Drum winches

OVERHEAD TRANSMISSION LINE

DRUM WINCH
Model: ST 80

- **Drum winch with a pull force of max. 1 to for various usages (mast equipping, tower erection, antenna construction...)**
- **Other pull forces / bigger rope drums on request**
- **Robust machine designed for highest reliability, simple operation and minimal maintenance**
- **Simple chassis for operation only at construction sites; machine can be tilted by hand to dismount the wheels => simple anchoring of the base frame in the ground**
- **High quality control technique enables inching even under maximum load**

Drum winch technical data:

- Max. pull force (inner rope layer) and max. speed (outer rope layer):
  - Gasoline engine with 5,5 HP: 1.000 daN with 24 m/min
  - Gasoline engine with 11 HP: 1.000 daN with 48 m/min
- Stable rope guiding device with hardened rope rollers
- Large rope drum (=> few rope layers => rope preserving) with stable pressure rollers for fixing the rope
- Max. rope capacity: K=19200 => e.g. 300 m for rope Ø 8 mm

Control of the machine:

- The rope can be indefinitely controlled in/out via a hand lever

Hydraulic driving system:

- A complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- With safety disc-brakes automatically activated
- High quality control technique enables inching even under maximum load
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Honda gasoline engine 4,1 kW (5,5 HP) with hand start
- Optional: gasoline engine with 8,2 kW (11 HP) with electric starter

Weight and dimensions:

- Weight without rope: approx. 155 kg (with 8,2 kW engine approx 170 kg)
- Length x width x height: approx. 1.000 x 1.000 x 850 mm

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane

Chassis (optional):

- 1 rigid axle with easily removable towing bar; wheels can also be simply dismounted manually; to be used only at construction sites

Ropes (optional):

- Steel or synthetic fibre ropes on request

Optional equipment:

- Radio remote control
- Cover plane
- Special equipment or special models (with different pull forces) on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

DRUM WINCH
Model: ST 140 / ST 180 / ST 280 (Z 253)

- **Drum winch with a pull force of max. 1,6 to (ST140), 2,1 to (ST 180) or 3,4 to (ST 280) for various usages (mast equipping, tower erection, antenna construction...)**
- **Other pull forces / bigger rope drums on request**
- **Robust machine designed for highest reliability, simple operation and minimal maintenance**
- **Simple chassis for operation only at construction sites; machine can be tilted by hand to dismount the wheels => simple anchoring of the base frame in the ground**
- **High quality control technique enables inching even under maximum load**

Drum winch technical data:
- Max. pull force (inner rope layer) and max. speed (outer rope layer)
  - ST 140 => 1.600 daN and 37 m/min
  - ST 180 => 2.100 daN and 28 m/min
  - ST 280 => 3.400 daN and 19 m/min
- Optional with free wheel device to pull out ropes by hand (without engine)
- Stable rope guiding device with hardened rope rollers
- Large rope drum (=> few rope layers => rope preserving) with stable pressure rollers for fixing the rope
- Max. rope capacity: K=51283 => e.g. 900 m for rope Ø 7 mm
  or 360 m for rope Ø 12 mm

Control of the machine:
- The rope can be indefinitely controlled in/out via a hand lever

Hydraulic driving system:
- A complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- With safety disc-brakes automatically activated
- High quality control technique enables inching even under maximum load
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:
- Honda gasoline engine 8,2 kW (10,9 HP) with hand start
- Optional: gasoline engine with 12,4 kW (16,3 HP), air-cooled diesel engine with 10,5 kW (14,2 HP), water-cooled diesel engine with 10,7 kW (14,5 HP); also with electro starter available

Weight and dimensions:
- Weight: approx. 430 kg (without rope)
- Length x width x height: approx.1.580 x 1.580 x 1.270 mm

Frame and support:
- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane

Chassis:
- 1 rigid axle with height-adjustable and easily removable towing bar ; wheels can also be simply dismounted manually; to be used only at construction sites

Ropes (optional):
- Steel or synthetic fibre ropes on request

Optional equipment:
- Free wheel device
- Special equipment or special models with different pull forces) on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

DRUM WINCH
Model: ST 110L / ST 140 / ST 180 / ST 280

- **Drum winch with a pull force max. 1,4 to (ST 110L), 1,6 to (ST 140), 2,3 to (ST 180) or 3,4 to (ST 280) for various usages (mast equipping, tower erection, antenna construction ...)**
- **NEW: ST 280 with 2 operation modes => electrically switchable between high pull force (3,4 to and max. 33 m/min) and high rope speed (73 m/min and max. 1,25 to)**
- **New: ST 110L, weight under 700 kg**
- **Other pull forces/ bigger rope drums on request**
- **Stable backstay for fast and safe anchoring**
- **Robust machine designed for highest reliability, simple operation and minimal maintenance**
- **Optional operation of the machine via cable or radio remote control from a safe distance => good overview, low noise level and safe position for the operator**
- **High quality control technique enables inching even under maximum load**

Drum winch technical data:

- Max. pull force (inner rope layer) and max. speed (outer rope layer):
  - ST 110L => 1.400 daN and 70 m/min
  - ST 140 => 1.600 daN and 56 m/min
  - ST 180 => 2.300 daN and 42 m/min
  - ST 280 => electrical switchable
    Stage 1: 3.400 daN and 33 m/min
    Stage 2: 1.250 daN and 73 m/min
- Optional with free wheel device to pull out ropes by hand (without engine)
- Stable rope guiding device with hardened rope rollers
- Optional with inductive slack-rope safety system (functions only with steel ropes) => prevents rope from getting loose and crossed over
- Large rope drum (=> few rope layers => rope preserving) with stable pressure rollers for fixing the rope
- Max. rope capacity: K=51283 => e.g. 360 m with rope Ø 12 mm

Control of the machine:

- The rope can be indefinitely controlled in/out via a hand lever
- Optional with cable remote control with a 10 m cable (functions: rope indefinitely controlled in/out; emergency stop)
- Optional with radio remote control (additional functions: ignition; engine starting)
- Control panel with all instruments to control engine, hydraulic and electrical systems
- Optional with automatic speed adjustment (idle/full throttle)

Cover:

- Lockable tarpaulin cover (optional with aluminium sheet) protects the diesel engine, the hydraulic and electrical systems => increases the reliability of the machine and is noise reducing

Hydraulic driving system:

- A complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- With automatically activated safety disc-brakes
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with special sealing system for a long service life without leakage

Engine:

- Honda gasoline engine with 13,2 kW (18 HP) and elektro starter
- Optional: Honda gasoline engine with 17,7 kW (24 HP), watercooled diesel engine with 17 kW (23 HP) at 1.950 U/min (Low speed => long service life and low noise level)
- 12 V system with high capacity battery for safe starting also at cold temperatures

Weight and dimensions:

- Weight: approx. 840 kg (without rope)
- Length x width x height: approx. 2.280 x 1.570 x 1.530 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via mechanical backstay for highest stability and fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via stable mechanical parking jack

Standard chassis:

- 1 axle chassis with rigid axle and a non-adjustable height towing bar with ball coupling for car application

Optional chassis:

- 1 axle chassis with spring mounted axle , overrunning brake system, non-adjustable towing bar with ball coupling for car application, parking brake, lighting system, mudguards and registration as high-speed trailer up to 80 km/h
  Optional: dismountable towing bar (can be shipped crosswise on the truck), height adjustable towing bar with change coupling (for car or truck applications)

Ropes (Optional):

- Steel or synthetic fibre ropes on request

Optional equipment:

- Electrical valve and socket in the control panel
  => enables the connection of a cable/radio remote control (manual control remains possible as emergency control)
- Cable remote control
- Radio remote control
- Inductive slack-rope safety system
- Free wheel device
- Lockable cover made of thick-walled aluminium
- Large, lockable tool box
- Spare wheel with lockable holding device (only with aluminium cover)
- Grounding plate with holding device
- Biodegradable hydraulic oil
- Special equipment or special models (for lifting passengers or with different pull forces) on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

DRUM WINCH
Model: ST 500 E / ST 550 E

- **Drum winch with a pull force of max. 6 to for various usages (mast equipping, tower erection, regulating...)**
- **Optional operation of the machine via cable or radio remote control from a safe distance => good overview, low noise level and safe position for the operator**
- **ST 550 E with bigger drum, other pull forces on request**
- **Stable backstay for fast and safe anchoring**
- **Robust machine designed for highest reliability, simple operation and minimal maintenance**
- **High quality control technique enables inching even under maximum load**

Technical data of both drum winches:
- Max. pull force (inner rope layer): 6.000 daN
- Max. speed (outer rope layer): 45 m/min
- Optional with free wheel device to pull out ropes by hand (without engine)
- Stable rope guiding device with hardened rope rollers
- Large rope drum (=> few rope layers => rope preserving) with stable pressure rollers for fixing the rope
- Max. rope capacity: K=88200 => e.g. 450 m with rope Ø 14 mm
- Optional: ST 550 E with K=190000 => e.g. 750 m with rope-Ø 16 mm

Control of the machine:
- The rope can be indefinitely controlled in/out via a hand lever
- Optional with cable remote control with a 10 m cable (functions: continuously adjustable rope in/out; emergency stop)
- Optional with radio remote control (additional functions: ignition; engine starting)
- Control panel with all instruments to control engine, hydraulic and electrical system

Cover:
- Lockable tarpaulin cover (optional with aluminium sheet) protects the diesel engine, the hydraulic and electrical systems => in-creases the reliability of the machine and is noise reducing

Hydraulic driving system:
- A complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated in each rope drum => fully enclosed and therefore requiring minimal maintenance
- With automatically activated safety-disc brakes
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with special sealing system for a long service life without leakage

Engine:
- Water-cooled diesel engine with 38 kW (51,7 HP)
- 12 V system with high capacity battery for safe starting also at cold temperatures

Weight and dimension:
- Weight: approx. 1.500 kg (without rope)
- Length x width x height: approx. 3.300 x 2.100 x 1.500 mm

Frame and support:
- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via 2 mechanical supporting plates
  Optional: mechanical backstay for high stability and fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via stable mechanical parking jack

Standard chassis:
- 1 axle chassis with rigid axle and non-adjustable height towing bar

Optional chassis:
- 1 axle chassis with spring-mounted axle, overrunning brake system, non-adjustable height towing bar with ball coupling for car application, parking brake, lighting system, mudguards and registration up to 80 km/h
  Optional: height adjustable towing bar with change coupling (for car or truck applications)

Ropes (Optional):
- Steel ropes on request

Optional equipment:
- Electrical valve version and socket in the control panel => enables the connection of a cable/radio remote control (manual control remains possible as emergency control)
- Cable remote control
- Radio remote control
- Free wheel device
- Lockable cover made of thick walled aluminium
- Special equipment or special models (with different pull forces) on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

DRUM WINCH
Model: ST 1100 E

- **Drum winch with a pull force of max. 13,5 to for various usages (mast equipping, tower erection, regulating...)**
- **Optional operation of the machine via cable or radio remote control from a safe distance => good overview, low noise level and safe position for the operator**
- **Other pull forces / bigger rope drums on request**
- **Stable backstay for fast and safe anchoring**
- **Robust machine designed for highest reliability, simple operation and minimal maintenance**
- **High quality control technique enables inching even under maximum load**

Technical data of both drum winches:

- Max. pull force (inner rope layer): 13.300 daN
- Max. speed (outer rope layer):
  Stage 1: 19 m/min
  Stage 2: 30 m/min (with max. 5.000 daN)
- Stable rope guiding device with hardened rope rollers
- Large rope drum (=> few rope layers => rope preserving) with stable pressure rollers for fixing the rope
- Max. rope capacity: K=119380 => e.g. 270 m with rope Ø 21 mm
- Optional with K=190000 => e.g. 430 m with rope-Ø 21 mm

Control of the machine:

- The rope can be indefinitely controlled in/out via a hand lever
- Optional with cable remote control or radio remote control
- Control panel with all instruments to control engine, hydraulic and electrical system

Cover:

- Optional with tarpaulin cover or aluminium sheet protects the diesel engine, the hydraulic and electrical systems => in-creases the reliability of the machine and is noise reducing

Hydraulic driving system:

- A complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated in each rope drum => fully enclosed and therefore requiring minimal maintenance
- With automatically activated safety-disc brakes
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with special sealing system for a long service life without leakage

Engine:

- Water-cooled diesel engine with 38 kW (51,7 HP)
- 12 V system with high capacity battery for safe starting also at cold temperatures

Weight and dimension:

- Weight: approx. 2.500 kg (without rope)
- Length x width x height: approx. 4.100 x 2.300 x 1.710 mm

Frame and support:

- Stable steel frame with anchoring eyes
- Lifting rings for easy loading by crane
- Back support via 2 mechanical supporting plates
  Optional: mechanical backstay for high stability and fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via stable mechanical parking jack

Standard chassis:

- 1 axle chassis with rigid axle and non-adjustable height towing bar

Optional chassis:

- 1 axle chassis with spring-mounted axle, overrunning brake system, adjustable height towing bar with with change coupling (for car or truck applications), parking brake, lighting system, mudguards and registration up to 80 km/h

Ropes (Optional):

- Steel ropes on request

Optional equipment:

- Electrical valve version and socket in the control panel => enables the connection of a cable/radio remote control (manual control remains possible as emergency control)
- Cable remote control
- Radio remote control
- Lockable cover made of thick walled aluminium
- Special equipment or special models (with different pull forces) on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

MOUNTABLE DRUM WINCH
Model: ST 140 / ST 180 / ST 280 (Z251)

- **Drum winch to mount on a tractor (or similar construction site vehicle) with a pull force of 1,6 to (ST 140) or 2,1 to (ST 180) or 3,4 to (ST 280) for various usages (mast equipping, tower erection, regulating...)**
- **Optional operation of the machine via cable or radio remote control from a safe distance => good overview, low noise level and safe position for the operator**
- **Other pull forces / bigger rope drums on request**
- **Robust machine constructed for highest reliability, simple operation and minimal maintenance**
- **High quality control technique enables inching even under maximum load**

Technical data of both rope drums:

- Depending on the hydraulic of the driving vehicle – data e.g. for 55 l/min and 230 bar
- Max. pull force (inner rope layer) and max. speed (outer rope layer):
  - ST 140 => 1.600 daN and 68 m/min
  - ST 180 => 2.100 daN and 50 m/min
  - ST 280 => 3.400 daN and 39 m/min
- Optional with free wheel device to pull out ropes by hand (without engine)
- Stable rope guiding device with hardened rope rollers
- Optional with inductive slack-rope safety system (functions only with steel ropes) => prevents rope from getting loose and crossed over
- Large rope drum (=> few rope layers => rope preserving) with stable pressure roller for fixing the rope
- Max. rope capacity: K=51283 => e.g. 510 m with rope Ø 10 mm or 360 m with rope Ø 12 mm

Control of the machine:

- The rope can be indefinitely controlled in/out via a hand lever
- Optional with cable remote control with a 10m cable (functions: continuous control of rope in/out; emergency stop)
- Optional with radio remote control (additional functions: ignition; engine starting)

Hydraulic driving system:

- A complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated in each rope drum => fully enclosed and therefore requiring minimal maintenance
- With automatically activated safety-disc brakes
- High quality control technique enables inching even under maximum load
- Hydraulic hoses and screw connections with special sealing system for a long service life without leakage

Weight and dimensions:

- Weight: approx. 300 kg (without rope)
- Length x width x height: approx. 800 x 1.050 x 630 mm

Frame:

- The frame is adjusted for attachment to the vehicle

Ropes (Optional):

- Steel or synthetic fibre ropes on request

Optional equipment:

- Electrical valve version and socket in the control panel => enables the connection of a cable/radio remote control (manual control remains possible as emergency control)
- Cable remote control
- Radio remote control
- Free wheel device
- Inductive slack-rope safety system
- Complete with tractor (New Holland or on customer request)
- With mounted cran (for example Palfinger PK 6001)
- Special equipment or special models (with different pull forces or bigger rope capacity) on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

DOUBLE DRUM WINCH
Model: ST 280/D

- **Double drum winch with a pull force of max. 3,4 to and max. 1,6 to for various usages (regulating, tower equipping, tower erection ...)**
- **Optional operation of the machine via cable or radio remote control => good overview, low noise level and safe position for the operator**
- **Other pull forces / bigger rope drums on request**
- **Very compact machine due to the superimposed winches; with stable backstay for a quick and safe anchoring**
- **Robust machine designed for highest reliability, simple operation and minimal maintenance**
- **High quality control technique enables inching even under maximum load**

Technical data of both winches:

- Max. pull force (inner rope layer) and max. speed (outer rope layer):
  - lower winch: 3.400 daN with 36 m/min
  - upper winch: 1.600 daN with 56 m/min
- Optional with free wheel device to pull out ropes by hand (without engine)
- Stable rope guiding device with hardened rope rollers
- Optional with inductive slack-rope safety system (functions only with steel ropes) => prevents rope from getting loose and crossed over
- Large rope drums (=> few rope layers => rope preserving) with stable pressure roller for fixing the rope
- Max. rope capacity: K=51283 => e.g. 510 m with rope Ø 10 mm or 360 m with rope Ø 12 mm

Control of the machine:

- The rope can be indefinitely controlled in/out via a hand lever
- Optional with cable remote control with a 10 m cable (functions: rope indefinitely controlled in/out; emergency stop)
- Optional with radio remote control (additional functions: ignition; engine starting)
- Control panel with all instruments to control engine, hydraulic and electrical system
- Both drum winches cannot be operated simultaneously (only possible as special model)

Cover:

- Lockable tarpaulin cover (optional with aluminium sheet) protects the diesel engine, the hydraulic and electrical systems => increases the reliability of the machine and is noise reducing

Hydraulic driving system:

- A complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated in each rope drum => fully enclosed and therefore requiring minimal maintenance
- 2 automatically activated safety-disc brakes
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with special sealing system for a long service life without leakage

Engine:

- Honda gasoline engine with 17,7 kW (24 HP) and elektro starter
- Optional: Water-cooled diesel engine with 17 kW (23 HP) at 1.950 rpm (Low speed => long service life and low noise level)
- 12 V system with high capacity battery for safe starting also at cold temperatures

Weight and dimensions:

- Weight: approx. 1.170 kg (without rope)
- Length x width x height: approx. 2.280 x 1.570 x 1.700 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via mechanical backstay for highest stability and fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via stable mechanical parking jack

Standard chassis:

- 1 axle chassis with rigid axle and non-adjustable height towing bar with ball coupling for car application

Optional chassis:

- 1 axle chassis with spring mounted axle , overrunning brake system, non-adjustable towing bar with ball coupling for car application, parking brake, lighting system, mudguards and registration as high-speed trailer up to 80 km/h
  Optional: dismountable towing bar (can be shipped crosswise on the truck), height adjustable towing bar with change coupling (for car or truck applications)

Ropes (Optional):

- Steel or synthetic fibre ropes on request

Optional equipment:

- Electrical valve version and socket in the control panel
  => enables the connection of a cable/radio remote control (manual control remains possible as emergency control)
- Cable remote control
- Radio remote control
- Inductive slack-rope safety system
- Free wheel device
- Lockable cover made of thick-walled aluminium sheet
- Large, lockable tool box
- Spare wheel with lockable holding device
- Grounding plate with holding device
- Biodegradable hydraulic oil
- Special equipment or special models (with other pull forces) on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

DOUBLE DRUM WINCH
Model: ST 500/D

New machine generation:

- **PLC machine control with CAN-bus technology**
- **Large display to indicate all machine data**
- **Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)**
- **Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance**
- **New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control**
- **New remote controls: more functions, increased operational reliability, improved handling**
- **All electronic components are of robust construction (IP67)**
- **Optional: remote diagnosis system**

Overview:

- **Double drum winch each with a pull force of 6 to for various usages (regulating, tower equipping, tower erection…)**
- **Other pull forces are possible according to customer requirements => upper puller puller is e.g. often limited to 2,5 to (for gin-pole drive)**
- **Electronic pull force evaluation and overload system**
- **Compact machine due to superimposed winches; with hydraulic backstay for highest stability during operation**

Technical data of both drum winches:

- Max. pull force (inner rope layer): 6.000 daN
- Max. speed (outer rope layer): 63 m/min
- Otional with free wheel device to pull out ropes by hand (without engine)
- Stable rope guiding device with hardened rope rollers
- Optional with inductive slack-rope safety system (functions only with steel ropes) => prevents rope from getting loose and crossed over
- Large rope drums (=> few rope layers => rope preserving) with stable pressure roller for fixing the rope
- Rope capacity: K=88200 => e.g. 450 m with rope Ø 14 mm

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety
- Both drum winches cannot be operated simultaneously (only possible as special model)

Cover:

- Lockable cover made of thick-walled aluminium sheet protects the diesel engine, the hydraulic and electrical systems => increases the reliability of the machine and is noise reducing

Hydraulic driving system:

- A complete driving unit consisting of planetary gear, brakes and hydraulic motor is integrated in each rope drum => fully enclosed and therefore requiring minimal maintenance
- 2 automatically activated safety-disc brakes
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with special sealing system for a long service life without leakage

Engine:

- Liquid-cooled DEUTZ diesel engine with max. 65 kW (88 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

- Weight: approx. 3.250 kg (without rope)
- Length x width x height: approx. 4.200 x 2.250 x 2.200 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for highest stability and fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via hydraulic support cylinder

Standard chassis:

- 1 axle chassis with rigid axle,
  Optional: parking brake

Optional chassis:

- 2 axle chassis with spring-mounted axle, pneumatic hydraulic brake system (with integrated brake cylinders), parking brake, lighting system, mudguards and registration as high-speed trailer
  Optional: Antiblock system and registration up to 80 km/h

Ropes (optional):

- Steel or also synthetic fibre ropes on request

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote system with 15 m cable
- Radio remote control
- Free wheel device
- Inductive slack-rope safety system
- Display device of the pull forces (for inner/middle/outer rope layers)
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- Biodegradable hydraulic oil
- Spare wheel with lockable holding device
- Special equipment or special models (with different pull forces or bigger rope lengths) on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

DOUBLE DRUM WINCH
Model: ST 1100/500

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)
- Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control
- New remote controls: more functions, increased operational reliability, improved handling
- All electronic components are of robust construction (IP67)
- Optional: remote diagnosis system

Overview:

- **Double drum winch with a pull force of 13,3 to and 6 to for various usages (regulating, tower equipping, tower erection…)**
- **Other pull forces are possible according to customer requirements**
- **Electronic pull force evaluation and overload system**
- **Compact machine due to superimposed winches; with hydraulic backstay for highest stability during operation**

Technical data lower drum winch:

- Max. pull force (inner rope layer): 13.300 daN
- Max. speed (outer rope layer): 35 m/min
- Stable rope guiding device with hardened rope rollers
- Optional with inductive slack-rope safety system (functions only with steel ropes) => prevents rope from getting loose and crossed over
- Large rope drum (=> few rope layers => rope preserving) with stable pressure roller for fixing the rope
- Rope capacity K=119380 => e.g. 270 m with rope Ø 21 mm

Technical data upper drum winch:

- Max. pull force (inner rope layer): 6.000 daN
- Max. speed (outer robe layer): 80 m/min
- Optional with free wheel device to pull out ropes by hand (without engine)
- Stable rope guiding device with hardened rope rollers
- Optional with inductive slack-rope safety system (functions only with steel ropes) => prevents rope from getting loose and crossed over
- Large rope drums (=> few rope layers => rope preserving) with stable pressure roller for fixing the rope
- Rope capacity K=88200 => e.g. 450 m with rope Ø 14 mm

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety
- Both drum winches cannot be operated simultaneously (only possible as special model)

Cover:

- Lockable cover made of thick-walled aluminium sheet protects the diesel engine, the hydraulic and electrical systems => increases the reliability of the machine and is noise reducing

Hydraulic driving system:

- A complete driving unit consisting of planetary gear, brakes and hydraulic motor is integrated in each rope drum => fully enclosed and therefore requiring minimal maintenance
- 2 automatically activated safety-disc brakes
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with special sealing system for a long service life without leakage

Engine:

- Liquid-cooled DEUTZ diesel engine with max. 65 kW (88 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

- Weight: approx. 4.000 kg (without rope)
- Length x width x height: approx. 4.550 x 2.250 x 2.200 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for highest stability and fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via hydraulic support cylinders

Standard chassis:

- 1 axle chassis with rigid axle,
  Optional: parking brake

Optional chassis:

- 2 axle chassis with spring-mounted axle, pneumatic hydraulic brake system (with integrated brake cylinders), parking brake, lighting system, mudguards and registration as high-speed trailer
  Optional: Antiblock system and registration up to 80 km/h

Ropes (optional):

- Steel or also synthetic fibre ropes on request

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote system with 15 m cable
- Radio remote control
- Inductive slack-rope safety system
- Display device of the pull forces (for inner/middle/outer rope layers)
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- Biodegradable hydraulic oil
- Spare wheel with lockable holding device
- Special equipment or special models (with different pull forces) on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

WINCH FOR CONDUCTOR SCRAPPING
Model: WV 7/2

- **Machine is specially designed for highly efficient scrapping of old conductors / old transmission lines**
- **Even conductor spacers can be wound up on the drum**
- **Drum winch with 7 to pulling force at inner diameter and 2,4 to at outside diameter of the drum**
- **Drum flanges can be opened hydraulically => easy handling of the old conductor package**
- **Cable remote control for safe and comfortable controlling of all important functions of the machine**
- **Drum is designed for example for 3.100 m rope-Ø 19 mm (optional according to customer requirements)**

Technical data in pulling mode:

- Max. pull force and rope speed:
  - Inner rope layer-Ø (460 mm): 7.000 daN up to 46 m/min
  - Middle rope layer-Ø (880 mm): 3.600 daN up to 88 m/min
  - Outside rope layer-Ø (1.300 mm): 2.400 daN up to 130m/min
- Speed continuously adjustable: 0 - 7,8 km/h (130 m/min)

Control of the machine:

- Cable remote control with 10 m cable to operate the machine:
  - pulling the rope in/out is controlled via a joystick
  - control lever to operate the rope guiding system
  - control lever to open/close the drum flanges
  - emergency stop buttom
- Emergency operation for controlling the machine by hand
- Control panel with display of the pull force and all instruments to control engine, hydraulic and electrical systems
- Pull force switch off system (inductive system for highest safety of operation)

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Weight and dimensions:

- Weight: approx. 3.800 kg
- Length x width x height: approx. 5.300 x 2.400 x 2.520 mm

Drum Unit:

- The 2 drum flanges can be hydraulically opened - controlled by the remote control => the conductor package then falls automatically on the ground behind the machine (controlled by a guidance device) => and can be easily loaded on a truck
- Width: 850 mm; Outside-Ø: 1.360 mm; Inner-Ø: 460 mm
- Capacity: 1103100 : rope-$Ø^2$ = max. rope length (with rope-Ø 19 mm => 3.100 m; with Ø 25 mm => 1.800 m)

Rope guidance system:

- Hydraulic rope guidance ; controlled by the cable remote control
- Can be deactivated by lifting it up hydraulically
- The rope guidance rollers can be adjusted to various positions. In widest position (dimension according to customer requirements) 2-bundle conductors can be winded up together with spacers

Hydraulic drive system:

- Integrated in the drum unit is a complete driving unit consisting of planetary gear, brake and hydraulic motor => fully enclosed and therefore requiring minimal maintenance
- With emergency multiple-disc brake, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat ; designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system

Engine:

- Liquid cooled DEUTZ diesel engine with 54 kW (73 HP) at 2.000 rpm
- Low speed => long life cycle and low noise level
- 12 V system with high capacity battery for a safe start also at cold temperatures

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via 2 robust mechanical supporting winches (with load and idle speed)
- Front support via robust mechanical supporting winches (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle,
  Optional: parking brake

Optional chassis:

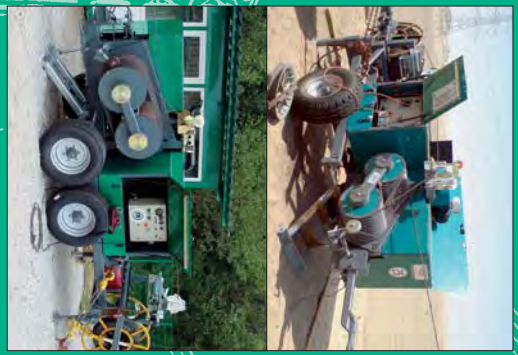
- 2 axle chassis with spring-mounted axle, pneumatic hydraulic brake system (with integrated brake cylinders), parking brake, lighting system, mudguards and registration as high-speed trailer
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Special Reel for pulling ropes => machine can be used as puller for normal stringing operations with very high rope capacity
- 700 bar hydraulic system with quick couplings => for example to power a hydraulic cutter
- Noise reduction kit for cover
- Front support via hydraulic support cylinder
- Biodegradable hydraulic oil
- Radio remote control (additional functions => ignition; engine starting)
- Special equipment or special models (for example with higher rope capacity or pulling force) on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com



Pullers

OVERHEAD TRANSMISSION LINE

PULLER
Model: SPW 2,5 E

- **Bull wheel Puller with integrated reel winder for pulling 1 rope up to a maximum pull force of 2,5 to**
- **Reel winder for loading/unloading reels independently**
- **Automatic rope guiding device**
- **Special reel shaft => allows one single operator to change the reels very quickly without tools**
- **Robust machine, constructed for highest reliability, simple operation and minimal maintenance**
- **Hydraulic pump with automatic limit load control => protection of engine and easy operation**

Technical data in pulling mode:

• Max. pull force:	2.500 daN
• Continuously adjustable speed:	0 - 4 km/h
at 2.500 daN:	max. 1,7 km/h

Control of the machine:

- Manual control; rope can be indefinitely controlled in/out
- Control panel with display of the pull force and all instruments to control engine, hydraulic and electrical systems
- Pulling force switch-off system
- Optional: Preparation for a quick installation of a pull force recorder

Cover:

- Optional: Lockable cover made of thick-walled aluminium sheet

Double wheel drive:

- 2 bull wheels with a diameter of 350 mm
- Grooves designed for connectors up to Ø 41 mm
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reels.

Hydraulic drive system:

- Each bull wheel with complete driving unit, consisting of planetary gear, hydraulic motor and multi-disk brake => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Integrated reel winder:

- Hydraulic drive of the reels with gear unit and hydraulic motor => fully enclosed => requiring minimal maintenance
- With free wheel device for pull out of the rope
- Reel lifting device for steel reels with Ø 1.100 - 1.400 mm
- Hydraulic lifting and lowering of the reels for loading/unloading
- Automatic rope guiding device

Engine:

- Water-cooled diesel engine with max. 26 kW (35 HP)
- 12 V system with high capacity battery for a safe start also at cold temperatures

Weight and dimensions:

• Weight:	approx. 1.150 kg
• Length x width x height:	approx. 2.450 x 1.550 x 1.700 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Front support via mechanical backstay => for high stability
- Back support via 2 mechanical supporting plates

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: parking brake, lighting system, mudguards

Optional chassis:

- 1 axle chassis with spring-mounted axle, overrunning brake system, parking brake, lighting system, mudguards and registration as high-speed trailer up to 80 km/h

Optional equipment:

- Biodegradable hydraulic oil
- Electronic pull force recorder to document the pull force
- Grounding plate with holding device
- Reels with detachable or non-detachable flange with Ø 1.100 or 1.400 mm
- Ropes (steel or synthetic fibre ropes) on request
- Special equipment or special models on request
- Radio remote control

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER
Model: SPW 2,5

- **Bull wheel Puller with integrated reel winder for pulling 1 rope up to a maximum pull force of 2,5 to**
- **Double bull wheel drive with a bull wheel diameter of 350 mm (optional: 400 mm)**
- **Reel winder for loading/unloading reels independently**
- **Automatic rope guiding device**
- **Special reel shaft => allows one single operator to change the reels very quickly without tools**
- **Robust machine, constructed for highest reliability of operation, simple operation and minimal maintenance**
- **Operation of the machine via cable remote control (optional also via radio remote control) from a safe distance => good overview, low noise level and safe position for the operator**

Technical data in pulling mode:

• Max. pull force:	2.500 daN
• Continuously adjustable speed:	0 - 6 km/h
at 2.000 daN:	max. 2 km/h

Control of the machine:

- Cable remote control with 10 m cable (functions: rope in/out, emergency stop); rope can be indefinitely controlled in/out via a joystick
- Emergency operation for controlling the machine by hand
- Control panel with display of the pull force and all instruments to control engine, hydraulic and electrical systems
- Pulling force switch-off system (inductive system for highest safety of operation)
- Optional: Preparation for a quick installation of a pull force recorder

Cover:

- Lockable cover made of thick-walled aluminium sheet; protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Double wheel drive:

- 2 bull wheels with a diameter of 350 mm (optional with 400 mm)
- Each with 8 grooves made of hardened steel
- Grooves designed for connectors up to Ø 41 mm
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reels.

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and t therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage
- Hydraulic differential system for the bull wheel drives => low stress for ropes and planetary gears

Integrated reel winder:

- Hydraulic drive of the reels and the rope guiding device with gear unit and hydraulic motor => fully enclosed => requiring minimal maintenance
- With free wheel device and mechanical disc-brake system (optional) for a controlled pull out of the rope
- Reel lifting device for steel reels with Ø 1.100 - 1.400 mm
- Hydraulic lifting and lowering of the reels for loading/unloading
- Automatic rope guiding device; can be continuously adjusted without tools to all rope diameters and different reel widths

Engine:

- Water-cooled diesel engine with max. 26 kW (35 HP)
- 12 V system with high capacity battery for a safe start also at cold temperatures

Weight and dimensions:

• Weight:	approx. 1.800 kg
• Length x width x height:	approx. 2.950 x 1.950 x 2.200 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Front support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Back support via stable mechanical parking jack

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: parking brake, lighting system, mudguards

Optional chassis:

- 1 axle chassis with spring-mounted axle, overrunning brake system, parking brake, lighting system, mudguards and registration as high-speed trailer up to 80 km/h

Optional equipment:

- Back support via 2 hydraulic supporting cylinders
- Biodegradable hydraulic oil
- Electronic pull force recorder to document the pull force
- Grounding plate with holding device
- Rope pulley block for operation as underground cable Puller
- Radio remote control (additional functions: ignition; engine starting)
- Reels with detachable or non-detachable flange with Ø 1.100 or 1.400 mm
- Ropes (steel or synthetic fibre ropes) on request
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER
Model: SPW 3,5 E

- **Bull wheel Puller with integrated reel winder for pulling 1 rope up to a maximum pull force of 3,5 to**
- **Reel winder for loading/unloading reels independently**
- **Automatic rope guiding device**
- **Special reel shaft => allows one single operator to change the reels very quickly without tools**
- **Robust machine, constructed for highest reliability, simple operation and minimal maintenance**
- **Hydraulic pump with automatic limit load control => protection of engine and easy operation**

Technical data in pulling mode:

• Max. pull force:	3.500 daN
• Continuously adjustable speed:	0 - 4 km/h
at 3.500 daN:	max. 1,2 km/h

Control of the machine:

- Manual control; rope can be indefinitely controlled in/out
- Control panel with display of the pull force and all instruments to control engine, hydraulic and electrical systems
- Pulling force switch-off system
- Optional: Preparation for a quick installation of a pull force recorder

Cover:

- Optional: Lockable cover made of thick-walled aluminium sheet

Double wheel drive:

- 2 bull wheels with a diameter of 350 mm
- Grooves designed for connectors up to Ø 41 mm
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reels.

Hydraulic drive system:

- Each bull wheel with complete driving unit, consisting of planetary gear, hydraulic motor and multi-disk brake => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Integrated reel winder:

- Hydraulic drive of the reels with gear unit and hydraulic motor => fully enclosed => requiring minimal maintenance
- With free wheel device for pull out of the rope
- Reel lifting device for steel reels with Ø 1.100 - 1.400 mm
- Hydraulic lifting and lowering of the reels for loading/unloading
- Automatic rope guiding device

Engine:

- Water-cooled diesel engine with max. 26 kW (35 HP)
- 12 V system with high capacity battery for a safe start also at cold temperatures

Weight and dimensions:

• Weight:	approx. 1.180 kg
• Length x width x height:	approx. 2.450 x 1.550 x 1.700 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Front support via mechanical backstay => for high stability
- Back support via 2 mechanical supporting plates

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: parking brake, lighting system, mudguards

Optional chassis:

- 1 axle chassis with spring-mounted axle, overrunning brake system, parking brake, lighting system, mudguards and registration as high-speed trailer up to 80 km/h

Optional equipment:

- Biodegradable hydraulic oil
- Electronic pull force recorder to document the pull force
- Grounding plate with holding device
- Reels with detachable or non-detachable flange with Ø 1.100 or 1.400 mm
- Ropes (steel or synthetic fibre ropes) on request
- Special equipment or special models on request
- Radio remote control

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

New machine generation:

- **PLC machine control with CAN-bus technology**
- **Large display to indicate all machine data**
- **Error diagnosis, language selection, maintenance data, intelligent engine management (overloading protection, noise reduction ...)**
- **Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance**
- **New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control**
- **New remote controls: more functions, increased operational reliability, improved handling**
- **Optional: - synchronisation system**
  - remote diagnosis

Overview:

- **Bull wheel Puller with integrated reel winder for pulling 1 rope up to a maximum pull force of 5 to**
- **Reel winder for loading/unloading reels independently**
- **Automatic rope guiding device**
- **Special reel shaft => allows one single operator to change the reels very quickly without tools**

Technical data in puller mode:

• Max. pull force:	5.000 daN
• Continuously adjustable speed:	0 - 5 km/h
at 5.000 daN:	max. 2,6 km/h

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety
- Optional with electronic printer for recording of all data during the stringing operation

Cover:

- Optinal: Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Double wheel drive:

- 2 bull wheels made of hardened steel with a diameter of 450 mm
- Grooves designed for connectors up to Ø 49 mm
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reels

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Integrated reel winder:

- Hydraulic drive of the reel with gear unit and hydraulic motor => fully enclosed => requiring minimal maintenance
- With free wheel device and mechanical disc-brake system (optinal) for a controlled pull out of the rope
- Reel lifting device for steel reels with Ø 1.100 - 1.400 mm
- Hydraulic lifting and lowering of the reels for loading/unloading
- Automatic rope guiding device

Engine:

- Liquid-cooled DEUTZ diesel engine with max. 65 kW (88 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 2.500 kg
• Length x width x height:	approx. 3.530 x 2.200 x 1.880 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Front support via mechanical backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Back support via 2 mechanical supporting plates

Standard chassis:

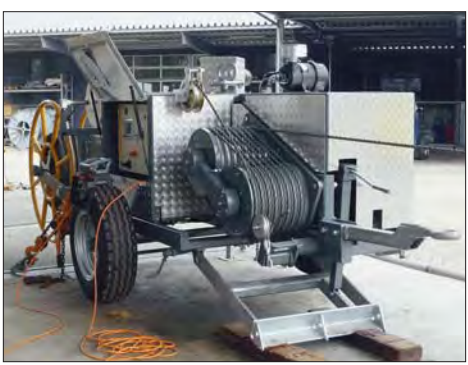
- 1 axle chassis with rigid axle
  Optional: pneumatic brake system, parking brake, lighting system, mudguards

Optional chassis:

- 1 axle chassis with spring-mounted axle, pneumatic hydraulic brake system (with integrated brake cylinders), parking brake, lighting system and registration as high-speed trailer up to 80 km/h

Optional equipment:

- Remote diagnosis with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Electronic printer
- Special maintenance-free precleaner for the air filter – reduce maintenance work ; for dusty areas
- Arctic kit for temperatures up to -30°
- Back support via 2 hydraulic supporting cylinders
- Grounding plate with holding device
- Biodegradable hydraulic oil
- Reels with detachable or non-detachable flange with a Ø 1.100 or 1.400 mm
- Ropes (steel or synthetic fibre ropes) on request
- Special equipment or special models on request



ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER
Model: SPW 7,5 Z 431

New machine generation:

- **PLC machine control with CAN-bus technology**
- **Large display to indicate all machine data**
- **Error diagnosis, language selection, maintenance data, intelligent engine management (overloading protection, noise reduction ...)**
- **Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance**
- **New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control**
- **New remote controls: more functions, increased operational reliability, improved handling**
- **Optional: - synchronisation system**
  - remote diagnosis

Overview:

- **Bull wheel Puller with integrated reel winder for pulling 1 rope up to a maximum pull force of 7,5 to**
- **Reel winder for loading/unloading reels independently**
- **Automatic rope guiding device**
- **Special reel shaft => allows one single operator to change the reels very quickly without tools**

Technical data in puller mode:

• Max. pull force:	7.500 daN
• Continuously adjustable speed:	0 - 5 km/h
at 5.000 daN:	max. 2,6 km/h

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety
- Optional with electronic printer for recording of all data during the stringing operation

Cover:

- Optinal: Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Double wheel drive:

- 2 bull wheels made of hardened steel with a diameter of 450 mm
- Grooves designed for connectors up to Ø 49 mm
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reels

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Integrated reel winder:

- Hydraulic drive of the reels and the rope guiding device with gear unit and hydraulic motor => fully enclosed => requiring minimal maintenance
- With free wheel device and mechanical disc-brake system (optinal) for a controlled pull out of the rope
- Reel lifting device for steel reels with Ø 1.100 - 1.400 mm
- Hydraulic lifting and lowering of the reels for loading/unloading
- Automatic rope guiding device

Engine:

- Liquid-cooled DEUTZ diesel engine with max. 65 kW (88 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 2.620 kg
• Length x width x height:	approx. 3.530 x 2.200 x 1.880 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Front support via mechanical backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Back support via 2 mechanical supporting plates

Standard chassis:

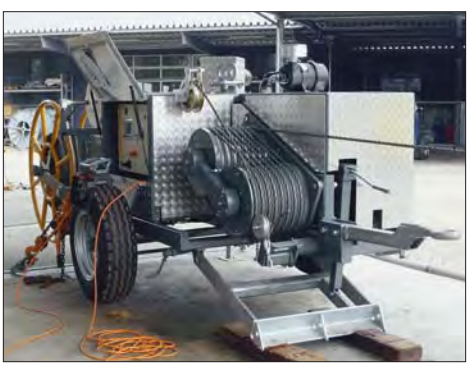
- 1 axle chassis with rigid axle
  Optional: pneumatic brake system, parking brake, lighting system, mudguards

Optional chassis:

- 1 axle chassis with spring-mounted axle, pneumatic hydraulic brake system (with integrated brake cylinders), parking brake, lighting system and registration as high-speed trailer up to 80 km/h

Optional equipment:

- Remote diagnosis with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Electronic printer
- Special maintenance-free precleaner for the air filter – reduce maintenance work ; for dusty areas
- Arctic kit for temperatures up to -30°
- Back support via 2 hydraulic supporting cylinders
- Grounding plate with holding device
- Biodegradable hydraulic oil
- Reels with detachable or non-detachable flange with a Ø 1.100 or 1.400 mm
- Ropes (steel or synthetic fibre ropes) on request
- Special equipment or special models on request



ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

New machine generation:

- **PLC machine control with CAN-bus technology**
- **Large display to indicate all machine data**
- **Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)**
- **Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance**
- **New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control**
- **New remote controls: more functions, increased operational reliability, improved handling**
- **Optional: - synchronisation system**
  - remote diagnosis

Overview:

- **Bull wheel Puller with integrated reel winder for pulling 1 rope up to a maximum pull force of 9 to**
- **Reel winder for loading/unloading reels independently**
- **Automatic rope guiding device**
- **Special reel shaft => allows one single operator to change the reels very quickly without tools**

Technical data in pulling mode:

• Max. pull force:	9.000 daN
• Continuously adjustable speed: at 8.000 daN:	0 - 5 km/h max. 2,6 km/h

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety
- Optional with electronic printer for recording of all data during the stringing operation

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Double wheel drive:

- 2 bull wheels made of hardened steel with a diameter of 540 mm
- Grooves designed for connectors up to Ø 52 mm
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reels

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Integrated reel winder:

- Hydraulic drive of the reels and the rope guiding device with gear and hydraulic motor => fully enclosed => requiring minimal maintenance
- With free wheel device and mechanical disc-brake system (optional) for a controlled pull out of the rope
- Reel lifting device for steel reels with Ø 1.100 - 1.400 mm
- Hydraulic lifting and lowering of the reels for loading/unloading
- Automatic rope guiding device; can be continuously adjusted without tools to all rope diameters and different reel widths

Engine:

- Water-cooled DEUTZ diesel engine with max. 103 kW (140 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 3.600 kg
• Length x width x height: (dimensions can be reduced for shipment)	approx. 4.220 x 2.100 x 2.100 mm

B 2

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Front support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Back support via 2 mechanical supporting plates

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: parking brake, pneumatic brake system, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles
  Optional: parking brake, pneumatic brake system, lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system, mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Electronic printer
- Special maintenance-free precleaner for the air filter – reduce maintenance work ; for dusty areas
- Arctic kit for temperatures up to -30°
- Back support via 2 hydraulic supporting cylinders
- Grounding plate with holding device
- Biodegradable hydraulic oil
- Reels with detachable or non-detachable flange with a Ø 1.100 or 1.400 mm
- Ropes (steel or synthetic fibre ropes) on request
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER
Model: SPW 9/5

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)
- Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control
- New remote controls: more functions, increased operational reliability, improved handling
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Bull wheel Puller with two sets of bull wheels an two integrated reel winders for pulling one or two ropes up to a maximum pull force of 2x 5,5 to or 1x 9 to**
- **Two reel winders for loading/unloading reels independently – both with automatic rope guiding device**
- **Both reel winders are tilded outwards at the back of the machine – allows safe change of one reel while the other reel winder is still rotating**

Technical data in pulling mode:

• Max. pull force:	2x 5.500 or 1x 9.000 daN
• Continuously adjustable speed:	0 - 5 km/h
at 8.000 daN (or 2x 4.000):	max. 2,6 km/h

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Double wheel drive I (8 to) and double wheel drive II (5 to) :

- 2 bull wheels made of hardened steel with a diameter of 540 mm (8 to) and 450 mm (5 to)
- Grooves designed for connectors up to Ø 52 mm (8 to) and 49 mm (5 to)
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reels

Hydraulic drive system:

- In all four bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 4 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage
- Hydraulic differential system of the bull wheel drives => low stress for ropes and planetary gears

Integrated reel winder (2 units):

- Hydraulic drive of the reels and the rope guiding device with gear unit and hydraulic motor => fully enclosed => requiring minimal maintenance
- With free wheel device for a simple pull out of the rope
- Reel lifting device for steel reels with Ø 1.100 - 1.400 mm
- Hydraulic lifting and lowering of the reels for loading/unloading
- Automatic rope guiding device; can be continuously adjusted without tools to all ropes diameters and different reel widths

Engine:

- Water-cooled DEUTZ diesel engine with max. 103 kW (140 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 5.500 kg
• Length x width x height:	approx. 4.900 x 2.290 x 2.270 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Front support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Back support via 2 mechanical supporting plates

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: pneumatic brake system, parking brake, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles
  Optional: pneumatic brake system, parking brake, lighting system, mudguards
- 2 axle chassis with spring-mounted axle, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system and mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Special maintenance-free precleaner for the air filter – reduce maintenance work ; for dusty areas
- Arctic kit for temperatures up to -30°
- Back support via 2 hydraulic supporting cylinders
- Grounding plate with holding device
- Biodegradable hydraulic oil
- Reels with detachable or non-detachable flange with a Ø 1.100 or 1.400 mm
- Ropes (steel or synthetic fibre ropes) on request
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

New machine generation:

- **PLC machine control with CAN-bus technology**
- **Large display to indicate all machine data**
- **Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)**
- **Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance**
- **New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control**
- **New remote controls: more functions, increased operational reliability, improved handling**
- **Optional: - synchronisation system**
  - remote diagnosis

Overview:

- **Bull wheel Puller with integrated reel winder for pulling 1 rope up to a maximum pull force of 14 to**
- **Reel winder for loading/unloading reels independently**
- **Automatic rope guiding device**
- **Special reel shaft => allows one single operator to change the reels very quickly without tools**

Technical data in pulling mode:

• Max. pull force:	14.000 daN
• Continuously adjustable speed:	0 - 4,5 km/h
at 12.000 daN:	max. 2,5 km/h

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety
- Optional with electronic printer for recording of all data during the stringing operation

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Double wheel drive:

- 2 bull wheels made of hardened steel with a diameter of 620 mm
- Grooves designed for connectors up to Ø 60 mm
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reels

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Integrated reel winder:

- Hydraulic drive of the reels and the rope guiding device with gear unit and hydraulic motor => fully enclosed => requiring minimal maintenance
- With free wheel device and mechanical disc-brake system (optional) for a controlled pull out of the rope
- Reel lifting device for steel reels with Ø 1.100 - 1.400 mm
- Hydraulic lifting and lowering of the reels for loading/unloading
- Automatic rope guiding device

Engine:

- Water-cooled DEUTZ diesel engine with max. 147 kW (200 HP) - optional: 155 kW with Exhaust Emission Regulation Stage III A - and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 4.800 kg
• Length x width x height:	approx. 3.880 x 2.280 x 2.450 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Front support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Back support via 2 mechanical supporting plates

Standard chassis:

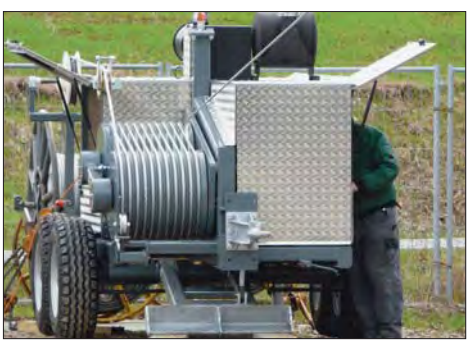
- 1 axle chassis with rigid axles
  Optional: parking brake, pneumatic brake system, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles
  Optional: parking brake, pneumatic brake system, lighting system, mudguards
- 2 axle chassis with spring-mounted axle, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system and mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Electronic printer
- Special maintenance-free precleaner for the air filter – reduce maintenance work ; for dusty areas
- Arctic kit for temperatures up to -30°
- Back support via 2 hydraulic supporting cylinders
- Grounding plate with holding device
- Biodegradable hydraulic oil
- Reels with detachable or non-detachable flange with a Ø 1.100 or 1.400 mm
- Ropes (steel or synthetic fibre ropes) on request
- Special equipment or special models on request



ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER
Model: SPW 16

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)
- Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control
- New remote controls: more functions, increased operational reliability, improved handling
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Bull wheel Puller with integrated reel winder for pulling 1 rope up to a maximum pull force of 16 to**
- **Reel winder for loading/unloading reels independently**
- **Automatic rope guiding device**
- **Special reel shaft => allows one single operator to change the reels very quickly without tools**

Technical data in pulling mode:

• Max. pull force:	16.000 daN
• Continuously adjustable speed:	0 - 4,5 km/h
at 14.000 daN:	max. 2,1 km/h

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety
- Optional with electronic printer for recording of all data during the stringing operation

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Double wheel drive:

- 2 bull wheels made of hardened steel with a diameter of 620 mm
- Grooves designed for connectors up to Ø 60 mm
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reels

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Integrated reel winder:

- Hydraulic drive of the reels and the rope guiding device with gear unit and hydraulic motor => fully enclosed => requiring minimal maintenance
- With free wheel device and mechanical disc-brake system (optional) for a controlled pull out of the rope
- Reel lifting device for steel reels with Ø 1.100 - 1.400 mm
- Hydraulic lifting and lowering of the reels for loading/unloading
- Automatic rope guiding device

Engine:

- Water-cooled DEUTZ diesel engine with max. 147 kW (200 HP) - optional: 155 kW with Exhaust Emission Regulation Stage III A - and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 4.900 kg
• Length x width x height:	approx. 3.880 x 2.280 x 2.450 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Front support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Back support via 2 mechanical supporting plates

Standard chassis:

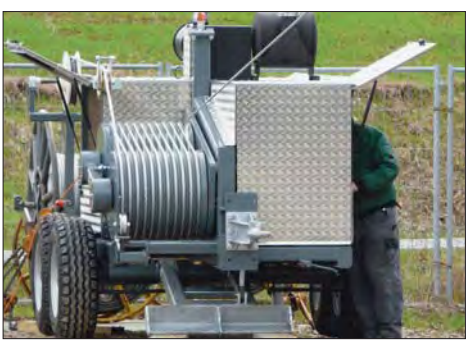
- 1 axle chassis with rigid axles
  Optional: parking brake, pneumatic brake system, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles
  Optional: parking brake, pneumatic brake system, lighting system, mudguards
- 2 axle chassis with spring-mounted axle, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system and mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Electronic printer
- Special maintenance-free precleaner for the air filter – reduce maintenance work ; for dusty areas
- Arctic kit for temperatures up to -30°
- Back support via 2 hydraulic supporting cylinders
- Grounding plate with holding device
- Biodegradable hydraulic oil
- Reels with detachable or non-detachable flange with a Ø 1.100 or 1.400 mm
- Ropes (steel or synthetic fibre ropes) on request
- Special equipment or special models on request



ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

New machine generation:

- **PLC machine control with CAN-bus technology**
- **Large display to indicate all machine data**
- **Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)**
- **Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance**
- **New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control**
- **New remote controls: more functions, increased operational reliability, improved handling**
- **Optional: - synchronisation system**
  - remote diagnosis

Overview:

- **Bull wheel Puller with integrated reel winder for pulling 1 rope up to a maximum pull force of 17 to**
- **Reel winder for loading/unloading reels independently**
- **Automatic rope guiding device**
- **Special reel shaft => allows one single operator to change the reels very quickly without tools**

Technical data in pulling mode:

• Max. pull force:	17.000 daN
• Continuously adjustable speed:	0 - 4,5 km/h
at 16.000 daN:	max. 2,4 km/h

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety
- Optional with electronic printer for recording of all data during the stringing operation

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Double wheel drive:

- 2 bull wheels made of hardened steel with a diameter of 620 mm
- Grooves designed for connectors up to Ø 60 mm
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reels

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Integrated reel winder:

- Hydraulic drive of the reels and the rope guiding device with gear unit and hydraulic motor => fully enclosed => requiring minimal maintenance
- With free wheel device and mechanical disc-brake system (optional) for a controlled pull out of the rope
- Reel lifting device for steel reels with Ø 1.100 - 1.400 mm
- Hydraulic lifting and lowering of the reels for loading/unloading
- Automatic rope guiding device

Engine:

- Water-cooled DEUTZ diesel engine with max. 200 kW (272 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 5.100 kg
• Length x width x height:	approx. 3.880 x 2.280 x 2.450 mm

ZECK

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Front support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Back support via 2 mechanical supporting plates

Standard chassis:

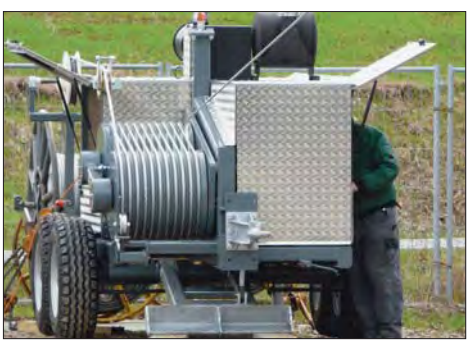
- 1 axle chassis with rigid axles
  Optional: parking brake, pneumatic brake system, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles
  Optional: parking brake, pneumatic brake system, lighting system, mudguards
- 2 axle chassis with spring-mounted axle, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system and mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Electronic printer
- Special maintenance-free precleaner for the air filter – reduce maintenance work ; for dusty areas
- Arctic kit for temperatures up to -30°
- Back support via 2 hydraulic supporting cylinders
- Grounding plate with holding device
- Biodegradable hydraulic oil
- Reels with detachable or non-detachable flange with a Ø 1.100 or 1.400 mm
- Ropes (steel or synthetic fibre ropes) on request
- Special equipment or special models on request



ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER
Model: SPW 19

New machine generation:

- **PLC machine control with CAN-bus technology**
- **Large display to indicate all machine data**
- **Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)**
- **Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance**
- **New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control**
- **New remote controls: more functions, increased operational reliability, improved handling**
- **Optional: - synchronisation system**
  - remote diagnosis

Overview:

- **Bull wheel Puller with integrated reel winder for pulling 1 rope up to a maximum pull force of 19 to**
- **Reel winder for loading/unloading reels independently**
- **Automatic rope guiding device**
- **Special reel shaft => allows one single operator to change the reels very quickly without tools**

Technical data in pulling mode:

• Max. pull force:	19.000 daN
• Continuously adjustable speed:	0 - 5 km/h
at 16.000 daN:	max. 2,4 km/h

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety
- Optional with electronic printer for recording of all data during the stringing operation

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Double wheel drive:

- 2 bull wheels made of hardened steel with a diameter of 620 mm
- Grooves designed for connectors up to Ø 60 mm
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reels

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Integrated reel winder:

- Hydraulic drive of the reels and the rope guiding device with gear unit and hydraulic motor => fully enclosed => requiring minimal maintenance
- With free wheel device and mechanical disc-brake system (optional) for a controlled pull out of the rope
- Reel lifting device for steel reels with Ø 1.100 - 1.400 mm
- Hydraulic lifting and lowering of the reels for loading/unloading
- Automatic rope guiding device

Engine:

- Water-cooled DEUTZ diesel engine with 200 KW (272 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 5.150 kg
• Length x width x height:	approx. 3.880 x 2.280 x 2.450 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Front support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Back support via 2 mechanical supporting plates

Standard chassis:

- 1 axle chassis with rigid axles
  Optional: parking brake, pneumatic brake system, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles
  Optional: parking brake, pneumatic brake system, lighting system, mudguards
- 2 axle chassis with spring-mounted axle, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system and mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Electronic printer
- Special maintenance-free precleaner for the air filter – reduce maintenance work ; for dusty areas
- Arctic kit for temperatures up to -30°
- Back support via 2 hydraulic supporting cylinders
- Grounding plate with holding device
- Biodegradable hydraulic oil
- Reels with detachable or non-detachable flange with a Ø 1.100 or 1.400 mm
- Ropes (steel or synthetic fibre ropes) on request
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER
Model: SPW 18/9

New machine generation:

- **PLC machine control with CAN-bus technology**
- **Large display to indicate all machine data**
- **Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)**
- **Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance**
- **New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control**
- **New remote controls: more functions, increased operational reliability, improved handling**
- **Optional: - synchronisation system**
  - remote diagnosis

Overview:

- **Bull wheel Puller with two sets of bull wheels an two integrated reel winders for pulling one or two ropes up to a maximum pull force of 2x 9 to or 1x 18 to**
- **Two reel winders for loading/unloading reels independently – both with automatic rope guiding device**
- **Both reel winders are tilded outwards at the back of the machine – allows safe change of one reel while the other reel winder is still rotating**

Technical data in pulling mode:

• Max. pull force:	2x 9.000 or 1x 18.000 daN
• Continuously adjustable speed: at 16.000 daN (or 2x 8.000):	0 - 5 km/h max. 2,4 km/h

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Double wheel drive I (18 to) and double wheel drive II (9 to) :

- 2 bull wheels made of hardened steel with a diameter of 620 mm (18 to) and 540 mm (9 to)
- Grooves designed for connectors up to Ø 60 mm (18 to) and 52 mm (9 to)
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reels

Hydraulic drive system:

- In all four bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 4 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage
- Hydraulic differential system of the bull wheel drives => low stress for ropes and planetary gears

Integrated reel winder (2 units):

- Hydraulic drive of the reels and the rope guiding device with gear unit and hydraulic motor => fully enclosed => requiring minimal maintenance
- With free wheel device for a simple pull out of the rope
- Reel lifting device for steel reels with Ø 1.100 - 1.400 mm
- Hydraulic lifting and lowering of the reels for loading/unloading
- Automatic rope guiding device

Engine:

- Water-cooled DEUTZ diesel engine with max. 200 kW (272 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 8.000 kg
• Length x width x height:	approx. 5.300 x 2.300 x 2.450 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Front support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Back support via 2 mechanical supporting plates

Standard chassis:

- 1 axle chassis with rigid axle with parking brake
  Optional: pneumatic brake system, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles with parking brake
  Optional: pneumatic brake system, lighting system, mudguards
- 2 axle chassis with spring-mounted axle, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system and mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Special maintenance-free precleaner for the air filter – reduce maintenance work ; for dusty areas
- Arctic kit for temperatures up to -30°
- Back support via 2 hydraulic supporting cylinders
- Grounding plate with holding device
- Biodegradable hydraulic oil
- Reels with detachable or non-detachable flange with a Ø 1.100 or 1.400 mm
- Ropes (steel or synthetic fibre ropes) on request
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER
Model: SPW 24

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)
- Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control
- New remote controls: more functions, increased operational reliability, improved handling
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Bull wheel Puller with integrated reel winder for pulling 1 rope up to a maximum pull force of 24 to**
- **Reel winder for loading/unloading reels independently**
- **Automatic rope guiding device**
- **Special reel shaft => allows one single operator to change the reels very quickly without tools**

Technical data in pulling mode:

• Max. pull force:	24.000 daN
• Continuously adjustable speed:	0 - 5 km/h
at 24.000 daN:	max. 1,9 km/h

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Double wheel drive:

- 2 bull wheels made of hardened steel with a diameter of 800 mm
- Grooves designed for connectors up to Ø 82 mm / rope Ø 32 mm
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reels

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage
- Hydraulic differential system of the bull wheel drives => low stress for ropes and planetary gears

Integrated reel winder:

- Hydraulic drive of the reels and the rope guiding device with gear unit and hydraulic motor => fully enclosed => requiring minimal maintenance
- With free wheel device and mechanical disc-brake system for a controlled pull out of the rope
- Reel lifting device for steel reels with Ø 1.900 mm
- Hydraulic lifting and lowering of the reels for loading/unloading
- Automatic rope guiding device

Engine:

- Water-cooled DEUTZ diesel engine with max. 238 kW (324 HP)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 8.800 kg
• Length x width x height:	approx. 4.800 x 2.300 x 2.700 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Front support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Back support via 2 mechanical supporting plates

Standard chassis:

- 1 axle chassis with rigid axles with parking brake
  Optional: pneumatic brake, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles with parking brake
  Optional: pneumatic brake, lighting system, mudguards
- 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders) and parking brake, lighting system and mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Special maintenance-free precleaner for the air filter – reduce maintenance work ; for dusty areas
- Arctic kit for temperatures up to -30°
- Back support via 2 hydraulic supporting cylinders
- Grounding plate with holding device
- Biodegradable hydraulic oil
- Reels with detachable or non-detachable flange
- Ropes (steel or synthetic fibre ropes) on request
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER
Model: SPW 26

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)
- Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control
- New remote controls: more functions, increased operational reliability, improved handling
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Bull wheel Puller with integrated reel winder for pulling 1 rope up to a maximum pull force of 26 to**
- **Reel winder for loading/unloading reels independently**
- **Automatic rope guiding device**
- **Special reel shaft => allows one single operator to change the reels very quickly without tools**

Technical data in pulling mode:

• Max. pull force:	26.000 daN
• Continuously adjustable speed:	0 - 5 km/h
at 24.000 daN:	max. 2,1 km/h

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Double wheel drive:

- 2 bull wheels made of hardened steel with a diameter of 800 mm
- Grooves designed for connectors up to Ø 82 mm / rope Ø 32 mm
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reels

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage
- Hydraulic differential system of the bull wheel drives => low stress for ropes and planetary gears

Integrated reel winder:

- Hydraulic drive of the reels and the rope guiding device with gear unit and hydraulic motor => fully enclosed => requiring minimal maintenance
- With free wheel device and mechanical disc-brake system for a controlled pull out of the rope
- Reel lifting device for steel reels with Ø 1.900 mm
- Hydraulic lifting and lowering of the reels for loading/unloading
- Automatic rope guiding device

Engine:

- Water-cooled DEUTZ diesel engine with max. 262 kW (356 HP)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 9.200 kg
• Length x width x height:	approx. 4.800 x 2.300 x 2.700 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Front support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Back support via 2 mechanical supporting plates

Standard chassis:

- 1 axle chassis with rigid axles with parking brake
  Optional: pneumatic brake, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles with parking brake
  Optional: pneumatic brake, lighting system, mudguards
- 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders) and parking brake, lighting system and mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Special maintenance-free precleaner for the air filter – reduce maintenance work ; for dusty areas
- Arctic kit for temperatures up to -30°
- Back support via 2 hydraulic supporting cylinders
- Grounding plate with holding device
- Biodegradable hydraulic oil
- Reels with detachable or non-detachable flange
- Ropes (steel or synthetic fibre ropes) on request
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER
Model: SPW 28

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)
- Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control
- New remote controls: more functions, increased operational reliability, improved handling
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Bull wheel Puller with integrated reel winder for pulling 1 rope up to a maximum pull force of 28 to**
- **Reel winder for loading/unloading reels independently**
- **Automatic rope guiding device**
- **Special reel shaft => allows one single operator to change the reels very quickly without tools**

Technical data in pulling mode:

• Max. pull force:	28.000 daN
• Continuously adjustable speed:	0 - 4,8 km/h
at 15.700 daN:	max. 4,8 km/h
at 28.000 daN:	max. 2,4 km/h

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Double wheel drive:

- 2 bull wheels made of hardened steel with a diameter of 900 mm
- Grooves designed for connectors up to Ø 85 mm / rope Ø 38 mm
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reels

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage
- Hydraulic differential system of the bull wheel drives => low stress for ropes and planetary gears

Integrated reel winder:

- Hydraulic drive of the reels and the rope guiding device with gear unit and hydraulic motor => fully enclosed => requiring minimal maintenance
- With free wheel device and mechanical disc-brake system for a controlled pull out of the rope
- Reel lifting device for steel reels with Ø 1.900 mm
- Hydraulic lifting and lowering of the reels for loading/unloading
- Automatic rope guiding device

Engine:

- Water-cooled DEUTZ diesel engine with max. 360 kW (490 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 10.400 kg
• Length x width x height:	approx. 5.760 x 2.370 x 2.700 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Front support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Back support via 2 hydraulic supporting cylinders

Standard chassis:

- 2 axle chassis with rigid axles with parking brake
  Optional: pneumatic brake, lighting system, mudguards

Optional chassis:

- 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders) and parking brake, lighting system and mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Special maintenance-free precleaner for the air filter – reduce maintenance work ; for dusty areas
- Arctic kit for temperatures up to -30°
- Grounding plate with holding device
- Biodegradable hydraulic oil
- Reels with detachable or non-detachable flange with a Ø 1.100 or 1.400 mm
- Ropes (steel or synthetic fibre ropes) on request
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER
Model: SPW 36

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)
- Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control
- New remote controls: more functions, increased operational reliability, improved handling
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Bull wheel Puller with integrated reel winder for pulling 1 rope up to a maximum pull force of 36 to**
- **Reel winder for loading/unloading reels independently**
- **Automatic rope guiding device**
- **Special reel shaft => allows one single operator to change the reels very quickly without tools**

Technical data in pulling mode:

• Max. pull force:	36.000 daN
• Continuously adjustable speed:	0 - 4,8 km/h
at 15.700 daN:	max. 4,8 km/h
at 36.000 daN:	max. 2 km/h

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Double wheel drive:

- 2 bull wheels made of hardened steel with a diameter of 960 mm
- Grooves designed for connectors up to Ø 90 mm / rope Ø 38 mm
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reels

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage
- Hydraulic differential system of the bull wheel drives => low stress for ropes and planetary gears

Integrated reel winder:

- Hydraulic drive of the reels and the rope guiding device with gear unit and hydraulic motor => fully enclosed => requiring minimal maintenance
- With free wheel device and mechanical disc-brake system for a controlled pull out of the rope
- Reel lifting device for steel reels with Ø 1.900 mm
- Hydraulic lifting and lowering of the reels for loading/unloading
- Automatic rope guiding device

Engine:

- Water-cooled DEUTZ diesel engine with max. 360 kW (490 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 13.800 kg
• Length x width x height:	approx. 6.050 x 2.500 x 2.900 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Front support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Back support via 2 hydraulic supporting cylinders

Standard chassis:

- 2 axle chassis with rigid axles with parking brake
  Optional: pneumatic brake, lighting system, mudguards

Optional chassis:

- 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders) and parking brake, lighting system and mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Special maintenance-free precleaner for the air filter – reduce maintenance work ; for dusty areas
- Arctic kit for temperatures up to -30°
- Grounding plate with holding device
- Biodegradable hydraulic oil
- Reels with detachable or non-detachable flange with a Ø 1.100 or 1.400 mm
- Ropes (steel or synthetic fibre ropes) on request
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Tensioners

TENSIONER WITHOUT ENGINE
Model: B 1500 / 2,5 E

- **Tensioner without engine for 1 conductor up to Ø 45 mm and a tension force of max. 2,5 to**
- **Tensioning mode via hydraulically controlled ATS (Automatic Tensioning System)**
- **Robust machine constructed for highest reliability, easy operation and minimal maintenance**
- **Free-wheel device for conductor loading**

Technical data in tensioning mode:

- Continuous tension force: 2.500 daN
- Continuously adjustable speed: 0 - 5 km/h
- Minimal tension force: approx. 100 daN

Control of the machine:

- The tension force can be continuously regulated at the control panel; the machine then functions independently via the hydraulical ATS. This system guarantees a constant sag of the conductor.
- Stopping of the machine (= activating the bull wheel brake system) and restarting of the machine (= deactivating the bull wheel brake system) can be controlled manually by the operator
- Control panel with display of the tension force
- Optional with meter counter

Bull wheels:

- 2 bull wheels with a diameter of 1.500 mm
- 5 grooves per bull wheel for 1 conductor
- Designed for max. conductor Ø 45 mm
- High tensile elastic groove linings
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- Bull wheel with a complete driving unit consisting of planetary gear, brake and hydraulic motor => fully enclosed and therefore requiring minimal maintenance
- 1 emergency multiple-disc brakes, automatically activated
- Hydraulic activated oil cooling system
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Version with chassis:

- 1-axle chassis with rigid axle; turnable towing bar
- Central lifting ring for easy loading by crane
- Back and front support by mechanical parking jacks

Weight and dimensions:

- Weight: 1.650 kg
- Length x width x height: approx. 3.350 x 1.700 x 2.360 mm

Optional equipment:

- meter counter
- lockable tool box
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

TENSIONER WITHOUT ENGINE
Model: B 1500 / 4 E

B 3

- **Tensioner without engine for 1 or 2 conductors up to Ø 45 mm and a tension force of max. 4 to**
- **Tensioning mode via hydraulically controlled ATS (Automatic Tensioning System)**
- **Robust machine constructed for highest reliability, easy operation and minimal maintenance**
- **Free-wheel device for conductor loading**

Technical data in tensioning mode:

- Continuous tension force: 4.000 daN
- Continuously adjustable speed: 0 - 5 km/h
- Minimal tension force: approx. 100 daN

Control of the machine:

- The tension force can be continuously regulated at the control panel; the machine then functions independently via the hydraulical ATS. This system guarantees a constant sag of the conductor.
- Stopping of the machine (= activating the bull wheel brake system) and restarting of the machine (= deactivating the bull wheel brake system) can be controlled manually by the operator
- Control panel with display of the tension force
- Optional with meter counter

Bull wheels:

- 2 bull wheels with a diameter of 1.500 mm
- 8 grooves per bull wheel for 1 or 2 conductors
- Designed for max. conductor Ø 45 mm
- High tensile elastic groove linings
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- Bull wheel with a complete driving unit consisting of planetary gear, brake and hydraulic motor => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- Hydraulic activated oil cooling system
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Version with chassis:

- 1-axle chassis with rigid axle; turnable towing bar
- Central lifting ring for easy loading by crane
- Back and front support by mechanical parking jacks

Weight and dimensions:

- Weight: 2.200 kg
- Length x width x height: approx. 3.100 x 1.800 x 2.480 mm

Optional equipment:

- meter counter
- lockable tool box
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

TENSIONER WITH ENGINE
Model: B 1200 / 2

- **Tensioner with engine aggregate for regulation (sagging). For 1 conductor up to Ø 45 mm and a tension force of max. 2 to**
- **In tensioning mode, automatic control of the machine via ATS (Automatic Tensioning System)**
- **Pulling mode to regulate the conductor with a max. pull force of 2 to and to install the conductors into the machine**
- **Integrated diesel hydraulic aggregate to control the ATS and activate the pulling mode, the oil cooling system and the optional hydraulic system for drum stand or press**
- **Robust machine constructed for highest reliability, easy operation minimal maintenance**

Technical data in tensioning mode:

- Max. tension force: 2.000 daN
- Continuously adjustable speed: 0 - 6 km/h
- Minimal tension force: approx. 200 daN (with ATS)

Technical data in regulating mode (pulling mode):

- Max. pull force: 2.000 daN
- Continuously adjustable speed: 0 - approx. 0,8 km/h

Control of the machine:

- In tensioning mode, the tension force can be continuously regulated at the control panel (optional also with cable remote control); the machine then functions independently via the Automatic Tensioning System (ATS). This system guarantees a constant sag of the conductor and an automatic stopping and restarting without manual intervention
- In regulating mode (pulling mode), the rope can be indefinitely controlled in/out via a joystick located at the control panel
- Control panel with display of the pull force and all instruments to control engine, hydraulic and electrical systems
- With digital meter counter

Cover:

- Lockable cover made of thick-walled aluminium sheet; protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.200 mm
- 4 grooves per bull wheel for 1 conductor
- Designed for max. conductor Ø 45 mm
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Optional with 1 additional hydraulic system to operate a hydraulically activated drum stand
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage
- Hydraulic differential system for the bull wheel drives => low stress for ropes and planetary gears

Engine:

- Water-cooled diesel engine with max. 12,5 kW (17 HP)
- 12 V system with high capacity battery for a safe start also at cold temperatures

Weight and dimensions:

- Weight: approx. 1.550 kg
- Length x width x height: approx. 3.200 x 1.780 x 2.240 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via 2 mechanical supporting plates
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: parking brake, ighting system, mudguards

Optional chassis:

- 1 axle chassis with spring-mounted overrunning brake system, parking brake, lighting system and mudguards and registration up to 80 km/h

Optional equipment:

- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Special maintenance-free precleaner for the air filter – reduce maintenance work ; for dusty areas
- Arctic kit for temperatures up to -30°
- Cable remote control with 10m cable to regulate the tension force for the Automatic Tensioning System (ATS)
- Digital tachometer
- Large, lockable tool box
- Grounding plate with holding device
- 1 additional hydraulic system to operate the drum stands
- Hose set with quick coupling to operate drum stands (standard length: 15m or according to customer requirements)
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Bull wheels and rope guiding devices with regulating possibilities for „right" and „left" conductors
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

TENSIONER WITH ENGINE
Model: B 1200 / 4

- **Tensioner with engine aggregate for regulation (sagging). For 1 conductor up to Ø 45 mm and a tension force of max. 4 to**
- **Optional for 2 conductors available**
- **In tensioning mode, automatic control of the machine via ATS (Automatic Tensioning System)**
- **Pulling mode to regulate the conductor with a max. pull force of 4 to and to install the conductors into the machine**
- **Integrated diesel hydraulic aggregate to control the ATS and activate the pulling mode, the oil cooling system and the optional additional hydraulic system for drum stand or press**
- **Robust machine constructed for highest reliability, easy operation and minimal maintenance**

Technical data in tensioning mode:

- Max. tension force: 4.000 daN
- Continuously adjustable speed: 0 - 6 km/h
- Minimal tension force: approx. 200 daN (with ATS)

Technical data in regulating mode (pulling mode):

- Max. pull force: 4.000 daN
- Continuously adjustable speed: 0 - approx. 0,8 km/h

Control of the machine:

- In tensioning mode, the tension force can be continuously regulated at the control panel (optional also with cable remote control), the machine then functions independently via the Automatic Tensioning System (ATS). This system guarantees a constant sag of the conductor and an automatic stopping and restarting without manual intervention
- In regulating mode (pulling mode), the rope can be indefinitely controlled in/out via a joystick located on the control panel
- Control panel with display of the pull force and all instruments to control engine, hydraulic and electrical systems
- With digital meter counter

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.200 mm
- 4 grooves per bull wheel for 1 conductor (optional for 2 conductors)
- Designed for max. conductor Ø 45 mm
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 automatically activated emergency multiple-disc brakes
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage
- Optional with 1 or 2 independent additional hydraulic system to operate up to 2 hydraulically activated drum stand
- Hydraulic differential system for the bull wheel drives => low stress for ropes and planetary gears

Engine:

- Water-cooled diesel engine with 26 kW (35 HP)
- 12 V system with high capacity battery for a safe start also at cold temperatures

Weight and dimensions:

- Weight: approx. 2.700 kg
- Length x width x height: approx. 3.360 x 2.090 x 2.290 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

B 3

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: parking brake, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles
  Optional: parking brake, lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system, mudguards and registration up to 80 km/h

Optional equipment:

- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Cable remote control with 10 m cable to regulate the tension force for the Automatic Tensioning System (ATS)
- Digital tachometer
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- 1 or 2 additional hydraulic system to operate the drum stands
- Hose set with quick coupling to operate drum stands (standard length: 15 m or according to customer requirements)
- Front support via hydraulic supporting cylinders
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Suitable for 2 conductors => special bull wheels, second additional hydraulic system and special rope guiding devices
- Bull wheels and rope guiding devices with regulating possibilities for „right“ and „left“ conductors
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

TENSIONER WITH ENGINE
Model: B 1500 / 4

- **Tensioner with engine aggregate for regulation (sagging). For 1 conductor up to Ø 45 mm and a tension force of max. 4 to**
- **Optional for 2 conductors available**
- **In tensioning mode, automatic control of the machine via ATS (Automatic Tensioning System)**
- **Pulling mode to regulate the conductor with a max. pull force of 4 to and to install the conductors into the machine**
- **Integrated diesel hydraulic aggregate to control the ATS and activate the pulling mode, the oil cooling system and the optional additional hydraulic system for drum stands or press**
- **Robust machine constructed for highest reliability, easy operation and minimal maintenance**

Technical data in tensioning mode:

- Max. tension force: 4.000 daN
- Continuously adjustable speed: 0 - 6 km/h
- Minimal tension force: approx. 200 daN (with ATS)

Technical data in regulating mode (pulling mode):

- Max. pull force: 4.000 daN
- Continuously adjustable speed: 0 - approx. 0,8 km/h

Control of the machine:

- In tensioning mode, the tension force can be continuously regulated at the control panel (optional also with cable remote control); the machine then functions independently via the Automatic Tensioning System (ATS). This system guarantees a constant sag of the conductor and an automatic stopping and restarting without manual intervention
- In regulating mode (pulling mode), the rope can be indefinitely controlled in/out via a joystick located at the control panel
- Control panel with display of the pull force and all instruments to control engine, hydraulic and electrical systems
- With digital meter counter

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.500 mm
- 4 grooves per bull wheel for 1 conductor (optional for 2 conductors)
- Designed for max. conductor Ø 45 mm
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage
- Optional with 1 or 2 independent additional hydraulic system to operate up to 2 hydraulically activated drum stand
- Hydraulic differential system for the bull wheel drives => low stress for ropes and planetary gears

Engine:

- Water-cooled diesel engine with max. 26 kW (35 HP)
- 12 V system with high capacity battery for a safe start also at cold temperatures

Weight and dimensions:

- Weight: approx. 2.800 kg
- Length x width x height: approx. 3.760 x 2.090 x 2.490 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: parking brake, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles
  Optional: parking brake, lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system, mudguards and registration up to 80 km/h

Optional equipment:

- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Cable remote control with 10 m cable to regulate the tension force for the Automatic Tensioning System (ATS)
- Digital tachometer
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- 1 or 2 additional hydraulic system to operate the drum stands
- Hose set with quick coupling to operate drum stands (standard length: 15 m or according to customer requirements)
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable support
- Suitable for 2 conductors => special bull wheels, second additional hydraulic system and special rope guiding devices
- Bull wheels and rope guiding devices with regulating possibilities for „right" and „left" conductors
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

TENSIONER WITH ENGINE
Model: B 1500 / 6

- **Tensioner with engine aggregate for regulation (sagging). For 1 or 2 conductor up to Ø 45 mm and a tension force of max. 6 to**
- **In tensioning mode, automatic control of the machine via ATS (Automatic Tensioning System)**
- **Pulling mode to regulate the conductor with a max. pull force of 6 to and to install the conductors into the machine**
- **Integrated diesel hydraulic aggregate to control the ATS and activate the pulling mode, the oil cooling system and the additional hydraulic system for drum stand**
- **Robust machine constructed for highest reliability, easy operation and minimal maintenance**

Technical data in tensioning mode:

- Max. tension force: 6.000 daN
- Continuously adjustable speed: 0 - 5 km/h
- Minimal tension force: approx. 400 daN (with ATS)

Technical data in regulating mode (pulling mode):

- Max. pull force: 6.000 daN
- Continuously adjustable speed: 0 - approx. 0,5 km/h

Control of the machine:

- In tensioning mode, the tension force can be continuously regulated at the control panel (optional also with cable remote control), the machine then functions independently via the Automatic Tensioning System (ATS). This system guarantees a constant sag of the conductor and an automatic stopping and restarting without manual intervention
- In regulating mode (pulling mode), the rope can be indefinitely controlled in/out via a joystick located on the control panel
- Control panel with display of the pull force and all instruments to control engine, hydraulic and electrical systems
- With digital meter counter

Cover:

- Optional: Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.500 mm
- Bull wheel for 2 conductors
- Designed for max. conductor Ø 45 mm
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Optional: automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 automatically activated emergency multiple-disc brakes
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage
- 2 independent additional hydraulic system to operate up to 2 hydraulically activated drum stand
- Hydraulic differential system for the bull wheel drives => low stress for ropes and planetary gears

Engine:

- Water-cooled diesel engine with 26 kW (35 HP)
- 12 V system with high capacity battery for a safe start also at cold temperatures

Weight and dimensions:

- Weight: approx. 3.500 kg
- Length x width x height: approx. 3.500 x 2.280 x 2.760 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via 2 mechanical supporting plates
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: parking brake, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles
  Optional: parking brake, lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system, mudguards and registration up to 80 km/h

Optional equipment:

- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Cable remote control with 10 m cable to regulate the tension force for the Automatic Tensioning System (ATS)
- Digital tachometer
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- 2 additional hydraulic system to operate the drum stands
- Hose set with quick coupling to operate drum stands (standard length: 15 m or according to customer requirements)
- Back support via hydraulic backstay for high stability and fast and easy anchoring; with integrated eyes for anchoring of ropes
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Bull wheels and rope guiding devices with regulating possibilities for „right" and „left" conductors
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

TENSIONER WITH ENGINE
Model: B 1500 / 7,5 Z 341

- **Tensioner with engine aggregate for regulation (sagging). For 1 or 2 conductor up to Ø 45 mm and a tension force of max. 7,5 to**
- **In tensioning mode, automatic control of the machine via ATS (Automatic Tensioning System)**
- **Pulling mode to regulate the conductor with a max. pull force of 7,5 to and to install the conductors into the machine**
- **Integrated diesel hydraulic aggregate to control the ATS and activate the pulling mode, the oil cooling system and the optional additional hydraulic system for drum stand or press**
- **Robust machine constructed for highest reliability, easy operation and minimal maintenance**

Technical data in tensioning mode:

• Max. tension force:	7.500 daN
• Continuously adjustable speed:	0 - 5 km/h
• Minimal tension force:	approx. 400 daN (with ATS)

Technical data in regulating mode (pulling mode):

• Max. pull force:	7.500 daN
• Continuously adjustable speed:	0 - approx. 0,6 km/h

Control of the machine:

- In tensioning mode, the tension force can be continuously regulated at the control panel (optional also with cable remote control), the machine then functions independently via the Automatic Tensioning System (ATS). This system guarantees a constant sag of the conductor and an automatic stopping and restarting without manual intervention
- In regulating mode (pulling mode), the rope can be indefinitely controlled in/out via a joystick located on the control panel
- Control panel with display of the pull force and all instruments to control engine, hydraulic and electrical systems
- With digital meter counter

Cover:

- Optional: Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.500 mm
- 8 grooves per bull wheel for 2 conductors simultaneously
- Designed for max. conductor Ø 45 mm
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Optional: automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 automatically activated emergency multiple-disc brakes
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage
- Optional with 2 independent additional hydraulic system to operate up to 2 hydraulically activated drum stand
- Hydraulic differential system for the bull wheel drives => low stress for ropes and planetary gears

Engine:

- Water-cooled diesel engine with 26 kW (35 HP)
- 12 V system with high capacity battery for a safe start also at cold temperatures

Weight and dimensions:

• Weight:	approx. 3.980 kg
• Length x width x height:	approx. 3.500 x 2.280 x 2.760 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via 2 mechanical supporting plates
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: parking brake, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles
  Optional: parking brake, lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system, mudguards and registration up to 80 km/h

Optional equipment:

- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Cable remote control with 10 m cable to regulate the tension force for the Automatic Tensioning System (ATS)
- Digital tachometer
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- 2 additional hydraulic system to operate the drum stands
- Hose set with quick coupling to operate drum stands (standard length: 15 m or according to customer requirements)
- Back support via hydraulic backstay for high stability and fast and easy anchoring; with integrated eyes for anchoring of ropes
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Bull wheels and rope guiding devices with regulating possibilities for „right" and „left" conductors
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

TENSIONER WITH ENGINE
Model: B 1300 / 9

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction...)
- Diesel engines with electronic control system – satisfaction of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept – manual control at the control panel – preparation for cable or radio remote control
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Tensioner with engine aggregate for regulation (sagging). For 1 or 2 (optional 3) conductors up to Ø 45 mm (optional for 60 mm) and a tension force of max. 8 to**
- **In tensioning mode, automatic control of the machine via ATS (Automatic Tensioning System)**
- **Pulling mode to regulate the conductor with a max. pull force of 8 to and to install the conductors into the machine**
- **Integrated diesel hydraulic aggregate to control the ATS and activate the pulling mode, the oil cooling system and the optional additional hydraulic system for drum stands or press**

Technical data in tensioning mode:

• Max. tension force:	9.000 daN
• Continuously adjustable speed:	0 - 5 km/h
• Minimal tension force:	approx. 400 daN (with ATS)

Technical data in regulating mode (pulling mode):

• Max. pull force:	9.000 daN
• Continuously adjustable speed:	0 - approx. 1 km/h

Control of the machine:

- In tensioning mode, the tension force can be continuously regulated at the control panel (optional also with cable remote control); the machine then functions independently via the Automatic Tensioning System (ATS). This system guarantees a constant sag of the conductor and an automatic stopping and restarting without manual intervention
- In regulating mode (pulling mode), the rope can be indefinitely controlled in/out via a joystick located on the control panel
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Optional: Cable remote control for pulling and tensioning mode or only for Automatic Tensioning System

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.300 mm
- 8 grooves per bull wheel for up to 2 conductors simultaneously (optional for 3 conductors)
- Designed for max. conductor Ø 45 mm (optional Ø 60 mm)
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Optional with 2 or 3 independent additional hydraulic systems to operate up to 3 hydraulically activated drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage
- Hydraulic differential system for the bull wheel drives => low stress for ropes and planetary gears

Engine:

- Liquid-cooled DEUTZ diesel engine with max. 65 kW (88 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 4.200 kg
• Length x width x height:	approx. 3.770 x 2.180 x 2.450 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

B 3

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: parking brake, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles
  Optional: parking brake, lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system,mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Cable remote control with 10 m cable to regulate the tension force for the Automatic Tensioning System (ATS)
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- 2 or 3 additional hydraulic systems to operate the drum stands
- Hose set with quick coupling to operate drum stands (standard length 15 m; or according to customer requirements)
- Front support via hydraulic supporting cylinder
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Suitable for 3 conductors => special bull wheels, third additional hydraulic system and special rope guiding devices
- Bull wheels and rope guiding devices with regulating possibilities for „right" and „left" conductors
- Special equipment and special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

TENSIONER WITH ENGINE
Model: B 1500 / 8

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction...)
- Diesel engines with electronic control system – satisfaction of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept – manual control at the control panel – preparation for cable or radio remote control
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Tensioner with engine aggregate for regulation (sagging). For 1 or 2 (optional 3) conductors up to Ø 45 mm (optional for 60 mm) and a tension force of max. 8 to**
- **In tensioning mode, automatic control of the machine via ATS (Automatic Tensioning System)**
- **Pulling mode to regulate the conductor with a max. pull force of 8 to and to install the conductors into the machine**
- **Integrated diesel hydraulic aggregate to control the ATS and activate the pulling mode, the oil cooling system and the optional additional hydraulic system for drum stands or press**

Technical data in tensioning mode:

• Max. tension force:	8.000 daN
• Continuously adjustable speed:	0 - 5 km/h
• Minimal tensioning force:	approx. 400 daN (with ATS)

Technical data in regulating mode (pulling mode):

• Max. pull force:	8.000 daN
• Continuously adjustable speed:	0 - approx. 1 km/h

Control of the machine:

- In tensioning mode, the tension force can be continuously regulated at the control panel (optional also with cable remote control); the machine then functions independently via the Automatic Tensioning System (ATS). This system guarantees a constant sag of the conductor and an automatic stopping and restarting without manual intervention
- In regulating mode (pulling mode), the rope can be indefinitely controlled in/out via a joystick located at the control panel
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Optional: Cable remote control for pulling and tensioning mode or only for Automatic Tensioning System

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.500 mm
- 8 grooves per bull wheel for 2 conductors simultaneously (optional for 3 conductors)
- Designed for max. conductor Ø 45 mm (optional Ø 60 mm)
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Optional with 2 or 3 independent additional hydraulic systems to operate up to 3 hydraulically activated drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage
- Hydraulic differential system for the bull wheel drives => low stress for ropes and planetary gears

Engine:

- Liquid-cooled DEUTZ diesel engine with max. 65 kW (88 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 4.400 kg
• Length x width x height:	approx. 3.970 x 2.180 x 2.570 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

B 3

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: parking brake, pneumatic brake system, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles
  Optional: parking brake,pneumatic brake system, lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system, mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Cable remote control with 10 m cable to regulate the tension force for the Automatic Tensioning System (ATS)
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- 2 or 3 additional hydraulic systems to operate the drum stands
- Hose set with quick coupling to operate drum stands (standard length 15 m; or according to customer requirements)
- Front support via hydraulic supporting cylinder
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Suitable for 3 conductors => special bull wheels, third additional hydraulic system and special rope guiding devices
- Bull wheels and rope guiding devices with possibilities for „right" and „left" conductors
- Special equipment and special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

TENSIONER WITH ENGINE
Model: B 1500 / 12

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overload protection, noise reduction...)
- Diesel engines with electronic control system – satisfaction of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept – manual control at the control panel – preparation for cable or radio remote control
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Tensioner with engine aggregate for regulation (sagging). For 1 or 2 (optional 3) conductors up to Ø 45 mm (optional for 60 mm) and a tension force of max. 12 to**
- **In tensioning mode, automatic control of the machine via ATS (Automatic Tensioning System)**
- **Pulling mode to regulate the conductor with a max. pull force of 12 to and to install the conductors into the machine**
- **Integrated diesel hydraulic aggregate to control the ATS and activate the pulling mode, the oil cooling system and the optional additional hydraulic system for drum stands or press**

Technical data in tensioning mode:

• Max. tension force:	12.000 daN
• Continuously adjustable speed:	0 - 5 km/h
• Minimal tension force:	approx. 400 daN (with ATS)

Technical data in regulating mode (pulling mode):

• Max. pull force:	12.000 daN
• Continuously adjustable speed:	0- approx. 0,7 km/h

Control of the machine:

- In tensioning mode, the tension force can be continuously regulated at the control panel (optional also with cable remote control); the machine then functions independently via the Automatic Tensioning System (ATS). This system guarantees a constant sag of the conductor and an automatic stopping and restarting without manual intervention
- In regulating mode (pulling mode), the rope can be indefinitely controlled in/out via a joystick located on the control panel
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Optional: Cable remote control for pulling and tensioning mode or only for Automatic Tensioning System

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.500 mm
- 8 grooves per bull wheel for up to 2 conductors simultaneously (optional for 3 conductors)
- Designed for max. conductor Ø 45 mm (optional Ø 60 mm)
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Optional with 2 or 3 independent additional hydraulic systems to operate up to 3 hydraulically activated drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage
- Hydraulic differential system for the bull wheel drives => low stress for ropes and planetary gears

Engine:

- Liquid-cooled DEUTZ diesel engine with max. 65 kW (88 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 5.000 kg
• Length x width x height:	approx. 5.000 x 2.280 x 2.570 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: parking brake, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles
  Optional: parking brake, lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system,mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Cable remote control with 10 m cable to regulate the tension force for the Automatic Tensioning System (ATS)
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- 2 or 3 additional hydraulic systems to operate the drum stands
- Hose set with quick coupling to operate drum stands (standard length 15 m; or according to customer requirements)
- Front support via hydraulic supporting cylinder
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Suitable for 3 conductors => special bull wheels, third additional hydraulic system and special rope guiding devices
- Bull wheels and rope guiding devices with regulating possibilities for „right" and „left" conductors
- Special equipment and special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

TENSIONER WITH ENGINE
Model: B 1500 / 14 Z 342

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloading protection, noise reduction...)
- Diesel engines with electronic control system – satisfaction of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept – manual control at the control panel – preparation for cable or radio remote control
- All electronic components are of robust construction (IP67)
- Optional: remote diagnosis

Overview:

- **Tensioner with engine aggregate for regulation (sagging). For 1, 2, 3 or 4 conductors up to Ø 45 mm and a tension force of max. 14 to**
- **In tensioning mode, automatic control of the machine via ATS (Automatic Tensioning System)**
- **Pulling mode to regulate the conductor with a max. pull force of 14 to and to install the conductors into the machine**
- **Integrated diesel hydraulic aggregate to control the ATS and activate the pulling mode, the oil cooling system and the optional additional hydraulic system for drum stands or press**

Technical data in tensioning mode:

• Max. tension force:	14.000 daN
• Continuously adjustable speed:	0 - 5 km/h
• Minimal tension force:	approx. 400 daN (with ATS)

Technical data in regulating mode (pulling mode):

• Max. pull force:	14.000 daN
• Continuously adjustable speed:	0- approx. 2,5 km/h
at 14.000 daN:	max 0,5 km/h
at 2.800 daN:	max 2,5 km/h

Control of the machine:

- In tensioning mode, the tension force can be continuously regulated at the control panel (optional also with cable remote control); the machine then functions independently via the Automatic Tensioning System (ATS). This system guarantees a constant sag of the conductor and an automatic stopping and restarting without manual intervention
- In regulating mode (pulling mode), the rope can be indefinitely controlled in/out via a joystick located on the control panel
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Optional: Cable remote control for pulling and tensioning mode or only for Automatic Tensioning System

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.500 mm
- 12 grooves per bull wheel for up to 4 conductors simultaneously
- Designed for max. conductor Ø 45 mm
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- With 4 independent additional hydraulic systems to operate up to 4 hydraulically activated drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage
- Hydraulic differential system for the bull wheel drives => low stress for ropes and planetary gears

Engine:

- Liquid-cooled DEUTZ diesel engine with max. 65 kW (88 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 5.500 kg
• Length x width x height:	approx. 5.000 x 2.280 x 2.570 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: parking brake, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles
  Optional: parking brake, lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system,mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Artic kit for temperatures up to –20°
- Cable remote control with 10 m cable to regulate the tension force for the Automatic Tensioning System (ATS)
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- Hose set with quick coupling to operate drum stands (standard length 15 m; or according to customer requirements)
- Front support via hydraulic supporting cylinder
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Special equipment and special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

TENSIONER WITH ENGINE
Model: B 1500 / 16 F

B 3

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction...)
- Diesel engines with electronic control system – satisfaction of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept – manual control at the control panel – preparation for cable or radio remote control
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Tensioner with engine aggregate for regulation (sagging). For 1,2,3 or 4 conductor up to Ø 45 mm (optional for 60 mm) and a tension force of max. 16 to**
- **In tensioning mode, automatic control of the machine via ATS (Automatic Tensioning System)**
- **Pulling mode to regulate the conductor with a max. pull force of 16 to and to install the conductors into the machine**
- **Integrated diesel hydraulic aggregate to control the ATS and activate the pulling mode, the oil cooling system and the optional additional hydraulic system for drum stands or press**

Technical data in tensioning mode:

• Max. tension force:	16.000 daN
• Continuously adjustable speed:	0 - 5 km/h
• Minimal tension force:	approx. 700 daN (with ATS)

Technical data in regulating mode (pulling mode):

• Max. pull force:	16.000 daN
• Continuously adjustable speed:	0 - 3 km/h (at 2.500 daN)
	max. 0,5 km/h (at 15.000 daN)

Control of the machine:

- In tensioning mode, the tension force can be continuously regulated at the control panel (optional also with cable remote control); the machine then functions independently via the Automatic Tensioning System (ATS). This system guarantees a constant sag of the conductor and an automatic stopping and restarting without manual intervention
- In regulating mode (pulling mode), the rope can be indefinitely controlled in/out via a joystick located on the control panel
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Optional: Cable remote control for pulling and tensioning mode or only for Automatic Tensioning System

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.500 mm
- 12 grooves per bull wheel for up to 4 conductors simultaneously
- Designed for max. conductor Ø 45 mm (optional Ø 60 mm)
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Optional with 4 independent additional hydraulic systems to operate up to 4 hydraulically activated drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage
- Hydraulic differential system for the bull wheel drives => low stress for ropes and planetary gears

Engine:

- Liquid cooled DEUTZ diesel engine with 65 kW (88 HP) and automatic and infinitely variable speed control (depending on the power requirement)
- Low speed => long life cycle and low noise level
- 24 V system with high capacity battery for a safe start also at cold temperatures

Weight and dimensions:

• Weight:	approx. 6.500 kg
• Length x width x height:	approx. 4.970 x 2.300 x 2.640 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle and parking brake
  Optional: lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles and parking brake
  Optional: pneumatic brake system, lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system,mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Cable remote control with 10 m cable to regulate the tension force for the Automatic Tensioning System (ATS)
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- 4 additional hydraulic systems to operate the drum stands
- Hose set with quick coupling to operate drum stands (standard length 15 m; or according to customer requirements)
- Front support via hydraulic supporting cylinder
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Bull wheels and rope guiding devices with regulating possibilities for „right" and „left" conductors
- Special equipment and special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

TENSIONER WITH ENGINE
Model: B 1500 / 16 F-6

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction...)
- Diesel engines with electronic control system – satisfaction of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept – manual control at the control panel – preparation for cable or radio remote control
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Tensioner with engine aggregate for regulation (sagging). For 1,2,3,4 or 6 conductor up to Ø 40 mm (optional for 60 mm) and a tension force of max. 16 to**
- **In tensioning mode, automatic control of the machine via ATS (Automatic Tensioning System)**
- **Pulling mode to regulate the conductor with a max. pull force of 16 to and to install the conductors into the machine**
- **Integrated diesel hydraulic aggregate to control the ATS and activate the pulling mode, the oil cooling system and the optional additional hydraulic system for drum stands or press**

Technical data in tensioning mode:

• Max. tension force:	16.000 daN
• Continuously adjustable speed:	0 - 5 km/h
• Minimal tension force:	approx. 700 daN (with ATS)

Technical data in regulating mode (pulling mode):

• Max. pull force:	16.000 daN
• Continuously adjustable speed:	0 - 3 km/h (at 2.500 daN)
	max. 0,5 km/h (at 15.000 daN)

Control of the machine:

- In tensioning mode, the tension force can be continuously regulated at the control panel (optional also with cable remote control); the machine then functions independently via the Automatic Tensioning System (ATS). This system guarantees a constant sag of the conductor and an automatic stopping and restarting without manual intervention
- In regulating mode (pulling mode), the rope can be indefinitely controlled in/out via a joystick located on the control panel
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Optional: Cable remote control for pulling and tensioning mode or only for Automatic Tensioning System

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.500 mm
- Bull wheel for up to 6 conductors simultaneously
- Designed for max. conductor Ø 40 mm
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Optional with 4 independent additional hydraulic systems to operate up to 4 hydraulically activated drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage
- Hydraulic differential system for the bull wheel drives => low stress for ropes and planetary gears

Engine:

- Liquid cooled DEUTZ diesel engine with 65 kW (88 HP) and automatic and infinitely variable speed control (depending on the power requirement)
- Low speed => long life cycle and low noise level
- 24 V system with high capacity battery for a safe start also at cold temperatures

Weight and dimensions:

• Weight:	approx. 7.200 kg
• Length x width x height:	approx. 4.970 x 2.500 x 2.640 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle and parking brake
  Optional: lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles and parking brake
  Optional: pneumatic brake system, lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system,mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Cable remote control with 10 m cable to regulate the tension force for the Automatic Tensioning System (ATS)
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- 4 additional hydraulic systems to operate the drum stands
- Hose set with quick coupling to operate drum stands (standard length 15 m; or according to customer requirements)
- Front support via hydraulic supporting cylinder
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Bull wheels and rope guiding devices with regulating possibilities for „right" and „left" conductors
- Special equipment and special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

TENSIONER WITH ENGINE
Model: B 1500 / 4,5 x 2

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction...)
- Diesel engines with electronic control system – satisfaction of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept – manual control at the control panel – preparation for cable or radio remote control
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Tensioner with engine aggregate for regulation (sagging). For 1 or 2 conductors up to Ø 45 mm (optional for 60 mm) and a tension force of max. 2 x 4,5 to**
- **Sychronizing system => both bull wheel units can be operated in synchronous or separate mode**
- **In tensioning mode, automatic control of the machine via ATS (Automatic Tensioning System)**
- **Pulling mode to regulate the conductor with a max. pull force of 2 x 4,5 to and to install the conductors into the machine**
- **Integrated diesel hydraulic aggregate to control the ATS and activate the pulling mode, the oil cooling system and the optional additional hydraulic system for drum stands or press**

Technical data in tensioning mode:

• Max. tension force:	2 x 4.500 daN
• Continuously adjustable speed:	0 - 5 km/h
• Minimal tensioning force:	approx. 300 daN (with ATS)

Technical data in regulating mode (pulling mode):

• Max. pull force:	2 x 4.500 daN
• Continuously adjustable speed:	0 - approx. 1 km/h

Control of the machine:

- In tensioning mode, the tension force can be continuously regulated at the control panel (optional also with cable remote control); the machine then functions independently via the Automatic Tensioning System (ATS). This system guarantees a constant sag of the conductor and an automatic stopping and restarting without manual intervention
- In regulating mode (pulling mode), the rope can be indefinitely controlled in/out via a joystick located at the control panel
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Optional: Cable remote control for pulling and tensioning mode or only for Automatic Tensioning System

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 x 2 bull wheels with a diameter of 1.500 mm
- 4 grooves per bull wheel unit; 2 bull wheel units for 1 + 1 conductors
- Designed for max. conductor Ø 45 mm (optional Ø 60 mm)
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In all four bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 4 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Optional with 2 independent additional hydraulic systems to operate up to 2 hydraulically activated drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Liquid-cooled DEUTZ diesel engine with max. 65 kW (88 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 5.400 kg
• Length x width x height:	approx. 5.400 x 2.100 x 2.600 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: parking brake, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles
  Optional: parking brake, pneumatic brake system, lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system and mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Grounding plate with holding device
- 2 additional hydraulic systems to operate the drum stands
- Hose set with quick coupling to operate drum stands (standard length 15 m; or according to customer requirements)
- Biodegradable hydraulic oil
- Hydraulic connection to operate 700 or 1.000 bar press units
- Bull wheels and rope guiding devices with regulating possibilities for „right" and „left" conductors
- Special equipment and special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

TENSIONER WITH ENGINE
Model: B 1500 / 8 x 2

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction...)
- Diesel engines with electronic control system – satisfaction of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept – manual control at the control panel – preparation for cable or radio remote control
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Tensioner with engine aggregate for regulation (sagging). For up to 4 (2+2) conductors up to Ø 45 mm (optional for 60 mm) and a tension force of max. 2 x 8 to**
- **Sychronizing system => both bull wheel units can be operated in synchronous or separate mode**
- **Optional for 6 (3+3) conductors**
- **In tensioning mode, automatic control of the machine via ATS (Automatic Tensioning System)**
- **Pulling mode to regulate the conductor with a max. pull force of 2 x 8 to and to install the conductors into the machine**
- **Integrated diesel hydraulic aggregate to control the ATS and activate the pulling mode, the oil cooling system and the optional additional hydraulic system for drum stands or press**

Technical data in tensioning mode:

• Max. tension force:	2 x 8.000 daN
• Continuously adjustable speed:	0 - 5 km/h
• Minimal tensioning force:	approx. 500 daN (with ATS)

Technical data in regulating mode (pulling mode):

• Max. pull force:	2 x 8.000 daN
• Continuously adjustable speed:	0 - approx. 0,6 km/h (optional 1 km/h)

Control of the machine:

- In tensioning mode, the tension force can be continuously regulated at the control panel (optional also with cable remote control); the machine then functions independently via the Automatic Tensioning System (ATS). This system guarantees a constant sag of the conductor and an automatic stopping and restarting without manual intervention
- In regulating mode (pulling mode), the rope can be indefinitely controlled in/out via a joystick located at the control panel
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Optional: Cable remote control for pulling and tensioning mode or only for Automatic Tensioning System

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 x 2 bull wheels with a diameter of 1.500 mm
- 8 grooves per bull wheel unit for 2 conductors simultaneously => 2 bull wheel units for 2 + 2 conductors (optional 3 + 3 ropes)
- Designed for max. conductor Ø 45 mm (optional Ø 60 mm)
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In all four bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 4 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Optional with 4 independent additional hydraulic systems to operate up to 4 hydraulically activated drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Water-cooled DEUTZ diesel engine with max. 75 kW (102 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 8.100 kg
• Length x width x height:	approx. 5.560 x 2.300 x 2.590 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

B 3

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle and parking brake
  Optional: lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles and parking brake
  Optional: pneumatic brake system, lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake and lighting system
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Grounding plate with holding device
- 4 additional hydraulic systems to operate the drum stands
- Hose set with quick coupling to operate drum stands (standard length 15 m; or according to customer requirements)
- Biodegradable hydraulic oil
- Hydraulic connection to operate 700 or 1.000 bar press units
- Special equipment and special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

TENSIONER WITH ENGINE
Model: B 1500 / 4,5 x 3

B 3

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction...)
- Diesel engines with electronic control system – satisfaction of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept – manual control at the control panel – preparation for cable or radio remote control
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Tensioner with engine aggregate for regulation (sagging). For up to 3 (1+1+1) conductors up to Ø 45 mm (optional for 60 mm) and a tension force of max. 3 x 4,5 to**
- **Sychronizing system => bull wheel units can be operated in synchronous or separate mode**
- **In tensioning mode, automatic control of the machine via ATS (Automatic Tensioning System)**
- **Pulling mode to regulate the conductor with a max. pull force of 3 x 4,5 to and to install the conductors into the machine**
- **Integrated diesel hydraulic aggregate to control the ATS and activate the pulling mode, the oil cooling system and the optional additional hydraulic system for drum stands or press**

Technical data in tensioning mode:

• Max. tension force:	3 x 4.500 daN
• Continuously adjustable speed:	0 - 5 km/h
• Minimal tensioning force:	approx. 500 daN (with ATS)

Technical data in regulating mode (pulling mode):

• Max. pull force:	3 x 4.500 daN
• Continuously adjustable speed:	0 - approx. 1,5 km/h

Control of the machine:

- In tensioning mode, the tension force can be continuously regulated at the control panel (optional also with cable remote control); the machine then functions independently via the Automatic Tensioning System (ATS). This system guarantees a constant sag of the conductor and an automatic stopping and restarting without manual intervention
- In regulating mode (pulling mode), the rope can be indefinitely controlled in/out via a joystick located at the control panel
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Optional: Radio or cable remote control for pulling and tensioning mode or only for Automatic Tensioning System

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 3 x 2 bull wheels (5 grooves each) with Ø 1.500 mm; for 3 conductors
- Designed for max. conductor Ø 45 mm (optionally Ø 60 mm)
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In all four bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 6 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- 3 independent additional hydraulic systems to operate up to 3 hydraulically activated drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Water-cooled DEUTZ diesel engine with max. 63 kW (85 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 8.300 kg
• Length x width x height:	approx. 5.900 x 2.300 x 2.800 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

B 3

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 2 axle chassis with rigid axles and parking brake
  Optional: pneumatic brake system, lighting system, mudguards

Optional chassis:

- 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake and lighting system
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Grounding plate with holding device
- 4 additional hydraulic systems to operate the drum stands
- Hose set with quick coupling to operate drum stands (standard length 15 m; or according to customer requirements)
- Biodegradable hydraulic oil
- Hydraulic connection to operate 700 or 1.000 bar press units
- Special equipment and special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

TENSIONER WITH ENGINE
Model: B 1500 / 6 x 3

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction...)
- Diesel engines with electronic control system – satisfaction of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept – manual control at the control panel – preparation for cable or radio remote control
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Tensioner with engine aggregate for regulation (sagging). For up to 3 (1+1+1) conductors up to Ø 45 mm (optional for 60 mm) and a tension force of max. 3 x 6 to**
- **Sychronizing system => both bull wheel units can be operated in synchronous or separate mode**
- **In tensioning mode, automatic control of the machine via ATS (Automatic Tensioning System)**
- **Pulling mode to regulate the conductor with a max. pull force of 3 x 6 to and to install the conductors into the machine**
- **Integrated diesel hydraulic aggregate to control the ATS and activate the pulling mode, the oil cooling system and the optional additional hydraulic system for drum stands or press**

Technical data in tensioning mode:

• Max. tension force:	3 x 6.0000 daN
• Continuously adjustable speed:	0 - 5 km/h
• Minimal tensioning force:	approx. 500 daN (with ATS)

Technical data in regulating mode (pulling mode):

• Max. pull force:	3 x 6.0000 daN
• Continuously adjustable speed:	0 - approx. 1,1 km/h

Control of the machine:

- In tensioning mode, the tension force can be continuously regulated at the control panel (optional also with cable remote control); the machine then functions independently via the Automatic Tensioning System (ATS). This system guarantees a constant sag of the conductor and an automatic stopping and restarting without manual intervention
- In regulating mode (pulling mode), the rope can be indefinitely controlled in/out via a joystick located at the control panel
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Optional: Radio or cable remote control for pulling and tensioning mode or only for Automatic Tensioning System

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 3 x 2 bull wheels (5 grooves each) with Ø 1.500 mm; for 3 conductors
- Designed for max. conductor Ø 45 mm (optionally Ø 60 mm)
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In all four bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 6 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- 3 independent additional hydraulic systems to operate up to 3 hydraulically activated drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Water-cooled diesel engine with max. 63 kW (85 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 8.600 kg
• Length x width x height:	approx. 5.900 x 2.300 x 2.800 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 2 axle chassis with rigid axles and parking brake
  Optional: pneumatic brake system, lighting system, mudguards

Optional chassis:

- 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake and lighting system
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Grounding plate with holding device
- 4 additional hydraulic systems to operate the drum stands
- Hose set with quick coupling to operate drum stands (standard length 15 m; or according to customer requirements)
- Biodegradable hydraulic oil
- Hydraulic connection to operate 700 or 1.000 bar press units
- Special equipment and special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

TENSIONER WITH ENGINE
Model: B 1500 / 12 x 2

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction...)
- Diesel engines with electronic control system – satisfaction of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept – manual control at the control panel – preparation for cable or radio remote control
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Tensioner with engine aggregate for regulation (sagging). For up to 4 (2+2) or 6 (3+3) conductors up toØ 45 mm or Ø 60 mm and a tension force of max. 2 x 12 to**
- **Optional for 6 (3+3) conductors**
- **In tensioning mode, automatic control of the machine via ATS (Automatic Tensioning System)**
- **Pulling mode to regulate the conductor with a max. pull force of 2 x 12 to and to install the conductors into the machine**
- **Integrated diesel hydraulic aggregate to control the ATS and activate the pulling mode, the oil cooling system and the optional additional hydraulic system for drum stands or press**

Technical data in tensioning mode:

- Max. tension force: 2 x 12.000 daN
- Continuously adjustable speed: 0 - 5 km/h
- Minimal tensioning force: approx. 600 daN (with ATS)

Technical data in regulating mode (pulling mode):

- Max. pull force: 2 x 12.000 daN
- Continuously adjustable speed: 0 - approx. 2 km/h

Control of the machine:

- In tensioning mode, the tension force can be continuously regulated at the control panel (optional also with cable remote control); the machine then functions independently via the Automatic Tensioning System (ATS). This system guarantees a constant sag of the conductor and an automatic stopping and restarting without manual intervention
- In regulating mode (pulling mode), the rope can be indefinitely controlled in/out via a joystick located at the control panel
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Optional: Cable remote control for pulling and tensioning mode or only for Automatic Tensioning System

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 x 2 bull wheels with a diameter of 1.500 mm; suitable for 2+2 or 3+3 conductors
- Designed for max. conductor Ø 60 mm (4 bundle) or 45 mm (6 bundle)
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In all four bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 4 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- 4 or 6 independent additional hydraulic systems to operate up to 4 or 6 hydraulically activated drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Water-cooled DEUTZ diesel engine with max. 75 kW (102 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

- Weight: approx. 11.900 kg
- Length x width x height: approx. 5.850 x 2.500 x 2.900 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 2 axle chassis with rigid axles and parking brake
  Optional: pneumatic brake system, lighting system, mudguards

Optional chassis:

- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake and lighting system
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Grounding plate with holding device
- Hose set with quick coupling to operate drum stands (standard length 15 m; or according to customer requirements)
- Biodegradable hydraulic oil
- Hydraulic connection to operate 700 or 1.000 bar press units
- Special equipment and special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

TENSIONER WITH ENGINE
Model: B 1800 / 12 x 2

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction...)
- Diesel engines with electronic control system – satisfaction of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept – manual control at the control panel – preparation for cable or radio remote control
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Tensioner with engine aggregate for regulation (sagging). For up to 4 (2+2) conductors up to Ø 60 mm and a tension force of max. 2 x 12 to**
- **Sychronizing system => both bull wheel units can be operated in synchronous or separate mode**
- **Optional for 6 (3+3) conductors**
- **In tensioning mode, automatic control of the machine via ATS (Automatic Tensioning System)**
- **Pulling mode to regulate the conductor with a max. pull force of 2 x 12 to and to install the conductors into the machine**
- **Integrated diesel hydraulic aggregate to control the ATS and activate the pulling mode, the oil cooling system and the optional additional hydraulic system for drum stands or press**

Technical data in tensioning mode:

• Max. tension force:	2 x 12.000 daN
• Continuously adjustable speed:	0 - 5 km/h
• Minimal tensioning force:	approx. 600 daN (with ATS)

Technical data in regulating mode (pulling mode):

• Max. pull force:	2 x 12.000 daN
• Continuously adjustable speed:	0 - 2 km/h

Control of the machine:

- In tensioning mode, the tension force can be continuously regulated at the control panel (optional also with cable remote control); the machine then functions independently via the Automatic Tensioning System (ATS). This system guarantees a constant sag of the conductor and an automatic stopping and restarting without manual intervention
- In regulating mode (pulling mode), the rope can be indefinitely controlled in/out via a joystick located at the control panel
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Optional: Cable remote control for pulling and tensioning mode or only for Automatic Tensioning System

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 x 2 bull wheels with a diameter of 1.800 mm
- 8 grooves per bull wheel unit for 2 conductors simultaneously => 2 bull wheel units for 2+2 conductors (optional 3+3 conductors)
- Designed for max. conductor Ø 60 mm (otional 70 mm)
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In all four bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 4 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Optional with 4 independent additional hydraulic systems to operate up to 4 hydraulically activated drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Water-cooled DEUTZ diesel engine with max. 75 kW (102 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 17.000 kg
• Length x width x height:	approx. 6.800 x 2.500 x 3.100 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 2 axle chassis with rigid axles and parking brake
  Optional: pneumatic brake system, lighting system, mudguards

Optional chassis:

- 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake and lighting system
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Grounding plate with holding device
- 4 additional hydraulic systems to operate the drum stands
- Hose set with quick coupling to operate drum stands (standard length 15 m; or according to customer requirements)
- Biodegradable hydraulic oil
- Hydraulic connection to operate 700 or 1.000 bar press units
- Special equipment and special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

TENSIONER WITH ENGINE
Model: B 1800 / 14 x 2

Overview:

- **Tensioner with engine aggregate for regulation (sagging). For up to 4 (2+2) conductors up to Ø 60 mm and a tension force of max. 2 x 14 to**
- **In tensioning mode, automatic control of the machine via ATS (Automatic Tensioning System)**
- **Pulling mode to regulate the conductor with a max. pull force of 2 x 15 to and to install the conductors into the machine**
- **Integrated diesel hydraulic aggregate to control the ATS and activate the pulling mode, the oil cooling system and the optional additional hydraulic system for drum stands or press**

Technical data in tensioning mode:

- Max. tension force: 2 x 14.000 daN
- Continuously adjustable speed: 0 - 5 km/h
- Minimal tensioning force: approx. 800 daN (with ATS)

Technical data in regulating mode (pulling mode):

- Max. pull force: 2 x 14.000 daN
- Continuously adjustable speed: 0 - 2 km/h

Control of the machine:

- In tensioning mode, the tension force can be continuously regulated at the control panel (optional also with cable remote control); the machine then functions independently via the Automatic Tensioning System (ATS). This system guarantees a constant sag of the conductor and an automatic stopping and restarting without manual intervention
- In regulating mode (pulling mode), the rope can be indefinitely controlled in/out via a joystick located at the control panel
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Optional: Cable remote control for pulling and tensioning mode or only for Automatic Tensioning System

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 x 2 bull wheels with a diameter of 1.800 mm
- for 2+2 conductors (optional 3+3 conductors)
- Designed for max. conductor Ø 60 mm (optional 70 mm)
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In all four bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 4 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- With 4 independent additional hydraulic systems to operate up to 4 hydraulically activated drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Water-cooled DEUTZ diesel engine with max. 75 kW (102 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

- Weight: approx. 14.500 kg
- Length x width x height: approx. 6.700 x 2.500 x 3.200 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust hydraulic supporting plate

Standard chassis:

- 2 axle chassis with gigid axles, pneumatic brakes, parking brake and mudguards
  Optional: lighting system

Optional chassis:

- 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake and lighting system
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Grounding plate with holding device
- Hose set with quick coupling to operate drum stands (standard length 15 m; or according to customer requirements)
- Biodegradable hydraulic oil
- Hydraulic connection to operate 700 or 1.000 bar press units
- Special equipment and special models on request

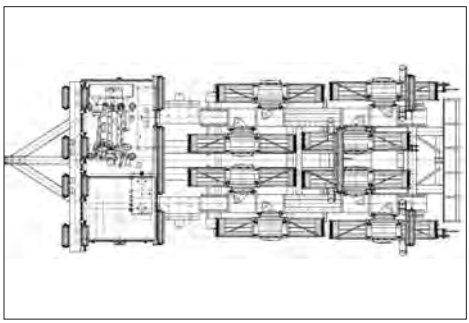
ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

TENSIONER WITH ENGINE
Model: B 1500 / 4,5 x 4

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction...)
- Diesel engines with electronic control system – satisfaction of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept – manual control at the control panel – preparation for cable or radio remote control
- Optional: - synchronisation system
  - remote diagnosis



Overview:

- **Tensioner with engine aggregate for regulation (sagging). For up to 4 (1+1+1+1) conductors up to Ø 45 mm and a tension force of max. 4 x 4,5 to**
- **all 4 conductors can be controlled independently**
- **In tensioning mode, automatic control of the machine via ATS (Automatic Tensioning System)**
- **Pulling mode to regulate the conductor with a max. pull force of 4 x 4,5 to and to install the conductors into the machine**
- **Integrated diesel hydraulic aggregate to control the ATS and activate the pulling mode, the oil cooling system and the optional additional hydraulic system for drum stands or press**

Technical data in tensioning mode:

• Max. tension force:	4 x 4.500 daN
• Continuously adjustable speed:	0 - 5 km/h
• Minimal tensioning force:	approx. 500 daN (with ATS)

Technical data in regulating mode (pulling mode):

• Max. pull force:	4 x 4.500 daN
• Continuously adjustable speed:	0 - approx. 0,7 km/h

Control of the machine:

- In tensioning mode, the tension force can be continuously regulated at the control panel (optional also with cable remote control); the machine then functions independently via the Automatic Tensioning System (ATS). This system guarantees a constant sag of the conductor and an automatic stopping and restarting without manual intervention
- In regulating mode (pulling mode), the rope can be indefinitely controlled in/out via a joystick located at the control panel
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Optional: Cable remote control for pulling and tensioning mode or only for Automatic Tensioning System

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 4 x 2 Bull wheels with a diameter of 1.500 mm
- 4 bull wheel units for 4 conductors
- Designed for max. conductor Ø 45 mm (optional: Ø 60 mm)
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In all bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 8 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum l oad
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- 4 independent additional hydraulic systems to operate up to 4 hydraulically activated drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Water-cooled DEUTZ diesel engine with max. 75 kW (102 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 10.200 kg
• Length x width x height:	approx. 6.200 x 2.500 x 2.800 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

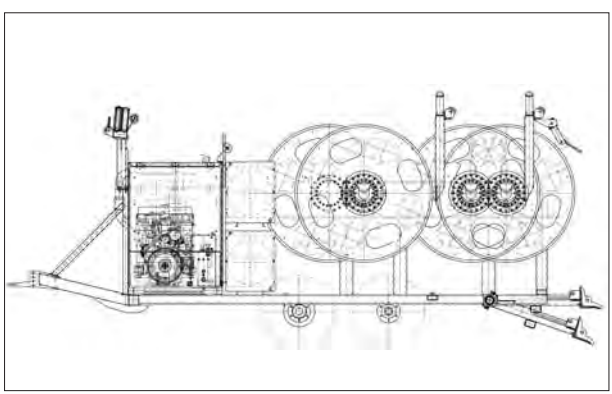
- 2 axle chassis with rigid axles and parking brake
  Optional: pneumatic brake system, lighting system, mudguards

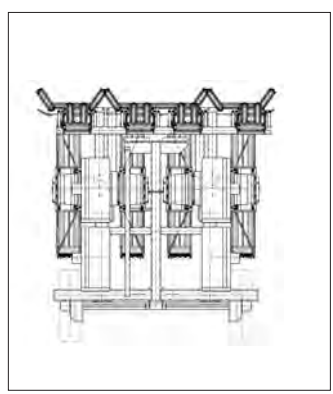
Optional chassis:

- 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake and lighting system
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Grounding plate with holding device
- Hose set with quick coupling to operate drum stands (standard length 15 m; or according to customer requirements)
- Biodegradable hydraulic oil
- Hydraulic connection to operate 700 or 1.000 bar press units
- Special equipment and special models on request





ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

TENSIONER WITH ENGINE
Model: B 1500 / 18

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction...)
- Diesel engines with electronic control system – satisfaction of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept – manual control at the control panel – preparation for cable or radio remote control
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Tensioner with engine aggregate for regulation (sagging). For 1, 2 ,3 or 4 conductors up to Ø 60 mm and a tension force of max. 18 to**
- **In tensioning mode, automatic control of the machine via ATS (Automatic Tensioning System)**
- **Pulling mode to regulate the conductor with a max. pull force of 18 to and to install the conductors into the machine**
- **Integrated diesel hydraulic aggregate to control the ATS and activate the pulling mode, the oil cooling system and the optional additional hydraulic system for drum stands or press**

Technical data in tensioning mode:

- Max. tension force: 18.000 daN
- Continuously adjustable speed: 0 - 5 km/h
- Minimal tension force: approx. 800 daN (with ATS)

Technical data in regulating mode (pulling mode):

- Max. pull force: 18.000 daN
- Continuously adjustable speed: 0 - approx. 0,6 km/h (optional 1 km/h)

Control of the machine:

- In tensioning mode, the tension force can be continuously regulated at the control panel (optional also with cable remote control), the machine then functions independently via the Automatic Tensioning System (ATS). This system guarantees a constant sag of the conductor and an automatic stopping and restarting without manual intervention
- In regulating mode (pulling mode), the rope can be indefinitely controlled in/out via a joystick located at the control panel
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Optional: Cable remote control for pulling and tensioning mode or only for Automatic Tensioning System

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.500 mm
- 12 grooves per bull wheel for up to 4 conductors simultaneously
- Designed for max. conductor Ø 60 mm
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Conductor anchoring during change of reel is not necessary

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Optional with 4 independent additional hydraulic systems to operate up to 4 hydraulically activated drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Water-cooled DEUTZ diesel engine with max. 75 kW (102 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

- Weight: approx. 7.800 kg
- Length x width x height: approx. 5.900 x 2.280 x 2.800 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via hydraulic cylinder

Standard chassis:

- 1 axle chassis with rigid axle and parking brake
  Optional: pneumatic brake system, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axle and parking brake
  Optional: pneumatic brake system, lighting system, mudguards
- 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system, mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Cable remote control with 10 m cable to regulate the tension force for the Automatic Tensioning System (ATS)
- Grounding plate with holding device
- Noise reduction kit for cover
- 4 additional hydraulic systems to operate the drum stands
- Hose set with quick coupling to operate drum stands (standard length 15 m; or according to customer requirements)
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Bull wheels and rope guiding devices with adjustment possibilities for „right“ and „left“ conductors
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Puller-Tensioners

PULLER-TENSIONER
Model: WB 1200 / 2E

- **Combination machine to be used as Puller or as Tensioner for 1 steel rope or conductor up to Ø 45 mm and a pull force of max. 1,8 to and tension force of max. 2 to**
- **In tensioning mode automatic control of the machine via ATS (Automatic Tensioning System**
- **In pulling mode particularly suitable for replacement of conductors**
- **Robust machine constructed for highest reliability, simple operation and minimal maintenance**

Technical data in pulling mode:

• Max. pull force:	1.800 daN
• Continuously adjustable speed: at 1.600 daN:	0 - 4 km/h max. 4 km/h

Technical data in tensioning mode:

• Max. tension force:	2.000 daN
• Continuously adjustable speed:	0 - 4,6 km/h
• Minimal tension force:	0 daN (with manual control) approx. 200 daN (with ATS)

Control of the machine:

- In pulling mode the rope is controlled in/out via handlevel at control desk
  - In tensioning mode, the tension force can be continuously regulated; the machine then functions independently via the Automatic Tensioning System (ATS) => constant sag of the conductor and an automatic stopping and restarting without manual intervention
- Control panel with display of the pull force and all instruments to control engine, hydraulic and electrical systems
- Optional with digital meter counter and digital tachometer
- Pull force switch off system (inductive system for highest safety of operation)
- Optional: Preparation for a quick installation of a pull force recorder

Cover:

- Lockable tarpaulin cover (optional with aluminium sheet) protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.200 mm
- 4 grooves per bull wheel for 1 rope/conductor
- Designed for max conductor Ø 45 mm
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reel/drum

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- 1 additional hydraulic system to operate 1 hydraulically activated reel winder or drum stand
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Water-cooled diesel engine with 26 kW (35 HP) at 3.600 rpm
- 12 V system with high capacity battery for a safe start also at cold temperatures

Weight and dimensions:

• Weight	approx. 1.600 kg
• Length x width x height:	approx. 2.500 x 1.760 x 2.240 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via 2 mechanical supporting plates
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: parking brake, lighting system, mudguards

Optional chassis:

- 1 axle chassis with spring-mounted axle, overrunning brake system, parking brake, lighting system, mudguards
  Optional: registration up to 80 km/h

Optional equipment:

- Special maintenance-free precleaner for the air filter; prevent engine overheating and reduce maintenance work at the diesel engine
- Large, lockable tool box
- Grounding plate with holding device
- Hose set with quick coupling to operate reel winders or drum stands (standard length: 15 m or according to customer requirements)
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar units
- Spare wheel with lockable holding device
- Electronic pull force recorder to document the pull force
- Bull wheels and rope guiding devices with adjustment possibilities for „right" and „left" conductors
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER-TENSIONER
Model: WB 1200 / 2

- **Combination machine to be used as Puller or as Tensioner for 1 steel rope or conductor up to Ø 45 mm and a pull/tension force of max. 2 to**
- **In tensioning mode automatic control of the machine via ATS (Automatic Tensioning System)**
- **In pulling mode particularly suitable for replacement of conductors**
- **Robust machine constructed for highest reliability, simple operation and minimal maintenance**
- **Operation of the machine via cable remote control (optional also via radio remote control) from a safe distance => good overview, low noise level and safe position for the operator**

Technical data in pulling mode:

• Max. pull force:	2.000 daN
• Continuously adjustable speed:	0 - 6 km/h
at 1.500 daN:	max. 2,3 km/h

Technical data in tensioning mode:

• Max. tension force:	2.000 daN
• Continuously adjustable speed:	0 - 6 km/h
• Minimal tension force:	0 daN (with manual control) approx. 200 daN (with ATS)

Control of the machine:

- Cable remote control with 10 m cable to operate the machine:
  - In pulling mode the rope is controlled in/out via a joystick
  - In tensioning mode, the tension force can be continuously regulated; the machine then functions independently via the Automatic Tensioning System (ATS) => constant sag of the conductor and an automatic stopping and restarting without manual intervention
- Emergency operation for controlling the machine by hand in pulling and tensioning modes
- Control panel with display of the pull force and all instruments to control engine, hydraulic and electrical systems
- Digital meter counter and digital tachometer
- Pull force switch off system (inductive system for highest safety of operation)
- Optional: Preparation for a quick installation of a pull force recorder

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.200 mm
- 4 grooves per bull wheel for 1 rope/conductor
- Designed for max conductor Ø 45 mm
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reel/drum

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- 1 additional hydraulic system to operate 1 hydraulically activated reel winder or drum stand
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Water-cooled diesel engine with 26 kW (35 HP) at 2.500 rpm
- Low speed => long life cycle and low noise level
- 12 V system with high capacity battery for a safe start also at cold temperatures

Weight and dimensions:

• Weight:	approx. 1.800 kg
• Length x width x height:	approx. 3.200 x 2.090 x 2.280 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: parking brake, lighting system, mudguards

Optional chassis:

- 1 axle chassis with spring-mounted axle, overrunning brake system, parking brake, lighting system, mudguards
  Optional: registration up to 80 km/h

Optional equipment:

- Special maintenance-free precleaner for the air filter; prevent engine overheating and reduce maintenance work at the diesel engine
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- Hose set with quick coupling to operate reel winders or drum stands (standard length: 15 m or according to customer requirements)
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar units
- Spare wheel with lockable holding device
- Electronic pull force recorder to document the pull force
- Radio remote control (additional functions: ignition; engine starting; additional hydraulic circuit).
- Bull wheels and rope guiding devices with adjustment possibilities for „right" and „left" conductors
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER-TENSIONER
Model: WB 1200 / 4

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)
- Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control
- New remote controls: more functions, increased operational reliability, improved handling
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Combination machine to be used as Puller or as Tensioner for 1 (optional for 2) steel rope or conductor up to Ø 45 mm and a pull / tension force of max. 4,5 to**
- **In tensioning mode automatic control of the machine via ATS (Automatic Tensioning System)**
- **In pulling mode particularly suitable for replacement of conductors**

Technical data in pulling mode:

• Max. pull force:	4.500 daN
• Continuously adjustable speed:	0 - 6 km/h
at 4.000 daN:	max. 2,3 km/h

Technical data in tensioning mode:

• Max. tension force:	4.500 daN
• Continuously adjustable speed:	0 - 6 km/h
• Minimal tension force:	0 daN (with manual control) approx. 250 daN (with ATS)

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety
- Optional with electronic printer for recording of all data during the stringing operation

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.200 mm
- 4 grooves per bull wheel for 1 rope/conductor (optional for 2 conductors)
- Designed for max. conductor Ø 45 mm (optional for Ø 60 mm)
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reel/drum

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- 1 (optional 2) additional hydraulic system to operate up to 2 hydraulically activated reel winder or drum stand
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Liquid-cooled DEUTZ diesel engine with max. 65 kW (88 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight	approx. 3.000 kg
• Length x width x height:	approx. 3.360 x 2.090 x 2.290 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support with robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: pneumatic brake system, parking brake, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles
  Optional: pneumatic brake system, parking brake, lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system, mudguards
  Optional: registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Electronic printer
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- Hose set with quick coupling to operate reel winders or drum stands (standard length 15 m; or according to customer requirements)
- Front support via hydraulic support cylinder
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Electronic pull force recorder to document the pull force
- Suitable for 2 conductors => special bull wheels, second additional hydraulic system and special rope guiding devices
- Bull wheels and rope guiding devices with adjustment possibilities for "right" and „left" conductors
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)
- Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control
- New remote controls: more functions, increased operational reliability, improved handling
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Combination machine to be used as Puller or as Tensioner for 1 (optional for 2) steel ropes or conductors up to Ø 45 mm and a pull/tension force of max. 4,5 to**
- **In tensioning mode automatic control of the machine via ATS (Automatic Tensioning System)**
- **In pulling mode particularly suitable for replacement of conductors**

Technical data in pulling mode:

• Max. pull force:	4.500 daN
• Continuously adjustable speed: at 4.000 daN:	0 - 6 km/h max. 2,3 km/h

Technical data in tensioning mode:

• Max. tension force:	4.500 daN
• Continuously adjustable speed:	0 - 6 km/h
• Minimal tension force:	0 daN (with manual control) approx. 250 daN (with ATS)

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety
- Optional with electronic printer for recording of all data during the stringing operation

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.500 mm
- 4 grooves per bull wheel for 1 rope/conductor (optional for 2 conductors)
- Designed for max. conductor Ø 45 mm (optional for Ø 60 mm)
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reel/drum

Hydraulic drive system:

- A complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated in both bull wheels => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- 1 (optional 2) additional hydraulic system to operate up to 2 hydraulically activated reel winder or drum stand
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Liquid-cooled DEUTZ diesel engine with max. 65 kW (88 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 3.200 kg
• Length x width x height:	approx. 3.760 x 2.090 x 2.490 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a safe and fast anchoring; with integrated eyes for anchoring of ropes
- Front support via hydraulic supporting cylinders

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: pneumatic brake system, parking brake, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles with pneumatic brake system and parking brake
  Optional: lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic hydraulic brake system (with integrated brake cylinders), parking brake, lighting system, mudguards
  Optional: registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Electronic printer
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- Hose set with quick coupling to operate reel winders or drum stands (standard length 15 m; or according to customer requirements)
- Front support via hydraulic support cylinder
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Electronic pull force recorder to document the pull force
- Suitable for 2 conductors => special bull wheels, second additional hydraulic system and special rope guiding devices
- Bull wheels and rope guiding devices with adjustment possibilities for "right" and „left" conductors
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER-TENSIONER
Model: WB 1300 / 9

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)
- Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control
- New remote controls: more functions, increased operational reliability, improved handling
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Combination machine to be used as Puller or as Tensioner for 1 or 2 (optional for 3) steel ropes or conductors up to Ø 45 mm and a pull/tension force of max. 9 to**
- **In tensioning mode automatic control of the machine via ATS (Automatic Tensioning System)**
- **In pulling mode particularly suitable for replacement of conductors**

Technical data in pulling mode:

• Max. pull force:	9.000 daN
• Continuously adjustable speed:	0 - 5 km/h
at 8.000 daN:	max. 2,5 km/h

Technical data in tensioning mode:

• Max. tension force:	9.000 daN
• Continuously adjustable speed:	0 - 5 km/h
• Minimal tension force:	0 daN (with manual control) approx. 400 daN (with ATS)

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety
- Optional with electronic printer for recording of all data during the stringing operation

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.300 mm
- 8 grooves per bull wheel for up to 2 ropes/conductors simultaneously (optional for 3 conductors)
- Designed for max. conductor Ø 45 mm (optional for Ø 60 mm)
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reel/drum

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- 2 (optional 3) additional hydraulic systems to operate up to 3 hydraulically activated reel winders or drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Water-cooled DEUTZ diesel engine with max. 103 kW (140 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 4.400 kg
• Length x width x height:	approx. 3.770 x 2.280 x 2.450 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle and parking brake
  Optional: pneumatic brake system, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles and parking brake
  Optional: pneumatic brake system, lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system, mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Electronic printer
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- Hose set with quick coupling to operate reel winders or drum stands (standard length 15 m; or according to customer requirements)
- Front support via hydraulic support cylinder
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Electronic pull force recorder to document the pull force
- Suitable for 3 conductors => special bull wheels, second additional hydraulic system and special rope guiding devices
- Bull wheels and rope guiding devices with adjustment possibilities for "right" and „left" conductors
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER-TENSIONER
Model: WB 1500 / 8

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)
- Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control
- New remote controls: more functions, increased operational reliability, improved handling
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Combination machine to be used as Puller or as Tensioner for 1 or 2 (optional for 3) steel ropes or conductors up to Ø 45 mm and a pull/tension force of max. 8 to**
- **In tensioning mode automatic control of the machine via ATS (Automatic Tensioning System)**
- **In pulling mode particularly suitable for replacement of conductors**

Technical data in pulling mode:

• Max. pull force:	8.000 daN
• Continuously adjustable speed:	0 - 5 km/h
at 8.000 daN:	max. 2,5 km/h

Technical data in tensioning mode:

• Max. tension force:	8.000 daN
• Continuously adjustable speed:	0 - 5 km/h
• Minimal tension force:	0 daN (with manual control) approx. 400 daN (with ATS)

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety
- Optional with electronic printer for recording of all data during the stringing operation

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.500 mm
- 8 grooves per bull wheel for up to 2 ropes/conductors simultaneously (optional for 3 conductors)
- Designed for max. conductor Ø 45 mm (optional for Ø 60 mm)
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reel/drum

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- 2 (optional 3) additional hydraulic systems to operate up to 3 hydraulically activated reel winders or drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Water-cooled DEUTZ diesel engine with max. 103 kW (140 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 4.600 kg
• Length x width x height:	approx. 3.970 x 2.280 x 2.570 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle and parking brake
  Optional: pneumatic brake system, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles and pneumatic brake system
  Optional: lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system, mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Electronic printer
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- Hose set with quick coupling to operate reel winders or drum stands (standard length 15 m; or according to customer requirements)
- Front support via hydraulic support cylinder
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Electronic pull force recorder to document the pull force
- Suitable for 3 conductors => special bull wheels, second additional hydraulic system and special rope guiding devices
- Bull wheels and rope guiding devices with adjustment possibilities for "right" and „left" conductors
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER-TENSIONER
Model: WB 1500 / 9+4,5

New machine generation:

- **PLC machine control with CAN-bus technology**
- **Large display to indicate all machine data**
- **Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)**
- **Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance**
- **New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control**
- **New remote controls: more functions, increased operational reliability, improved handling**
- **Optional: - synchronisation system**
  - remote diagnosis

Overview:

- **Combination machine to be used as Puller or as Tensioner for 1 or 2 (optional for 4) steel ropes or conductors up to Ø 45 mm and a pull/tension force of max. 9 to**
- **In tensioning mode automatic control of the machine via ATS (Automatic Tensioning System)**
- **In pulling mode particularly suitable for replacement of conductors**

Technical data in pulling mode:

• Max. pull force:	2 x 4.500 or 1 x 9.000 daN
• Continuously adjustable speed: at 8.000 daN (or 2 x 4.000 daN):	0 - 5 km/h max. 2,5 km/h

Technical data in tensioning mode:

• Max. tension force:	2 x 4.500 or 1 x 9.000 daN
• Continuously adjustable speed:	0 - 5 km/h
• Minimal tension force:	0 daN (with manual control) approx. 500 daN (with ATS)

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety
- Optional with electronic printer for recording of all data during the stringing operation

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and electrical systems =>increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 x 2 bull wheels with a diameter of 1.500 mm
- 4 grooves per bull wheel for 1 rope
  => 2 bull wheel pairs for 1 + 1 rope (optional for 2+2 ropes)
- Designed for max. conductor Ø 45 mm (optional for Ø 60 mm)
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device
  => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In all four bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 4 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- 2 additional hydraulic systems to operate up to 2 hydraulically activated reel winders or drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Water-cooled DEUTZ diesel engine with max. 103 kW (140 PS) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 6.800 kg
• Length x width x height:	approx. 5.300 x 2.280 x 2.600 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: pneumatic brake system, parking brake, mudguards and lighting system

Optional chassis:

- 2 axle chassis with rigid axles
  Optional: pneumatic brake system, parking brake, mudguards and lighting system
- 2 axle chassis with spring-mounted axles, pneumatic brake system parking brake, lighting system and mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Electronic printer
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- Hose set with quick coupling to operate reel winders or drum stands (standard length 15 m; or according to customer requirements)
- Front support via hydraulic support cylinder
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Electronic pull force recorder to document the pull force
- Bull wheels and rope guiding devices with adjustment possibilities for "right" and „left" conductors
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER-TENSIONER
Model: WB 1500 / 12

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)
- Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control
- New remote controls: more functions, increased operational reliability, improved handling
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Combination machine to be used as Puller or as Tensioner for 1 or 2 (optional for 3) steel ropes or conductors up to Ø 45 mm and a pull/tension force of max. 12 to**
- **In tensioning mode automatic control of the machine via ATS (Automatic Tensioning System)**
- **In pulling mode particularly suitable for replacement of conductors**

Technical data in pulling mode:

• Max. pull force:	12.000 daN
• Continuously adjustable speed:	0 - 4,3 km/h
at 10.000 daN:	max. 2 km/h

Technical data in tensioning mode:

• Max. tension force:	12.000 daN
• Continuously adjustable speed:	0 - 4,3 km/h
• Minimal tension force:	0 daN (with manual control) approx. 500 daN (with ATS)

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety
- Optional with electronic printer for recording of all data during the stringing operation

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and electrical systems =>increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.500 mm
- 8 grooves per bull wheel for up to 2 ropes/conductors simultaneously (optional for 3 conductors)
- Designed for max. conductor Ø 45 mm (optional for Ø 60 mm)
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- 2 (optional 3) additional hydraulic systems to operate up to 3 hydraulically activated reel winders or drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Water-cooled DEUTZ diesel engine with max. 103 kW (140 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 5.800 kg
• Length x width x height:	approx. 5.000 x 2.280 x 2.570 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

B 4

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: pneumatic brake system and parking brake,lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles, pneumatic brake system and parking brake
  Optional: lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system, mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Electronic printer
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- Hose set with quick coupling to operate reel winders or drum stands (standard length 15 m; or according to customer requirements)
- Front support via hydraulic support cylinder
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Electronic pull force recorder to document the pull force
- Suitable for 3 conductors => special bull wheels, second additional hydraulic system and special rope guiding devices
- Bull wheels and rope guiding devices with adjustment possibilities for "right" and „left" conductors
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER-TENSIONER
Model: WB 1500 / 15

New machine generation:

- **PLC machine control with CAN-bus technology**
- **Large display to indicate all machine data**
- **Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)**
- **Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance**
- **New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control**
- **New remote controls: more functions, increased operational reliability, improved handling**
- **Optional: - synchronisation system**
  - remote diagnosis

Overview:

- **Combination machine to be used as Puller or as Tensioner for 1, 2, 3 or 4 steel ropes or conductors up to Ø 45 mm and a pull/tension force of max. 15 to**
- **In tensioning mode automatic control of the machine via ATS (Automatic Tensioning System)**
- **In pulling mode particularly suitable for replacement of conductors**

Technical data in pulling mode:

• Max. pull force:	15.000 daN
• Continuously adjustable speed:	0 - 4,5 km/h
at 13.000 daN:	max. 2,3 km/h

Technical data in tensioning mode:

• Max. tension force:	15.000 daN
• Continuously adjustable speed:	0 - 4,5 km/h
• Minimal tension force:	0 daN (with manual control) approx. 700 daN (with ATS)

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety
- Optional with electronic printer for recording of all data during the stringing operation

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and electrical systems =>increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.500 mm
- 12 grooves per bull wheel for up to 4 ropes/conductors simultaneously
- Designed for max. conductor Ø 45 mm (optional for Ø 60 mm)
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- 4 additional hydraulic systems to operate up to 4 hydraulically activated reel winders or drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Water-cooled DEUTZ diesel engine with max. 147 kW (200 HP) - optional: 155 kW with Exhaust Emission Regulation Stage III - and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 7.100 kg
• Length x width x height:	approx. 4.970 x 2.400 x 2.640 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

B 4

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle and parking brake
  Optional: pneumatic brake system, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles, pneumatic brake system and parking brake
  Optional: lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system, mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Electronic printer
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- Hose set with quick coupling to operate reel winders or drum stands (standard length 15 m; or according to customer requirements)
- Front support via hydraulic support cylinder
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Electronic pull force recorder to document the pull force
- Suitable for 3 conductors => special bull wheels, second additional hydraulic system and special rope guiding devices
- Bull wheels and rope guiding devices with adjustment possibilities for "right" and „left" conductors
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER-TENSIONER
Model: WB 1700 / 13

New machine generation:

- **PLC machine control with CAN-bus technology**
- **Large display to indicate all machine data**
- **Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)**
- **Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance**
- **New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control**
- **New remote controls: more functions, increased operational reliability, improved handling**
- **Optional: - synchronisation system**
  - remote diagnosis

Overview:

- **Combination machine to be used as Puller or as Tensioner for 1, 2, 3 or 4 steel ropes or conductors up to Ø 45 mm, optional up to Ø 60 mm and a pull/tension force of max. 13 to**
- **In tensioning mode automatic control of the machine via ATS (Automatic Tensioning System)**
- **In pulling mode particularly suitable for replacement of conductors**

Technical data in pulling mode:

• Max. pull force:	13.000 daN
• Continuously adjustable speed:	0 - 5 km/h
at 13.000 daN:	max. 2,3 km/h

Technical data in tensioning mode:

• Max. tension force:	13.000 daN
• Continuously adjustable speed:	0 - 5 km/h
• Minimal tension force:	0 daN (with manual control) approx. 700 daN (with ATS)

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety
- Optional with electronic printer for recording of all data during the stringing operation

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and electrical systems =>increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.700 mm
- 12 grooves per bull wheel for up to 4 ropes/conductors simultaneously
- Designed for max. conductor Ø 45 mm (optional for Ø 60 mm)
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- 4 additional hydraulic systems to operate up to 4 hydraulically activated reel winders or drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Water-cooled DEUTZ diesel engine with max. 147 kW (200 HP) - optional: 155 kW with Exhaust Emission Regulation Stage III - and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 7.500 kg
• Length x width x height:	approx. 5.370 x 2.400 x 2.840 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

B 4

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 1 axle chassis with rigid axle and parking brake
  Optional: pneumatic brake system, lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles, pneumatic brake system and parking brake
  Optional: lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parking brake, lighting system, mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Electronic printer
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- Hose set with quick coupling to operate reel winders or drum stands (standard length 15 m; or according to customer requirements)
- Front support via hydraulic support cylinder
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Electronic pull force recorder to document the pull force
- Suitable for 3 conductors => special bull wheels, second additional hydraulic system and special rope guiding devices
- Bull wheels and rope guiding devices with adjustment possibilities for "right" and „left" conductors
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER-TENSIONER
Model: WB 1500 / 18

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)
- Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control
- New remote controls: more functions, increased operational reliability, improved handling
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Combination machine to be used as Puller or as Tensioner for 1, 2, 3 or 4 steel ropes or conductors up to Ø 60 mm and a pull/tension force of max. 18 to**
- **In tensioning mode automatic control of the machine via ATS (Automatic Tensioning System)**
- **In pulling mode particularly suitable for replacement of conductors**

Technical data in pulling mode:

• Max. pull force:	18.000 daN
• Continuously adjustable speed:	0 - 4,6 km/h
at 15.000 daN:	max. 2,6 km/h

Technical data in tensioning mode:

• Max. tension force:	18.000 daN
• Continuously adjustable speed:	0 - 4,6 km/h
• Minimal tension force:	0 daN (with manual control) approx. 800 daN (with ATS)

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety
- Optional with electronic printer for recording of all data during the stringing operation

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and electrical systems =>increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.500 mm
- 12 grooves per bull wheel for up to 4 ropes/conductors simultaneously
- Designed for max. connector Ø 60 mm
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- No anchoring of rope during change of reel/drum

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- 4 additional hydraulic systems to operate up to 4 hydraulically activated reel winders or drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Water-cooled DEUTZ diesel engine with max. 200 KW (272 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 8.500 kg
• Length x width x height:	approx. 5.470 x 2.440 x 2.800 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

B 4

Frame and support:

- Stable steel frame with anchoring eyes
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via hydraulic support cylinder

Standard chassis:

- 1 axle chassis with rigid axle, pneumatic brake system and parking brake
  Optional: lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles, pneumatic brake system and parking brake
  Optional: lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parkin brake, lighting system, mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Electronic printer
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- Hose set with quick coupling to operate reel winders or drum stands (standard length 15 m; or according to customer requirements)
- Front support via hydraulic support cylinder
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Electronic pull force recorder to document the pull force
- Suitable for 3 conductors => special bull wheels, second additional hydraulic system and special rope guiding devices
- Bull wheels and rope guiding devices with adjustment possibilities for "right" and „left" conductors
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER-TENSIONER
Model: WB 1700 / 18

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)
- Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control
- New remote controls: more functions, increased operational reliability, improved handling
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Combination machine to be used as Puller or as Tensioner for 1, 2, 3 or 4 steel ropes or conductors up to Ø 60 mm and a pull/tension force of max. 18 to**
- **In tensioning mode automatic control of the machine via ATS (Automatic Tensioning System)**
- **In pulling mode particularly suitable for replacement of conductors**

Technical data in pulling mode:

• Max. pull force:	18.000 daN
• Continuously adjustable speed:	0 - 5 km/h
at 15.000 daN:	max. 2,6 km/h

Technical data in tensioning mode:

• Max. tension force:	18.000 daN
• Continuously adjustable speed:	0 - 5 km/h
• Minimal tension force:	0 daN (with manual control) approx. 800 daN (with ATS)

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety
- Optional with electronic printer for recording of all data during the stringing operation

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and electrical systems =>increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 bull wheels with a diameter of 1.700 mm
- 12 grooves per bull wheel for up to 4 ropes/conductors simultaneously
- Designed for max. connector Ø 60 mm
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- No anchoring of rope during change of reel/drum

Hydraulic drive system:

- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- 4 additional hydraulic systems to operate up to 4 hydraulically activated reel winders or drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Water-cooled DEUTZ diesel engine with max. 200 KW (272 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 9.300 kg
• Length x width x height:	approx. 5.870 x 2.440 x 2.980 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

B 4

Frame and support:

- Stable steel frame with anchoring eyes
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via hydraulic support cylinder

Standard chassis:

- 1 axle chassis with rigid axle, pneumatic brake system and parking brake
  Optional: lighting system, mudguards

Optional chassis:

- 2 axle chassis with rigid axles, pneumatic brake system and parking brake
  Optional: lighting system, mudguards
- 1 or 2 axle chassis with spring-mounted axles, pneumatic-hydraulic brake system (with integrated brake cylinders), parkin brake, lighting system, mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Electronic printer
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- Hose set with quick coupling to operate reel winders or drum stands (standard length 15 m; or according to customer requirements)
- Front support via hydraulic support cylinder
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Electronic pull force recorder to document the pull force
- Bull wheels and rope guiding devices with adjustment possibilities for "right" and „left" conductors
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER-TENSIONER
Model: WB 1500 / 16+8

New machine generation:

- PLC machine control with CAN-bus technology
- Large display to indicate all machine data
- Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)
- Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance
- New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control
- New remote controls: more functions, increased operational reliability, improved handling
- Optional: - synchronisation system
  - remote diagnosis

Overview:

- **Combination machine to be used as Puller or as Tensioner for 1, 2, 3 or 4 steel ropes or conductors up to Ø 60 mm and a pull/tension force of max. 16 to**
- **In tensioning mode automatic control of the machine via ATS (Automatic Tensioning System)**
- **In pulling mode particularly suitable for replacement of conductors**

Technical data in pulling mode:

• Max. pull force:	2 x 8.000 or 1 x 16.000 daN
• Continuously adjustable speed: at 16.000 daN (or 2x8.000 daN):	0 - 4,8 km/h max. 2,4 km/h

Technical data in tensioning mode:

• Max. tension force:	2 x 8.000 or 1 x 16.000 daN
• Continuously adjustable speed:	0 - 4,8 km/h
• Minimal tension force:	0 daN (with manual control) approx. 800 daN (with ATS)

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and electrical systems =>increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 x 2 bull wheels with a diameter of 1.500 mm
- 8 grooves per bull wheel for up to 2 ropes simultaneously => 2 bull wheel pairs for 2 + 2 ropes
- Designed for max. conductor Ø 60 mm
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In all four bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 4 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- 4 additional hydraulic systems to operate up to 4 hydraulically activated reel winders or drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Water-cooled DEUTZ diesel engine with max. 200 KW (272 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 11.500 kg
• Length x width x height:	approx. 6.500 x 2.500 x 2.800 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

B 4

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via robust mechanical supporting winch (with load and idle speed)

Standard chassis:

- 2 axle chassis with rigid axles, pneumatic brake system, parking brake and mudguards
  Optional: lighting system

Optional chassis:

- 2 axle chassis with spring-mounted axles, pneumatic brake system parking brake, lighting system and mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- Hose set with quick coupling to operate reel winders or drum stands (standard length 15 m; or according to customer requirements)
- Front support via hydraulic support cylinder
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Electronic pull force recorder to document the pull force
- Suitable for 3 conductors => special bull wheels, second additional hydraulic system and special rope guiding devices
- Bull wheels and rope guiding devices with adjustment possibilities for "right" and „left" conductors
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER-TENSIONER
Model: WB 1700 / 18+9

New machine generation:

- **PLC machine control with CAN-bus technology**
- **Large display to indicate all machine data**
- **Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)**
- **Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance**
- **New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control**
- **New remote controls: more functions, increased operational reliability, improved handling**
- **Optional: - synchronisation system**
  - remote diagnosis

Overview:

- **Combination machine to be used as Puller or as Tensioner for 1, 2, 3 or 4 steel ropes or conductors up to Ø 60 mm and a pull/tension force of max. 18 to (optional 6 conductors)**
- **In tensioning mode automatic control of the machine via ATS (Automatic Tensioning System)**
- **In pulling mode particularly suitable for replacement of conductors**

Technical data in pulling mode:

• Max. pull force:	2 x 9.000 or 1 x 18.000 daN
• Continuously adjustable speed: at 16.000 daN (or 2x8.000 daN):	0 - 4,8 km/h max. 2,4 km/h

Technical data in tensioning mode:

• Max. tension force:	2 x 9.000 or 1 x 18.000 daN
• Continuously adjustable speed:	0 - 4,8 km/h
• Minimal tension force:	0 daN (with manual control) approx. 800 daN (with ATS)

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and electrical systems =>increases the reliability of the machine and is noise reducing

Bull wheels:

- 2 x 2 bull wheels with a diameter of 1.700 mm
- 8 grooves (optional 10 grooves) per bull wheel for up to 2 ropes simultaneously => 2 bull wheel pairs for 2 + 2 ropes (optional 3 + 3)
- Designed for max. conductor Ø 60 mm
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In all four bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 4 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- 4 additional hydraulic systems to operate up to 4 hydraulically activated reel winders or drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Water-cooled DEUTZ diesel engine with max. 200 KW (272 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 14.000 kg
• Length x width x height:	approx. 6.890 x 2.550 x 3.060 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via hydraulic backstay for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via hydraulic support cylinder

Standard chassis:

- 2 axle chassis with rigid axles, pneumatic brake system, parking brake and mudguards
  Optional: lighting system

Optional chassis:

- 2 axle chassis with spring-mounted axles, pneumatic brake system parking brake, lighting system and mudguards
  Optional: Antiblock system and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- Hose set with quick coupling to operate reel winders or drum stands (standard length 15 m; or according to customer requirements)
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Spare wheel with lockable holding device
- Electronic pull force recorder to document the pull force
- Suitable for 3 conductors => special bull wheels, second additional hydraulic system and special rope guiding devices
- Bull wheels and rope guiding devices with adjustment possibilities for "right" and „left" conductors
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLER-TENSIONER
Model: WB 1500 / 16+4+4+4

B 4

New machine generation:

- **PLC machine control with CAN-bus technology**
- **Large display to indicate all machine data**
- **Error diagnosis, language selection, maintenance data, intelligent engine management (overloadprotection, noise reduction ...)**
- **Diesel engines with electronic control system – fulfilment of future exhaust emission standards, optimization in fuel consumption and performance**
- **New uniform operation concept: manual control at the control panel, preparation for cable or radio remote control**
- **New remote controls: more functions, increased operational reliability, improved handling**
- **Optional: - self propelled chassis controlled by radio remote**

Overview:

- **Combination machine to be used as Puller or as Tensioner for 1, 2, 3 or 4 steel ropes or conductors up to Ø 45 mm and a pull/tension force of max. 1 x 17 to or 4 x 4,8 to**
- **In tensioning mode automatic control of the machine via ATS (Automatic Tensioning System)**
- **In pulling mode particularly suitable for replacement of conductors**

Technical data in pulling mode:

• Max. pull force:	4 x 4.800 or 1 x 17.000 daN
• Continuously adjustable speed: at 16.000 daN (or 4 x 4.000 daN):	0 - 4,8 km/h max. 2,4 km/h

Technical data in tensioning mode:

• Max. tension force:	4 x 4.800 or 1 x 17.000 daN
• Continuously adjustable speed:	0 - 4,8 km/h
• Minimal tension force:	0 daN (with manual control) approx. 800 daN (with ATS)

Control of the machine:

- Control of the machine with joystick on control panel for variable rope in/out adjustment
- Cruise control system: selected speed can be fixed and controlled by PLC system
- Optional with cable or radio remote control => good overview, low noise level and high security for the operator
- Display indicating all machine data (e.g. pulling/tensioning force, preset overload force, rope speed, meter counter, engine date, maintenance data....) and language selection
- Electronic overload system for highest operating safety

Cover:

- Lockable cover made of thick-walled aluminium sheet, protects the diesel engine, the hydraulic and electrical systems =>increases the reliability of the machine and is noise reducing

Bull wheels:

- 4 x 2 bull wheels with a diameter of 1.500 mm
- 4 bull wheel units for 4 conductors
- Designed for max. conductor Ø 45 mm
- High tensile elastic groove linings for all steel ropes and conductors (easily and quickly replaceable)
- Automatic conductor clamping with integrated grounding device => conductor anchoring not necessary during change of drum

Hydraulic drive system:

- In all four bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- 8 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- 4 additional hydraulic systems to operate up to 4 hydraulically activated reel winders or drum stands
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Water-cooled DEUTZ diesel engine with max. 200 KW (272 HP) and automatic and variable speed control (depending on the power requirement)
- Low speed (rpm) increasing life cycle and reducing noise level
- 24 V system with high capacity battery for a safe start also at low temperatures

Weight and dimensions:

• Weight:	approx. 16.500 kg
• Length x width x height:	approx. 7.500 x 2.550 x 3.500 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Back support via 2hydraulic supporting plates for high stability and a fast and easy anchoring; with integrated eyes for anchoring of ropes

Standard chassis:

- 2 axle chassis with spring-mounted axles, pneumatic brake system parking brake, lighting system and mudguards
  Optional: Antiblock system, ESP, and registration up to 80 km/h

Optional equipment:

- Remote diagnosis system with integrated modem (optional GPS modem)
- Cable remote control with 15 m cable
- Radio remote control
- Special maintenance-free precleaner for the air filter – reduce maintenance work; for dusty areas
- Arctic kit for temperatures up to -30°
- Grounding plate with holding device
- Hose set with quick coupling to operate reel winders or drum stands (standard length 15 m; or according to customer requirements)
- Biodegradable hydraulic oil
- Hydraulic press to operate 700 or 1.000 bar press units
- Electronic pull force recorder to document the pull force
- Bull wheels and rope guiding devices with adjustment possibilities for "right" and „left" conductors
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Drum Stands + Trailers

OVERHEAD TRANSMISSION LINE

DRUM STAND „ZECK“
Model: TB Z 246 / TB Z 249 / TB Z 550

- **Drum stand with hydraulic drive unit suitable for drums up to Ø 3.000 mm; Drum weight: 8.000 kg up to 13.000 kg**
- **Full hydraulic operation as drum stand => uniform and wear free operation, pulling mode also possible, no run on when the machine stops**
- **Mounted drum drive => drive need not be dismounted to change the drums**
- **High quality, light drum shaft with two adjustable cones for a perfect fixing of the drum – suitable for all drum types**

Drum drive unit:

- With planetary gear and hydraulic motor. The drive is activated directly on the drum shaft => high torques can be transmitted with little wear
- Free wheel device for an easy pull out of the rope
- With hydraulic quick couplings for connection with a Puller-Tensioner or other drive unit
- Mechanical brake system as parking brake for safely blocking the drum

Drum holding fixtures:

- Cone adjustable via a hand crank => simple handling and perfect fixing of the drum
- Adjustable drum driving bolt => for all drum types (wooden drums, aluminium and steel drums with 3 or 4 spokes)
- Drum is loaded via a crane or by tilting the drum stand

	TB Z 246	TB Z 249	TB Z 550
Drive torque: Nm	2.900	7.900	4.000
Drum shaft ø mm	76	76	95 (optional 76)
Max. drum ø mm	3.000	3.000	3.000
Max. drum width with 125 mm bore mm	1.480	1.560	1.775
Max. drum width with 80 mm bore mm	1.380	1.460	1.640
Max. drum weight kg	8.000	10.000	13.000

Weight and dimensions:

	TB Z 246	TB Z 249	TB Z 550
Weight approx. kg	720	1.250	1.360
Dimensions approx. mm	1.985 x 2.110 x 1.800	2.070 x 2.350 x 1.870	2.600 x 2.400 x 1.910

Frame:

- Stable steel frame with anchoring eyes
- Dismountable frame for smaller transport dimensions

Optional equipment:

- Hose set with quick couplings for connection with the drive unit (standard length: 15 m; or according to customer requirements)
- Grounding plate with holding device
- Suitable for stringing operation with helicopter => max. rope speed approx. 20 km/h
- Rope guidance device – hydraulic driven; continuously adjustable for all drum width and rope diameter
- Mounted or separate engine aggregate (with gasoline or diesel engine) => independent operation, e.g. as Puller to pull in old conductor directly
- ATS for automatic rope pull in/out for use behind a Tensioner without additional hydraulic system
- Reel with detachable flange HT/TBF with big rope capacity => ideal for scrapping conductors. Maximum pull force at core Ø: 1.400 daN
- Biodegradable hydraulic oil
- Special equipment or special models (e.g. for bigger drums) on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

DRUM STAND "IT"
Model: TB / IT

B 5

- **Drum stand with disc-brake system and a manual hydraulic for independent loading of conductor drums**
- **For drums with a weight up to 10 to (Optional also for heavy drums)**
- **Consisting of 2 separate units => smaller transport dimensions and minimal weight**
- **Optional with hydraulic drum drive unit**

Drum tensioning unit:

- Speed continuously adjustable: 0 - ca. 6 km/h (32 U/min)
- With disc-brake system; operation via hand wheel

Drum holding fixtures:

- Drum shaft with 2 adjustable cones
- The drum is fixed on each side with 4 clamp units. Optional special clamp unit for drums with 3 spokes
- Two manual hydraulic units for lifting and lowering the drum holding fixtures => simple loading of drums

Frame:

- 2 separate units for smaller transport dimensions; with supporting grips for an easy transport

Optional equipment:

- Mechanical holding device for drum lifting system; keep the load independent from the hydraulic cylinders
- Holding device to connect a hydraulic drum drive
- Hydraulic drum drive (drive torque: 2.900 Nm; weight: 77 kg) with quick locking device to connect onto the drum stand => in connection with ZECK machines, rope pull in/out is fully automatically controlled
- Hose set with quick coupling to connect to a drive unit (standard length: 15 m; or according to customer requirements)
- Special equipment for bigger drums on request

Model	max. drum weight (kg)	Device for drum drive	max. drum Ø (mm)	min. drum Ø mm	max. drum width mm	Length mm	Weight (kg)
244-050	2.000	no	2.000	700	1.300	1.400	180
244-200	7.000	yes	2.800	1.000	1.500	2.000	280
244-300	10.000	yes	3.200	1.500	1,650	2.200	360

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

DRUM CARRIER
Model: TBF 70 SB

- **Drum carrier and hydraulic drum stand suitable for drums up to Ø 3.000 mm / width 1.500 mm / weight: 7.000 kg**
- **All-purpose, as:**
  - hydraulically activated drum stand behind a Tensioner
  - Drum carrier (registration up to 80 km/h) with engine aggregate for loading conductor drums independently
  - hydraulic Puller for direct pull in of rope
- **Fully hydraulic operation as drum stand => uniform and wear free operation; pulling mode also possible; no run on when the machine stops**
- **Mounted drum drive => not necessary to dismount the drive to change the drums**
- **High quality, light drum shaft with two adjustable cones for a perfect fixing of the drum - suitable for all types of drum**

Drum drive unit:

- Drive torque: 2.900 Nm
- Speed continuously adjustable: 0 - 6 km/h
- With planetary gear and hydraulic motor. Drive is activated directly on the drum shaft (no wheel friction drive) => high torques can be transmitted with little wear
- Free wheel device for an easy pull out of the rope
- With hydraulic quick couplings for connection with a Puller-Tensioner or other drive units
- In connection with ZECK machines, rope pull in/out is fully automatic hydraulically controlled
- Mechanical brake system as parking brake for safely blocking the drum

Drum holding fixtures:

- High quality, light drum shaft with Ø 76 mm, with two adjustable cones and minimal maintenance plain bearings on both sides
- Cone adjustable via a hand crank => easy handling and a perfect fixing of the drum
- Adjustable drum driving bolt => for all types of drums (wooden drums, aluminium and steel drums with 3 or 4 spokes)
- Engine aggregate (5 HP) for lifting and lowering the drum holding fixtures hydraulically => simple loading/unloading of drums
- Suitable for:
  - Drum Ø: max. 3.000 mm
  - Drum width: max. 1.580 mm (with 125 mm bore)
  - Center bore: 80 - 125 mm
  - Drum weight: max. 7.000 kg

Weight and dimensions:

- Weight: approx. 2.650 kg
- Length x width x height: approx. 4.700 x 2.550 x 2.360 mm

Frame:

- Stable steel frame – optional in galvanized version
- Front support via robust mechanical supporting winch (with load and idle speed)
- Back support by 2 mechanical supporting plates

Chassis:

- EU chassis: 2 axle chassis with spring-mounted axles, pneumatic brake system with automatic load dependent braking force, parking brake, lighting system, mudguards and registration as high-speed trailer (in Germany up to 80 km/h)
- Export chassis: 2 axle chassis with spring-mounted axles, pneumatic brake with manual braking force regulation and parking brake, lighting system, mudguards
- Stable towing bar with height adjustable towing eye with Ø 40 mm (optional according to customer requirements)

Optional equipment:

- Galvanized steel frame
- Lockable tool box
- Hose set with quick couplings for connection to a drive unit (standard length: 15 m; or according to customer requirements)
- Grounding plate with holding device
- Biodegradable hydraulic oil
- Big engine aggregate with electro start(17 HP; with gasoline or diesel engine) => independent operation, e.g.as Puller to pull in old conductors directly
- ATS for automatic rope pull in/out for use behind Tensioners without additional hydraulic system
- Reels with detachable flange HT/TBF with big rope capacity => ideal for scrapping conductors. Maximum pull force at core Ø: 1.400 daN
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

DRUM CARRIER
Model: TBF 8020 E

- **Drum Carrier for drums up to Ø 3.200 mm / width: 1.720 mm / weight: 8.000 kg**
- **Easy installation of the drum by special frame design ("U-type")**
- **Easy loading by hydraulic hand pump and cylinders**

Drum holding system:
- Steel axle Ø 76 mm with 2 drum fixing devices
- Various holding devices for different drum-Ø
- Suitable for:
  - Drum-Ø: max. 3.200 mm
  - Drum width: max. 1.720 mm
  - Center bore: 80-125 mm
  - Drum weight: max. 8000 kg

Weight and dimensions:
- Weight: approx. 1.100 kg
permissible max. 9.100 kg
- Length x width x height: ca. 4.000 x 2.520 x 2.300 mm
- delivered with detachable frame for small shipment dimensions

Chassis:
- 1 axle with rigid axle and parking brake
- supporting wheel
- Optional: Ligthing system, mudguards

Optional equipment:
- Engine driven hydraulic aggregate
- Drum drive unit (only with aggregate)
- additional drum holding devices for drum-Ø < 1.700 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

DRUM CARRIER
Model: TB - S01

B
5

- **Drum carrier and hydraulic drum stand suitable for drums up to Ø 3.000 mm / width 1.500 mm / weight: 8.000 kg**
- **All-purpose as:**
  - hydraulically activated drum stand behind a Tensioner
  - Drum carrier with simple chassis => only for operation at construction sites (without vehicle registration)
  - hydraulic Puller for direct pull in of rope
- **Fully hydraulic operation as drum stand => uniform and wear-free operation, pulling mode also possible, no run on when the machine stops**
- **Mounted drum drive => not necessary to dismount the drive to change the drums**
- **High quality, light drum shaft with 2 adjustable cones for a perfect fixing of the drum; suitable for all types of drum**

Drum drive unit:

- Drive torque: 2.900 Nm
- Speed continuously adjustable: 0 - ca. 6 km/h (32 U/min)
- With planetary gears and hydraulic motor. Drive is activated directly on the drum shaft (no wheel friction drive) => high torques can be transmitted with little wear
- Free wheel device for an easy pull out of the rope
- With hydraulic and quick couplings for connection with a Puller-Tensioner or other drive units
- In connection with ZECK machines rope pull in/out is fully automatic hydraulically controlled
- Mechanical brake system as parking brake for safely blocking the drum

Drum holding fixtures:

- High quality, light drum shaft with Ø 76 mm, with two adjustable cones and minimal maintenance plain bearings on both sides
- Cone adjustable via a hand crank => easy handling and perfect fixing of the drum
- Adjustable drum driving bolt => for all drum types (wooden drums, aluminium and steel drums with 3 or 4 spokes)
- Drum is loaded via a crane
- Suitable for:
  - Drum Ø: max. 3.000 mm
  - Drum width: max. 1.486 mm (with 125 mm bore)
    max. 1.384 mm (with 80 mm bore)
  - Center bore: 80 - 125 mm
  - Drum weight: max. 8.000 kg

Weight and dimensions:

- Weight: approx. 1.200 kg
- Length x width x height: approx. 3.200 x 2.420 x 2.020 mm

Frame:

- Stable steel frame with anchoring eyes
- Lifting rings for easy loading by crane
- Front support via robust mechanical supporting winch (with load and idle speed)

Chassis:

- 1 axle chassis with rigid axle
  Optional: lighting system
- Stable towing bar with height-adjustable towing eye with Ø 40 mm (optional according to customer requirements)

Optional equipment:

- Hose set with quick couplings for connection with the drive unit (standard length: 15 m; or according to customer requirements)
- Grounding plate with holding device
- Suitable for stringing operation with helicopter => max. rope speed approx. 20 km/h
- Mounted or separate engine aggregate with gasoline or diesel engine) => independent operation, e.g.as Puller to pull in old conductors directly
- ATS for automatic rope pull in/out; for use behind Tensioners without additional hydraulic system
- Biodegradable hydraulic oil
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

DRUM STAND
Model: TBh 18 / TBh 20

- **Drum stand with large disc-brake system and a manually activated hydraulic system for loading drums independently; for drums up to Ø 1.800 mm (TBh 20 up to Ø 2.000 mm) / width 1.140 mm / weight 3.000 kg**
- **High quality, light drum shaft with two adjustable cones for a perfect fixing of the drum - suitable for all drum types**
- **Optional with a connectable hydraulic drum drive**

Drum tensioning unit:

- Tensioning torque: 1.900 Nm
- Continuously adjustable speed: 0 - ca. 6 km/h
- Double acting, large disc-brake system; comfortable operation via a big hand wheel

Drum holding fixtures:

- High quality, light drum shaft with Ø 76 mm, with 2 adjustable cones and minimal maintenance plain bearings on both sides
- Cone adjustable via a hand crank => simple handling and perfect fixing of the drum
- Adjustable drum driving bolt => for all drum types (wooden drums, aluminium and steel drums with 3 or 4 spokes)
- Manual hydraulic unit for lifting and lowering the drum holding fixtures => simple loading of drums
- Suitable for:
  - Drum Ø: max. 1.800 mm (TBh 18)
max. 2.000 mm (TBh 20)
min. 1.000 mm
  - Drum width: max. 1.140 mm
  - Center bore: 80 mm
  - Drum weight: max. 3.000 kg

Weight and dimensions:

- Weight: approx. 460 kg
- Length x width x height: approx. 1.550 x 1.930 x 1.200 mm

Frame:

- Stable steel frame with anchoring eyes

Optional equipment:

- Grounding plate with holding device
- Biodegradable hydraulic oil
- Holding device to connect a hydraulic drum drive
- Hydraulic drum drive (drive torque: 2.400 Nm; weight: 67 kg) with quick locking device to connect to the drum stand => in connection with ZECK machines, rope pull in/out is fully automatically controlled
- Hose set with quick coupling to connect to a drive unit (standard length: 15 m; or according to customer requirements)
- Mounted or separate engine aggregate (gasoline or diesel) => independent operation for tension rope-out or pull rope-in
- Rope guidance device – hydraulic driven; continuously adjustable for all drum width and rope diameter
- Special rope grounding device
- Special model (e.g. mounted engine aggregate) or special equipment (e.g. for bigger drums) on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

DRUM STAND
Model: TB 18 / 25 / 30

B 5

- **Drum stand with large disc-brake system; various models for drums up to Ø 1.800 mm / 2.500 mm / 3.000 mm (or according to customer requirements)**
- **High quality, light drum shaft with 2 adjustable cones for a perfect fixing of the drum - suitable for all types of drum**
- **Optional with a connectable hydraulic drum drive**

Drum tensioning unit:

- Tensioning torque: 1.900 Nm
- Continuously adjustable speed: 0 - 100 m/min (6 km/h)
- Double acting, large disc-brake system; comfortable operation via a big hand wheel

Drum holding fixtures:

- High quality, light drum shaft with 2 adjustable cones and minimal maintenance plain bearings on both sides
- Cone adjustable via a hand crank => simple handling and perfect fixing of the drum
- Adjustable drum driving bolt => for all drum types (wooden drums, aluminium and steel drums with 3 or 4 spokes)
- Drum is loaded via crane or by tilting the drum stand
- Suitable for:

	TB 18	TB 25	TB 30	TB 30/12,5
Max. drum Ø in mm	1.800	2.500	3.000	3.000
Max. drum width in mm	1.150	1.470	1.650	1.800
Center bore in mm	80 - 125	80 - 125	125 - 140	125 - 140
Max. drum weight (kg)	4.000	7.000	10.000	12.500

Weight and dimensions:

- Weight: approx. 430 / 620 / 840 / 950 kg
- Length x width x height: approx. 1.600 x 1.960 x 1.380 mm
  approx. 1.790 x 1.960 x 1.830 mm
  approx. 2.500 x 2.400 x 2.100 mm

Frame:

- Stable steel frame with anchoring eyes
- Dismountable frame for smaller transport dimensions

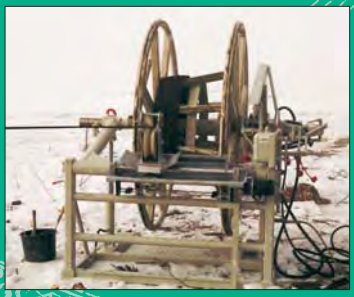
Optional equipment:

- Holding device for connecting a hydraulic drum drive
- Hydraulic drum drive (drive torque: 2.400 Nm; weight: 67 kg) with quick locking device to connect to the drum stand => in connection with ZECK machines, rope pull in/out is fully automatically controlled
- Hose set with quick coupling to connect to a drive unit (standard length: 15 m; or according to customer requirements)
- Grounding plate with holding device
- Special models or special equipment (e.g. for bigger drums) on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Reel Winders + Reels



OVERHEAD TRANSMISSION LINE

HYDRAULIC REEL WINDER
Model: HTB + HTB/D + HTB/E

Operation range:

- **Hydraulic reel winder powered by ZECK Puller-Tensioner, hydraulik power unit or truck hydraulik**
- **Disc-brake system for a controlled pull out of the rope without hydraulic drive; also for helicopter operation**

Reel drive unit:

- Drive torque: 1.100 Nm
- With planetary gear and hydraulic motor as enclosed drive system => high reliability and minimal maintenance
- Free wheel device allows a simple pull out of the rope
- With hydraulic quick couplings for connection to a Puller-Tensioner or other drive units (e.g. truck hydraulic)

Disc-brake system:

- For usage without hydraulic supply, the disc-brake system (Ø 300 mm) allows a controlled pull out of the rope
- Model HTB/D with large disc-brake system (Ø 700 mm) with tension torque of 1.900 Nm for usage as continuous brake ; e.g. pulling rope installation via helicopter

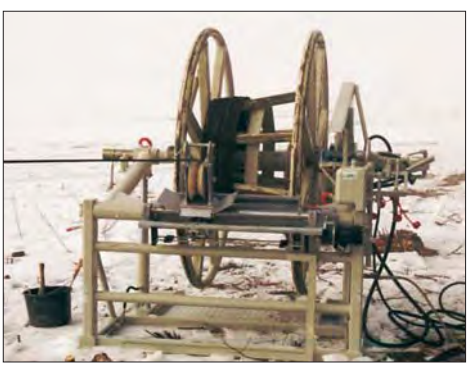
Reel holding fixture:

- Manual hydraulic to lift and lower the reel-holding fixture
- Changing the reel can be carried cut very quickly by a single operator
- Optional: Special plug-in axle with quick locking device for simple reels allows a fast change of reels => no tool is necessary

Optional equipment:

- Hose set with quick couplings for connection to the drive unit (standard length: 15 m; or according to customer requirements)
- Grounding plate with holding device
- Special equipment (e.g. mounted or separate engine aggregate or mounting supports for transportation with a front loader) or special models on request

Model: HTB und HTB/D



Reel holding fixture, 2 versions available:

- Version „IT" Ø 1.100 and 1.400 mm (B6-300) and HT (B6-400)
- Version „Zeck": H0, H1, H2, H3, H0/T, H1/T, H2/T and HT (B6-400)
- Reel weight: max. 3.500 kg
- Reel diameter: 1.100 - 1.800 mm

Rope guiding device (Optional):

- Continuously adjustable to all rope diameters and reel widths – simple adjustment via hand wheel => no tool is necessary !
- With gear unit and hydraulic motor as enclosed drive system => high reliability and minimal maintenance

Weight and dimensions:

- Weight: approx. 560 kg (without rope guidance device 470 kg)
- Length x width x height: approx. 1.800 x 1.750 x 1.370 mm

Model: HTB/E

Reel holding fixture, 2 versions available:

- Version „IT" Ø 1.100 and 1.400 mm (B6-300)
- Reel weight: max. 1.700 kg
- Reel diameter: 1.100 - 1.400 mm

Rope guiding device:

- Automatic rope guidance device

Chassis (optional):

- Heigt adjustable, fold away towing bar

Weight and dimensions:

- Weight: 460 kg (approx. 600 kg with chassis)
- Länge x Breite x Höhe: 1.500 x 1.450 x 1.500 mm
  1.700 x 2.000 x 1.800 mm (with chassis)

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

B 6

Reel winder without drive: Model HB

- **Reel winder without drive unit but with brake system for reels up to diameter 1.400 mm and max. reel weight 2000 kg**
- **Reel-holding device with maintenance free ball bearing**
- **With disc-brake system (Ø 300 mm) for a controlled pull out of the rope**
  Optional with large disc-brake system (Ø 700 mm)
- **Can be tilted in 2 positions for installation of reels with a diameter of 1.100 mm or 1.400 mm**
- **Available in 2 models:**
  "Zeck" for reels H0, H1, H2, H0/T, H1/T and H2/T
  '"IT" for simple reels with Ø 1.100 mm and 1.400 mm
- **Special plug-in axle with quick locking device for simple reels allows a fast change of reels => no tool is necessary**

Weight and dimensions:

• Weight:	approx. 125 kg
• Length x width x height:	2.050 x 1.200 x 950 mm

Frame:

- Dismountable frame for smaller transport dimensions

Reel winder without drive: Model HB/E

- **Reel winder in simple version without drive unit; for reels up to diameter 1.400 mm and max. reel weight 1.500 kg**
- **Can be tilted for installation of reels with a diameter of 700 mm up to 1.400 mm**
- **Optional with disc brake unit**

Weight and dimensions:

• Weight:	approx. 85 kg
• Length x width x height:	2.550 x 1.325 x 1.060 mm

Frame:

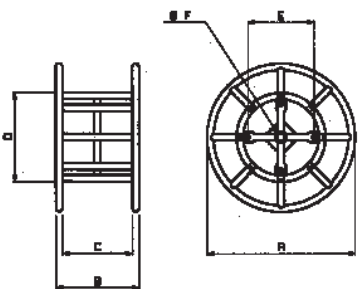
- Dismountable frame for smaller transport dimensions
- Optional with aluminium frame

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

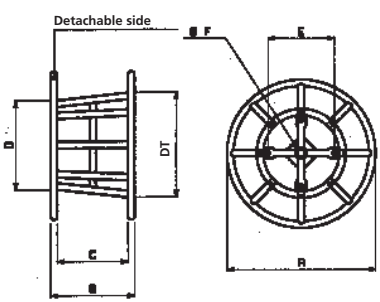
- **Steel reels in simple version without integrated axle and without bearing. Screwed in crosses on both sides for holding the axle**
- **Reels with detachable flange and with a conic core, for scrapping of conductors**
- **Optional:**
  - hot-dip galvanized steel
  - with ZECK plug-in axle => faster change of reel

Steel reels (non detachable):



Art. Nr	Dimensions in mm							Weight Kg
	A	B	C	D	DT	E	F	
77-9034	1100	560	460	570	-	420	50	66
77-9035	1400	560	460	570	-	420	50	105

Detachable steel reels:



Art. Nr	Dimensions in mm							Weight Kg
	A	B	C	D	DT	E	F	
77-9052	1100	540	460	570	680	420	50	70
77-9054	1400	560	460	620	715	420	50	100

ø mm	Rope capacity of the reel in mm	
	77-9034 77-9052	77-9035 77-9054
8	3200	6400
10	2000	4000
12	1400	2800
13	1200	2400
14	1000	2000
16	800	1600
18	-	1200
20	-	1000
22	-	800
24	-	800

- **Zeck reels with mounted axle with sealed, maintenance-free bearing**
- **Reels with detachable flange and with a conic core, for scrapping of conductors => types: H 0/T; H 2/T; HT**
  - **Bundling wire can be installed even when reels are full**
  - **Available for reel winder with "Zeck" and "IT" holding fixtures**
  - **HT: detachable flange can be easily released with a lever (without screws)**
- **Reel with detachable flange for Zeck drum stands => HT / TBF:**

Dimensions:

Type of reel	H 0	H 2	H 3	H 0 / T	H 2 / T	HT / BM	H T	H T / TBF
Suitable for	USP + HTB	SPW + HTB	HTB	USP + HTB	SPW + HTB	TB + TBF + BM	HTB	TB + TBF
Axle Ø [mm]	35	40	40	35	40	hollow shaft Ø 80	40	hollow shaft Ø 80
Axle length [mm]	620	680	1.000	620	680	990	1.000	1.360
Outer Ø [mm]	1.100	1.380	1.700	1.100	1.380	1.300	1.750	1.650
Core Ø [mm]	350	400	400	570 / 360	580 / 380	840 / 500	1.040 / 760	885 / 400
Clear width [mm]	360	410	580	360	360	694	580	980
Weight [kg]	74	148	220	110	170	345	270	360
Rope capacity factor	240.000	460.000	1.020.000	220.000	450.000	540.000	860.000	1.500.000

Formula to calculate the rope capacity for reels: **Rope capacity factor : Rope Ø² = Rope capacity in [m]**

Rope capacity in [m]:

Rope Ø [mm]	H 0	H 2	H 3	H 0 / T	H 2 / T	HT / BM	HT	HT / TBF
8	3.750	7.200	15.950	3.450	7.050	8.400	13.450	24.400
10	2.400	4.600	10.020	2.200	4.500	5.400	8.600	15.000
12	1.670	3.200	7.100	1.530	3.140	3.750	6.000	10.400
13	1.420	2.720	6.040	1.300	2.680	3.200	5.100	8.900
14	1.220	2.350	5.200	1.140	2.300	2.760	4.400	7.600
16	940	1.800	4.000	860	1.760	2.100	3.380	4.650
18		1.420	3.150		1.400	1.670	2.660	3.670
20		1.150	2.550		1.140	1.350	2.160	2.980
22		950	2.100		930	1.120	1.780	2.460
24		800	1.770		800	940	1.500	2.060
28						690	1.100	1.510
32						530	850	1.160

Machines for medium-voltage lines

REEL PULLER
Model: HB 800

- **Hydraulic driven Reel Puller with detachable Reel**
- **Suitable for medium voltage lines ; for pulling old conductors or pulling rope up to approx. 800 kg pulling force**
- **Optional with normal Reel (non-detachable) for pulling ropes**
- **Easy handling of detachable Reel for scrapping of conductors**

Reel drive:

- Drive torque: max. 3.200 Nm
- Max. Pulling force and speed:
  - Middle rope layer: 800 daN (Ø 840 mm) with 35 m/min
  - Inner rope layer: 1.380 daN (Ø 460 mm) with 20 m/min
  - Outer rope layer: 535 daN (Ø 1.200 mm) with 50 m/min
- Diesel aggregate with 8 kW (11 HP)
  Optional: electric starter; gasoline engine
  stronger engine for higher pulling speed
- Reel drive with integrated planetary gear and hydraulic motor
  => highest reliabilty and minimal maintenance
- The rope can be indefinitely controlled in/out via a hand lever

Reel:

- Fixed at the planetary gear box ; detachable with Ø 1.400 mm with conic core; optional non-detachable reel
- rope capacity: e.g. 1.560 m with rope Ø 16 mm
- optional with higher rope capacity

Weight and dimension:

- Weight: approx. 890 kg
- Length x width x height: approx. 1.660 x 1.150 x 1.730 mm

Frame:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane

Optional Equipment:

- Free wheel device to pull out ropes by hand (without engine)
- Loackable tool box
- Biodegradable hydraulic oil
- Not detachable Reel
- Tarpaulin cover
- Cable or Radio remote control
- 1 axle chassis
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

DRUM STAND
Model: TB 16-5000

- Drum Stand with hydraulic drive unit and diesel-hydraulic-aggregate
- Suitable for 2 working modes:
  - hydraulic tensioning of the drum during stringing operation
  - hydraulic pulling for sagging
- Mounted drum drive
  - drive unit need not be dismounted to change the drums
  - easy and fast handling
- High quality, light drum shaft with two adjustable cones for a perfect fixing of the drum

Data in tensioning mode:

- Max. tension force (at Ø 1.250 mm): 500 daN
- Continuous adjustable speed: 0 - 30 m/min

Data in pulling (sagging) mode:

- Max. Pulling force (at Ø 1.250 mm): 800 daN
- Speed continuously adjustable: 0 - 8 m/min

Drum drive:

- Diesel aggregate with 5 kW (7 HP)
  Optional: electric starter; gasoline engine
- Drive torque: max. 5.000 Nm

Drum holding fixtures:

- Drum-Ø: max. 1.600 mm
- Drum width: max. 1.150 mm
- Center bore: 76 -100 mm
- Drum weight: max. 2.500 kg
- Optional for bigger drums

Weight and dimension:

- Weight: approx. 890 kg without drum
- Length x width x height: approx. 1.600 x 2.210 x 1.230 mm

Frame:

- Stable steel frame with anchoring eyes

Optional Equipment:

- Loackable tool box
- Biodegradable hydraulic oil
- Cable or Radio remote control
- Special equipment or special models on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Winches for load lifting and passenger lifting

C
1

PULLER FOR LIFTING PASSENGERS
Model: SPW 2,5 - P

- **Bull wheel Puller with integrated reel winder switchable between lifting passengers with a maximum pull force of 0,4 or 0,6 to and normal lifting operation with maximum 2,5 to.**
- **Other pull forces on request**
- **With registration for lifting passengers**
- **The machine can be operated either by the operator in the cage/at the tower or by an operator on the ground via 2 radio remote controls**
- **Double bull wheel drive with a bull wheel diameter of 350 mm**
- **Reel winder for loading/unloading reels independently**
- **With automatic and continuously adjustable rope guiding device**
- **Robust machine suitable for highest reliability of operation, simple operation and minimal maintenance**

C 1

Data in lifting passenger mode:
- Max. pull force: 400 daN / 600 daN (switchable)
- Speed continuously adjustable: 0 - 30 m/min (limited)

Data in normal lifting mode:
- Max. pull force: 2.500 daN
- Speed continuously adjustable: 0 - 6 Km/h
  at 2.000 daN: max. 2,1 Km/h

Control of the machine:
- Radio remote control with 2 transmitters; the rope can be indefinitely controlled in/out via a joystick; additional functions: ignition, engine starting and emergency stop
- Emergency operation for controlling the machine by hand
- Control panel with display of the pull force and all instruments to control engine, hydraulic and electrical systems
- Pull force switch off system (inductive system for highest safety of operation)
- Preparation for a quick installation of a pull force recorder

Cover:
- Lockable cover made of thick-walled aluminium sheet; protects the diesel engine, the hydraulic and the electrical systems => increases the reliability of the machine and is noise reducing

Double wheel drive:
- 2 bull wheels with a diameter of 350 mm
- Each with 8 grooves made of hardened steel
- Grooves designed for connectors up to max. Ø 16 mm
- Automatic rope clamping with integrated grounding device => rope anchoring not necessary during change of reels
- Window for an exact rope feed into the bull wheel

Hydraulic drive system:
- In both bull wheels a complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- Emergency system for a powerless lowering of the cage when lifting passengers
- 2 emergency multiple-disc brakes, automatically activated
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage
- Hydraulic differential system for the bull wheel drives -> low stress for ropes and planetary gears

Integrated reel winder:
- Hydraulic drive of the reels and the rope guiding device with gear unit and hydraulic motor => fully enclosed => requiring minimal maintenance
- With free wheel device and mechanical disc-brake system for a controlled pull out of the rope
- Reel lifting device for steel reels with Ø 1.100 - 1.400 mm
- Hydraulic lifting and lowering of the reels for loading/unloading
- Automatic rope guiding device; can be continuously adjusted without tools to all rope diameters and different reel widths

Engine:
- Water-cooled diesel engine with 23 kW (31 HP) at 3.000 rpm
- 12 V system with high capacity battery for a safe start even at cold temperatures

Weight and dimensions:
- Weight: approx. 1.950 kg
- Length x width x height: approx. 3.900 x 1.890 x 2.080 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Front support via hydraulic backstay for high stability and fast and easy anchoring ; with integrated eyes for anchoring of ropes
- Back support via 2 hydraulic supporting cylinders

Standard chassis:

- 1 axle chassis with rigid axle
  Optional: parking brake, lighting system, mudguards
- Stable towing bar for truck application
  (Optional: change coupling for truck and car applications)

Optional chassis:

- 1 axle chassis with spring-mounted axle, overrunning brake system, parking brake, lighting system, mudguards and registration as high-speed trailer up to 80 km/h

Optional equipment:

- Large, lockable tool box
- Grounding plate with holding device
- Noise reduction kit for cover
- Biodegradable hydraulic oil
- Digital meter counter and digital tachometer
- Electronic pull force recorder to document the pull force
- Reels with detachable or non-detachable flange with Ø 1.100 or 1.400 mm
- Ropes (steel or synthetic fibre ropes) on request
- Special equipment or special models (with other pull forces) on request

C 1

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

DRUM WINCH
Model: ST 80

- **Drum winch with a pull force of max. 1 to for various usages (mast equipping, tower erection, antenna construction...)**
- **Other pull forces / bigger rope drums on request**
- **Robust machine designed for highest reliability, simple operation and minimal maintenance**
- **Simple chassis for operation only at construction sites; machine can be tilted by hand to dismount the wheels => simple anchoring of the base frame in the ground**
- **High quality control technique enables inching even under maximum load**

C 1

Drum winch technical data:

- Max. pull force (inner rope layer) and max. speed (outer rope layer):
  - Gasoline engine with 5,5 HP: 1.000 daN with 24 m/min
  - Gasoline engine with 11 HP: 1.000 daN with 48 m/min
- Stable rope guiding device with hardened rope rollers
- Large rope drum (=> few rope layers => rope preserving) with stable pressure rollers for fixing the rope
- Max. rope capacity: K=19200 => e.g. 300 m for rope Ø 8 mm

Control of the machine:

- The rope can be indefinitely controlled in/out via a hand lever

Hydraulic driving system:

- A complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- With safety disc-brakes automatically activated
- High quality control technique enables inching even under maximum load
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:

- Honda gasoline engine 4,1 kW (5,5 HP) with hand start
- Optional: gasoline engine with 8,2 kW (11 HP) with electric starter

Weight and dimensions:

- Weight without rope: approx. 155 kg (with 8,2 kW engine approx 170 kg)
- Length x width x height: approx. 1.000 x 1.000 x 850 mm

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane

Chassis (optional):

- 1 rigid axle with easily removable towing bar; wheels can also be simply dismounted manually; to be used only at construction sites

Ropes (optional):

- Steel or synthetic fibre ropes on request

Optional equipment:

- Radio remote control
- Cover plane
- Special equipment or special models (with different pull forces) on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

DRUM WINCH
Model: ST 140 / ST 180 / ST 280 (Z 253)

- **Drum winch with a pull force of max. 1,6 to (ST140), 2,1 to (ST 180) or 3,4 to (ST 280) for various usages (mast equipping, tower erection, antenna construction...)**
- **Other pull forces / bigger rope drums on request**
- **Robust machine designed for highest reliability, simple operation and minimal maintenance**
- **Simple chassis for operation only at construction sites; machine can be tilted by hand to dismount the wheels => simple anchoring of the base frame in the ground**
- **High quality control technique enables inching even under maximum load**

C 1

Drum winch technical data:
- Max. pull force (inner rope layer) and max. speed (outer rope layer)
  - ST 140 => 1.600 daN and 37 m/min
  - ST 180 => 2.100 daN and 28 m/min
  - ST 280 => 3.400 daN and 19 m/min
- Optional with free wheel device to pull out ropes by hand (without engine)
- Stable rope guiding device with hardened rope rollers
- Large rope drum (=> few rope layers => rope preserving) with stable pressure rollers for fixing the rope
- Max. rope capacity: K=44816 => e.g. 900 m for rope Ø 7 mm
  or 300 m for rope Ø 12 mm

Control of the machine:
- The rope can be indefinitely controlled in/out via a hand lever

Hydraulic driving system:
- A complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- With safety disc-brakes automatically activated
- High quality control technique enables inching even under maximum load
- Hydraulic hoses and screw connections with a special sealing system for a long service life without leakage

Engine:
- Honda gasoline engine 8,2 kW (10,9 HP) with hand start
- Optional: gasoline engine with 12,4 kW (16,3 HP), air-cooled diesel engine with 10,5 kW (14,2 HP), water-cooled diesel engine with 10,7 kW (14,5 HP); also with electro starter available

Weight and dimensions:
- Weight: approx. 430 kg (without rope)
- Length x width x height: approx.1.580 x 1.580 x 1.270 mm

Frame and support:
- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane

Chassis:
- 1 rigid axle with height-adjustable and easily removable towing bar ; wheels can also be simply dismounted manually; to be used only at construction sites

Ropes (optional):
- Steel or synthetic fibre ropes on request

Optional equipment:
- Free wheel device
- Special equipment or special models with different pull forces) on request

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

DRUM WINCH
Model: ST 110L / ST 140 / ST 180 / ST 280

- **Drum winch with a pull force max. 1,4 to (ST 110L), 1,6 to (ST 140), 2,3 to (ST 180) or 3,4 to (ST 280) for various usages (mast equipping, tower erection, antenna construction ...)**
- **NEW: ST 280 with 2 operation modes => electrically switchable between high pull force (3,4 to and max. 33 m/min) and high rope speed (73 m/min and max. 1,25 to)**
- **New: ST 110L, weight under 700 kg**
- **Other pull forces/ bigger rope drums on request**
- **Stable backstay for fast and safe anchoring**
- **Robust machine designed for highest reliability, simple operation and minimal maintenance**
- **Optional operation of the machine via cable or radio remote control from a safe distance => good overview, low noise level and safe position for the operator**
- **High quality control technique enables inching even under maximum load**

C 1

Drum winch technical data:

- Max. pull force (inner rope layer) and max. speed (outer rope layer):
  - ST 110L => 1.400 daN and 70 m/min
  - ST 140 => 1.600 daN and 56 m/min
  - ST 180 => 2.300 daN and 42 m/min
  - ST 280 => electrical switchable
    Stage 1: 3.400 daN and 33 m/min
    Stage 2: 1.250 daN and 73 m/min
- Optional with free wheel device to pull out ropes by hand (without engine)
- Stable rope guiding device with hardened rope rollers
- Optional with inductive slack-rope safety system (functions only with steel ropes) => prevents rope from getting loose and crossed over
- Large rope drum (=> few rope layers => rope preserving) with stable pressure rollers for fixing the rope
- Max. rope capacity: K=51283 => e.g. 360 m with rope Ø 12 mm
  or 260 m with rope Ø 14 mm

Control of the machine:

- The rope can be indefinitely controlled in/out via a hand lever
- Optional with cable remote control with a 10 m cable (functions: rope indefinitely controlled in/out; emergency stop)
- Optional with radio remote control (additional functions: ignition; engine starting)
- Control panel with all instruments to control engine, hydraulic and electrical systems
- Optional with automatic speed adjustment (idle/full throttle)

Cover:

- Lockable tarpaulin cover (optional with aluminium sheet) protects the diesel engine, the hydraulic and electrical systems => increases the reliability of the machine and is noise reducing

Hydraulic driving system:

- A complete driving unit consisting of planetary gear, brake and hydraulic motor is integrated => fully enclosed and therefore requiring minimal maintenance
- With automatically activated safety disc-brakes
- High quality control technique enables inching even under maximum load
- Highly effective oil cooling system, electrically activated and controlled via thermostat, designed for extreme operating conditions
- Hydraulic hoses and screw connections with special sealing system for a long service life without leakage

Engine:

- Honda gasoline engine with 13,2 kW (18 HP) and elektro starter
- Optional: Honda gasoline engine with 17,7 kW (24 HP), watercooled diesel engine with 17 kW (23 HP) at 1.950 U/min (Low speed => long service life and low noise level)
- 12 V system with high capacity battery for safe starting also at cold temperatures

Weight and dimensions:

- Weight: approx. 840 kg (without rope)
- Length x width x height: approx. 2.280 x 1.570 x 1.530 mm

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Frame and support:

- Stable steel frame with anchoring eyes
- Central lifting ring for easy loading by crane
- Back support via mechanical backstay for highest stability and fast and easy anchoring; with integrated eyes for anchoring of ropes
- Front support via stable mechanical parking jack

Standard chassis:

- 1 axle chassis with rigid axle and a non-adjustable height towing bar with ball coupling for car application

Optional chassis:

- 1 axle chassis with spring mounted axle , overrunning brake system, non-adjustable towing bar with ball coupling for car application, parking brake, lighting system, mudguards and registration as high-speed trailer up to 80 km/h
  Optional: dismountable towing bar (can be shipped crosswise on the truck), height adjustable towing bar with change coupling (for car or truck applications)

Ropes (Optional):

- Steel or synthetic fibre ropes on request

Optional equipment:

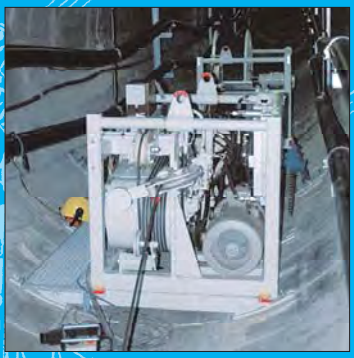
- Electrical valve and socket in the control panel
  => enables the connection of a cable/radio remote control (manual control remains possible as emergency control)
- Cable remote control
- Radio remote control
- Inductive slack-rope safety system
- Free wheel device
- Lockable cover made of thick-walled aluminium
- Large, lockable tool box
- Spare wheel with lockable holding device (only with aluminium cover)
- Grounding plate with holding device
- Biodegradable hydraulic oil
- Special equipment or special models (for lifting passengers or with different pull forces) on request

C 1

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Pullers + Drum Stands/Trailers



UNDERGROUND CABLE INSTALLATION

Catenary installation machines

Pullers + Tensioners
Drum Stands + Trailers

ACCESSORIES

Ropes
Connectors
Pulling grips
Pulley-blocks
Running boards

Model 60-10.. Braided Steel Ropes

- Braided steel rope, twist resistant, made of 12 galvanized high tensile wire strands; ideally suitable as pulling rope for construction of overhead transmission lines
- Special features:
  - Twist resistant
  - Premium lubrication of the individual strands as well as braided robes
  - High flexibility
  - Hexagonal cross section => lower wear of wheels, rope rollers and scaffolding
  - Spliced eyes at both ends
  - Supplied on hot-dip galvanized steel reels with Ø 1.100 and 1.400 mm (see data sheet B6-300)

NEW!
- Produced by ZECK (Thailand) Ltd.
- ISO 9001 Certificated
- Production according to European standards (CE)

Model	Rope diameter mm	Breaking load daN	Weight kg/m	Standard production length m**	Max. length with reel-ø	
					1.100 mm m	1.400 mm m
60-1008	8	4.500	0,24	1.600	3.200	6.400
60-1010*	10	7.200	0,32	1.000	2.000	4.000
60-1011	11	8.500	0,38	800	1.600	3.200
60-1012	12	9.000	0,42	1.400	1.400	2.800
60-1013*	13	10.500	0,56	1.200	1.200	2.400
60-1014	14	12.000	0,61	1.000	1.000	2.000
60-1016*	16	16.000	0,84	800	800	1.600
60-1018*	18	20.500	1,1	1.200	-	1.200
60-1020*	20	26.800	1,35	1.000	-	1.000
60-1022*	22	31.300	1,52	800	-	800
60-1024*	24	36.000	1,8	800	-	800
60-1026	26	40.000	1,98	700	-	700
60-1028	28	46.000	2,26	500	-	500
60-1028***	28	52.800	2,62	500	-	500
60-1030	30	65.800	3,36	500	-	500

* available on stock
** other lengths on request
*** with 18 strands

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY
Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Model 60-51.. PP braided hollow rope
Low strength; high elongation (approx. 6.4 % at 20% of the breaking load)
Good abrasion resistance; very easily spliceable (like pulling grip), can be spliced easily by pull-in of the rope end
=> low-priced; perfect for work at live line condition

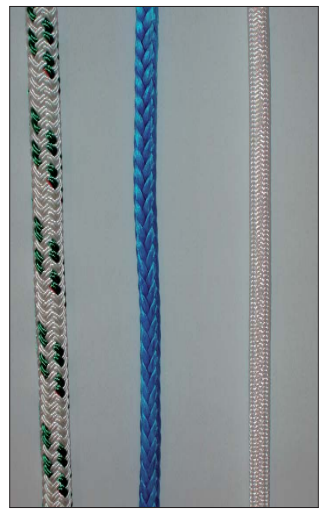
Model 60-53.. PP/PES braided hollow rope
Good strength; normal elongation (approx. 4.8 % at 20% of the breaking load)
Very good abrasion resistance; very easily spliceable (like pulling grip), can be spliced easily by pull-in of the rope end
=> low-priced and light pulling rope; easy handling

Model 60-52.. PES braided core sheeting rope
Good strength; low elongation (approx. 4.3 % at 20% of the breaking load).
Very good abrasion resistance; spliceable
=> strong pulling rope

Model 60-50.. Dyneema braided rope (DYN-core / PES-sheet)
Very good strength; lowest elongation (approx. 1.6 % at 20% of the breaking load)
Very good abrasion resistance; spliceable
=> high- strength pulling rope; rope for drum winches

Model 60-61.. Dyneema HF braided rope (DYN-core / PES-sheet)
Very good strength; lowest elongation (approx. 2 % at 30% of the breaking load)
Very good abrasion resistance; spliceable
=> high- strength pulling rope; rope for drum winches

Model 60-54.. Dyneema braided hollow rope
Highest strength; lowest elongation (approx. 0.8 % at 20% of the breaking load
Satisfying abrasion resistance; very easily spliceable (like pulling grip), can be spliced easily by pull-in of the rope end
=> if highest breaking load is needed at small diameter



Abbreviations:
PES = Polyester;
PP = Polypropylene;
DYN = Dyneema

Delivery in board box, on one way drums or on „type IT" steel reels with Ø 1.100 or 1.400 mm.

Rope-Ø mm	6	8	10	12	14	16	18	20	22	24
PP braided hollow rope Art.-Nr. 60- Weight in Kg/100 m Breaking load in daN	-	-	5110 2,7 1.100	5112 4,4 1.300	5114 5,8 2.100	5116 7,3 2.700	5118 10,6 3.600	5120 11,2 4.300	5122 15,5 5.200	5124 18,5 6.100
PP/PES braided hollow rope Art.-Nr. 60- Weight in Kg/100 m Breaking load in daN	-	-	-	5312 5,5 2.700	5314 7,5 3.300	5316 9,8 4.300	5318 12,4 6.000	5320 18,5 7.600	-	5324 27,5 10.500
PES braided core sheeting rope Art.-Nr. 60- Weight in Kg/100 m Breaking load in daN	5206 2,6 1.100	5208 4,0 1.500	5210 6,5 2.300	5212 9,3 3.600	5214 13,0 4.500	5216 18,3 6.500	5218 23,3 8.300	5220 29,0 10.000	5222 35,0 12.200	5224 42,0 14.500
Dyneema braided rope Art.-Nr. 60- Weight in Kg/100 m Breaking load in daN	5006 2,6 1.650	5008 4,0 3.000	5010 6,8 5.100	5012 9,9 7.500	5014 13,3 9.500	5016 17,5 12.000	5018 22,3 15.000	5020 28,0 19.000	5022 32,7 23.000	5024 38,9 25.500
Dyneema HF braided rope Art.-Nr. 60- Weight in Kg/100 m Breaking load in daN	-	6108 5,3 4.500	6110 7,5 7.200	6112 9,6 9.900	6114 13,6 12.200	6116 17 14.500	6118 21,9 17.700	6120 26,7 20.600	6122 28,8 24.300	6124 33,4 27.800
Dyneema braided hollow rope Art.-Nr. 60- Weight in Kg/100 m Breaking load in daN	5406 2,0 2.700	5408 3,5 5.000	5410 4,8 8.500	5412 8,2 11.500	5414 10,5 14.200	5416 12 17.000	5418 16,5 22.000	5420 20 26.500	-	-

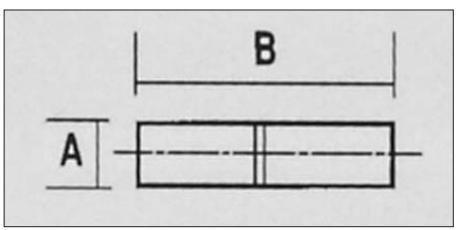
Modifications and errors excepted.

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY
Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Model 77-04.. Swivel Joint

Swivels made of superior galvanized steel. With pressure bearing.
The swivel is suitable to be used as connection element between the pulling rope and the conductor in order to prevent twist.

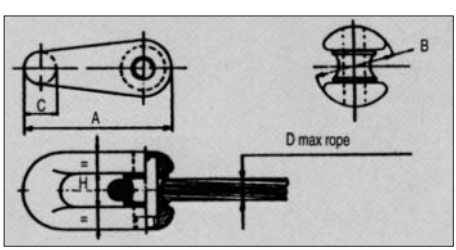
Model	Ø (A) mm	Length (B) mm	Rope Ø mm	Breaking load daN	Weight Kg
77-0400	40	143	13	11.000	0,95
77-0402	45	165	16	19.000	1,5
77-0405	54	183	18	22.000	2,2
77-0406	60	234	24	36.000	3,55
77-0408	77	323	28	75.000	8,1
77-0409	80	335	32	75.000	9,3



Model 77-020.. Fixed Joint

Connector made of superior galvanized steel,
is designed to connect pulling ropes and is suitable to pass the grooves of pullers.

Model	Dimension mm				Breaking load daN	Weight Kg
	A	B	C	D		
77-0200	59	28	15	10	7.000	0,13
77-0204	72,5	40	19,5	13	11.000	0,33
77-0206	90,5	48	20	16	16.000	0,53
77-0208	100,5	54	22	18	22.000	0,75
77-0210	119,5	60	27	24	36.000	1,03
77-0212	174	75	42	28	75.000	3,03



Modifications and errors excepted.

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Model 77-01.. Pulling grip for conductors (Made in Germany)

Optional in pressed or spliced version

Model pressed	Model spliced	Conductor Ø mm	Breaking load daN
77-0116	77-0117	6,0 - 10,9	1.800
77-0118	77-0119	8,0 - 16,0	3.800
77-0122	77-0123	11,0 - 15,9	3.400
77-0128	77-0129	16,0 - 20,9	6.600
77-0134	77-0135	21,0 - 26,9	9.300
77-0140	77-0141	27,0 - 37,9	12.000
77-0146	77-0147	38,0 – 44,9	12.600
77-0152	77-0153	45,0 – 55,0	13.800

Model 77-01.. Connection grip for conductors (Made in Germany)

Pressed version

Model	Conductor Ø mm	Breaking load daN
77-0158	6,0 – 10,9	1.800
77-0160	8,0 - 16,0	3.800
77-0162	11,0 – 15,9	3.600
77-0166	16,0 – 20,9	6.600
77-0170	21,0 – 26,9	9.300
77-0174	27,0 - 37,9	12.000
77-0178	38,0 – 44,9	12.600
77-0182	45,0 – 55,0	13.800

Model 77-00.. Pulling grip for conductors (Made in Europe)

Pressed version

Model	Conductor Ø mm	Breaking load daN
77-0013	8 – 17	3.500
77-0017	17 – 29	8.500
77-0020	29 – 38	13.000
77-0022	38 – 50	18.000

Model 77-01.. Connection grip for conductors (Made in Europe)

Pressed version

Model	Conductor Ø mm	Breaking load daN
77-0043	8 – 17	3.500
77-0047	17 – 29	8.500
77-0050	29 – 38	13.000
77-0052	38 – 50	18.000

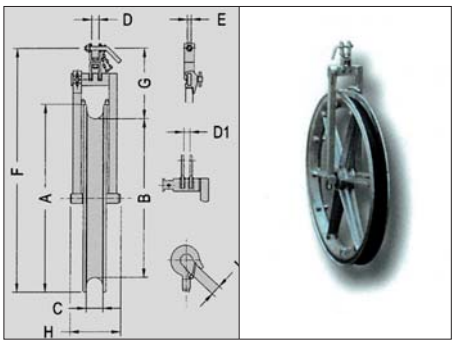
ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Model 77-20.. Single Pulley-Block

Ball bearing aluminium sheave with interchangeable groove liners of nylon or aluminium.
Galvanized steel frame with turnable clevis attachment.
Optional with fixed clevis.

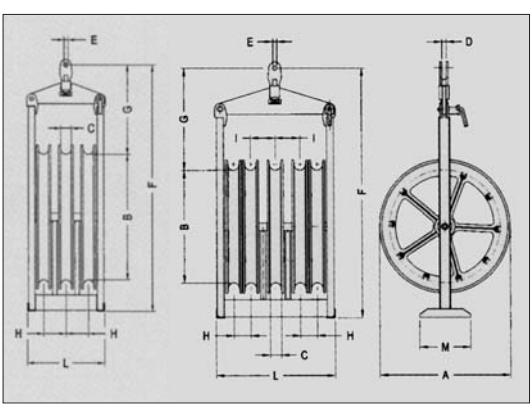
Model with nylon liners	Model with aluminium liners	Dimensions mm			Breaking load daN	Weight kg
		A	B	C		
77-2040	77-2040-A	300	230	38	6.000	6,5
77-2041	77-2041-A	440	350	48	6.000	9,7
77-2043	77-2043-A	620	500	68	10.000	23
77-2044	77-2044-A	770	650	68	12.000	28,5
77-2045	77-2045-A	800	650	95	12.000	34
77-2046	77-2046-A	920	800	68	12.000	34
77-2047	77-2047-A	920	800	95	12.000	40
77-2049	77-2049-A	1.100	1.000	95	12.000	49



Model77-20..Pulley-Block for 2-3 or 4 bundle conductors

Ball bearing aluminium sheave, with interchangeable groove liners of nylon or aluminium.
Galvanized steel frame with turnable clevis attachment.
Optional with reinforced sheave in the middle.

Model with nylon liners	Model with aluminium liners	Pulley block	Dimensions				Breaking load	Weight kg
			A	B	C	H		
77-2076	77-2076-A	3	620	500	68	146	12.000	100
77-2080	77-2080-A	3	770	650	68	146	12.000	120
77-2083	77-2083-A	3	800	650	95	178	18.000	130
77-2084	77-2084-A	3	920	800	68	146	18.000	135
77-2088	77-2088-A	3	920	800	95	178	18.000	165
77-2078	77-2078-A	5	620	500	68	146	12.000	130
77-2082	77-2082-A	5	770	650	68	146	12.000	165
77-2085	77-2085-A	5	800	650	95	178	18.000	180
77-2086	77-2086-A	5	920	800	68	146	18.000	180
77-2087	77-2087-A	5	920	800	95	178	18.000	230



Modifications and errors excepted.

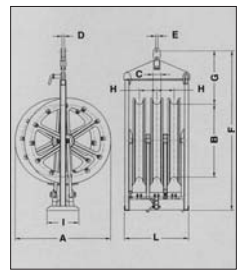
ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Art. Nr. 77-21.. Pully-block for 2 or 3 bundle conductors

Ball bearing, detachable aluminium sheave with interchangeable groove liners of nylon or aluminium.

Galvanised steel frame with turnable clevis attachment.
Optional with different gaps between sheaves (H)

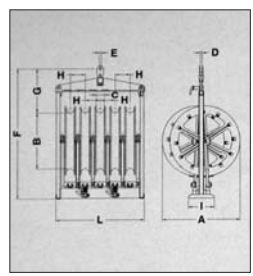


Model with nylon liners	Model with aluminium liners	Pulley-block	Dimension mm				Breaking load daN	Weight Kg
			A	B	C	H		
77-2101	77-2101-A	3	725	500	68	146	12.000	120
77-2102	77-2102-A	3	875	650	68	146	12.000	143
77-2103	77-2103-A	3	910	650	95	174	18.000	160
77-2104	77-2104-A	3	1035	800	68	146	18.000	170
77-2105	77-2105-A	3	1053	800	95	174	18.000	190

Art. Nr. 77-21.. Pully-block for 2, 3 or 4 bundle conductors

Ball bearing, detachable aluminium sheave with interchangeable groove liners of nylon or aluminium.

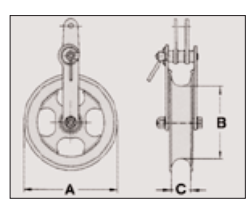
Galvanised steel frame with turnable clevis attachment.
Optional with different gaps between sheaves (H)



Model with nylon liners	Model with aluminium liners	Pulley-block	Dimension mm				Breaking load daN	Weight Kg
			A	B	C	H		
77-2183	77-2183-A	5	725	500	68	146	12.000	175
77-2184	77-2184-A	5	875	650	68	146	12.000	195
77-2185	77-2185-A	5	910	650	95	178	18.000	225
77-2186	77-2186-A	5	1035	800	68	146	18.000	230
77-2187	77-2187-A	5	1053	800	95	178	18.000	275

Model 77-203. Single Pulley-Block

Suitable for steel ropes and earth wires. Ball bearing steel sheave and galvanized steel frame.
Available with fixed or turnable clevis or with turnable hook.



Model	Suspension version	Dimension (mm) A	B	C	Breaking load daN	Weight Kg
77-2031	fixed clevis	300	230	65	7.000	14
77-2032	turnable clevis	300	230	65	7.000	14
77-2033	turnable hook	300	230	65	7.000	14

F 1

Modifications and errors excepted.

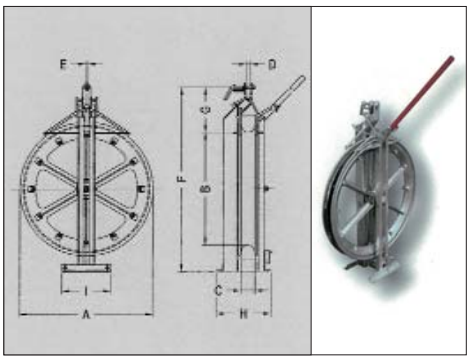
ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

PULLEY-BLOCKS FOR HELICOPTER APPLICATIONS

Model 77-20.. Pulley-Block for Helicopter Application

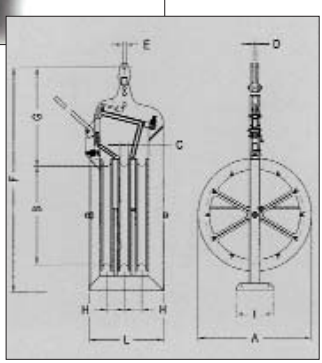
The ball bearing hinge mechanism makes it possible to insert the pulling rope automatically.
Ball bearing aluminium sheave with interchangeable groove inserts of nylon or aluminium. Galvanized steel frame with turnable clevis attachment.
Optional with fixed clevis.



Model Nylon	Model Aluminium	Dimensions mm			Breaking load daN	Weight Kg
		A	B	C		
77-2050		300	230	38	8.000	11
77-2052		440	350	48	8.000	40
77-2053	77-2053-A	620	500	68	10.000	48
77-2054	77-2054-A	770	650	68	12.000	52
77-2055	77-2055-A	800	650	95	12.000	56
77-2056	77-2056-A	920	800	68	12.000	58
77-2057		920	800	95	12.000	65

Model 77-20.. Pulley-block for 2 or 3 bundle conductors

The ball bearing hinge mechanism makes it possible to insert the pulling line automatically.
Ball bearing aluminium sheave with interchangeable groove inserts of nylon. The middle sheave is also available with aluminium inserts (77-....-A). Galvanized steel frame with turnable clevis attachment.
Optional with different gaps between sheaves (H).



Model Nylon	Model Aluminium	Sheaves	Dimensions mm				Breaking load daN	Weight Kg
			A	B	C	H		
77-2090	77-2090-A	3	620	500	68	146	12.000	115
77-2094	77-2094-A	3	770	650	68	146	12.000	160
77-2095	77-2095-A	3	800	650	95	174	18.000	176
77-2098	77-2098-A	3	920	800	68	146	18.000	180
77-2099	77-2099-A	3	950	800	95	174	18.000	200

F 1

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

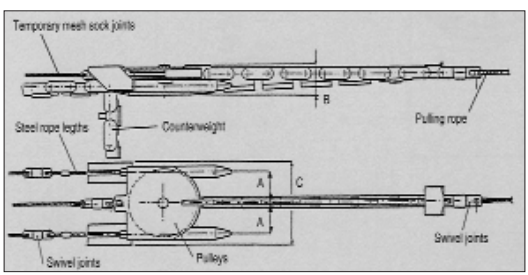
RUNNING BOARDS
FOR BUNDLED CONDUCTOR LINES

Model 77-08.. Running board for bundled conductor lines (balancing type)

Suitable to connect 2,3 or 4 bundled conductors to the pulling rope. Balancing wheels with counter weights to balance the stringing operation. Delivered with swivel joints and steel rope with spliced eyes.

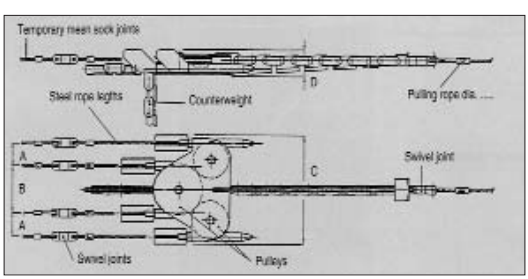
For 2 and 3 bundle:

Model	Dimensions mm			Swivels		Rope length m	Breaking load daN	Weight Kg
	A	B	C	77-0403	77-0406			
77-0800	146	160	360	2	1	1x30	30.000	140
77-0802	174	170	410	2	1	1x30	30.000	155
77-0804	146	160	360	3	1	1x30 + 1x15	30.000	155
77-0806	174	170	410	3	1	1x30 + 1x15	30.000	175
77-0807	give order			3	1	1x30 + 1x15	30.000	



For 4 bundle:

Model	Dimensions mm				Swivels		Rope length m	Breaking load daN	Weight Kg
	A	B	C	D	77-0403	77-0406			
77-0820	100	290	540	160	4	1	2x30	30.000	200
77-0822	130	340	650	160	4	1	2x30	30.000	220
77-0824	148	296	640	160	4	1	2x30	30.000	220
77-0826	178	356	760	160	4	1	2x30	30.000	240
77-0827	give order				4	1	2x30	30.000	



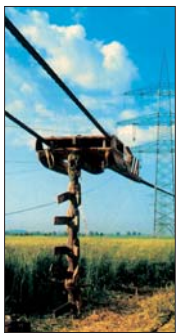
F 1

Modifications and errors excepted.

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

RUNNING BOARDS
FOR BUNDLED CONDUCTOR LINES

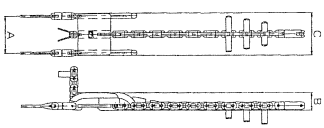


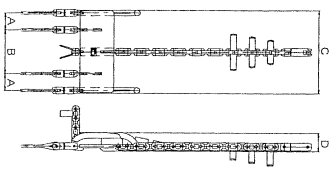
Model 77-08.. Running board for bundled conductor lines (rigid type)

Suitable to connect 2,3 or 4 conductors to the pulling rope. Delivered with counter weights for stabilisation and swivels.

For 2 and 3 bundle:

Art. Nr.	Dimensions mm				Swivels		Breaking load daN	Weight Kg
	A	B	C	D	77-0403	77-0406		
77-0850	give order				2	1	30.000	ca. 140



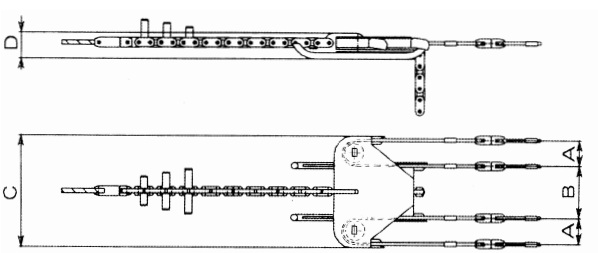


For 4 bundle:

Art. Nr.	Dimensions mm				Swivels		Breaking load daN	Weight Kg
	A	B	C	D	77-0403	77-0406		
77-0851	give order				2	1	30.000	ca. 200

Art. Nr. 77-08.. Running board for bundled conductor lines (balancing type)

special designed for 4-bundle operation:
- with Tensioner 2x2 (e.g. Tensioner B 1500/8x2)
- with 2 coupled 2-bundle Tensioners (e.g. Tensioner B 1300/8)



For 4 bundle:

Art. Nr.	Dimensions mm			Swivels		Breaking load daN	Weight Kg
	A	B	C	77-0403	77-0406		
77-0852	give order			4	1	30.000	ca. 200

F 1

Modifications and errors excepted.

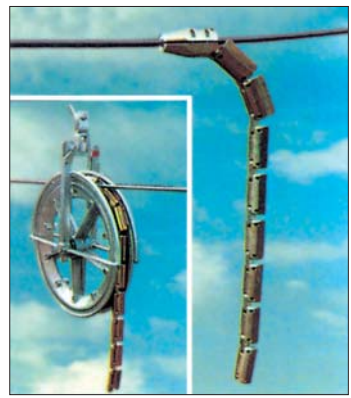
ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

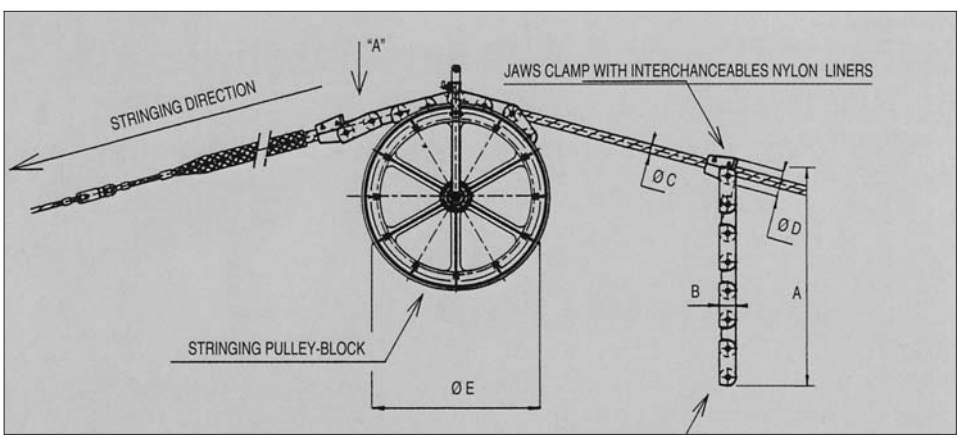
Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Model 77-084. Running board for OPGW

With counter weight in order to prevent torsion of the OPGW.
Extent of supply: 2 counter weights incl. clamp unit.
Please specify on the order:
- diameter of OPGW
- groove diameter and width of pulley-blocks used

Model	Dimensions mm			Weight Kg	Rope Ø 'C' mm
	Ø D	A	B		
77-0840	55	900	30	8	10-17
77-0842	55	1320	30	11	17-23





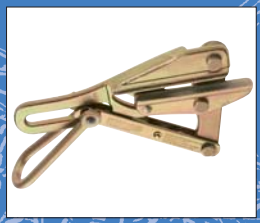
F 1

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

ACCESSORIES

Presses
Joint protectors
Self-gripping clamps
Cutters



Model 77-7400 Type: SR 100C2; Hydraulic press head with 100 to compression force

Very handy and light 100 to press unit. Double acting system for an extremely short pressing cycle and highest reliability.
Compression force: 100 to (1.000 kN)
Operation pressure: 700 bar
Weight: 33 kg
Power/weight ratio: 3.0 to / kg
Max. hexagonal dimension of the compression: 71 mm
Max. stroke: 24 mm
Dies available for all types of conductors.
Please specify on the order: conductor type or hexagon size of compression.

Model 77-7410 dies for aluminium compression
Model 77-7420 dies for steel compression

Model 77-77.. Hydraulic power unit

Very reliable power unit with integrated valve and control unit and with 2 hydraulic quick couplings to power double acting presses.
Operation pressure: 700 bar
Weight: approx. 45 kg (77-7700: 58 kg)
Dimensions: approx. 590 x 430 x 520 m

77-7700	Honda 4-stroke gasoline engine with 4 kW (5,5 PS)
77-7720	Honda 4-stroke gasoline engine, 3,2 kW (4,3 PS)
77-7750	Electric motor 230V / 50 Hz, 2,2 kW
77-7752	Electric motor 400V / 50 Hz, 2,2 kW

Model 77-74.. Hydraulic hoses set

Consists of 2 highest pressure hoses with quick couplings. In order to connect the press head with the hydraulic power unit or a Zeck Tensioner with integrated press power unit.
Standard lengths: (optional other lengths)

Model 77-7430 Length: 1.5 m
Model 77-7431 Length: 3 m
Model 77-7432 Length: 5 m
Model 77-7433 Length: 10 m
Model 77-7445 Box for hoses

Model 77-7500 Type: SR200M; Hydraulic press head with 200 to compression force

Very handy and light 200 to press unit.. Double acting system for an extremely short pressing cycle and highest reliability.
Compression force: 200 to (2.000 kN)
Operation pressure: 700 bar
Weight: 97.5 kg
Power/weight ratio: 2.1 to / kg
Max. hexagonal dimension of the compression connection: 90 mm
Max. stroke: 35 mm
Dies available for all types of ropes
Please specify on the order: conductor type or hexagon size of compression.

Model 77-7510 Dies for aluminium compression
Model 77-7520 Dies for steel compression

Model 77-7700 Type: SEP 5A; Hydraulic power unit with gasoline engine to power press heads

Very reliable power unit with integrated valve and control unit and with 2 hydraulic quick couplings to power double acting presses.
Basic frame with 4 wheels for easy handling
Operation pressure: 700 bar
Engine: HONDA 4-stroke gasoline engine with 4 kW (5.5 HP)
Weight: 58 kg
Dimensions: 590 x 430 x 520 mm

Model 77-7750 Type: SMP 3; Hydraulic power unit with electrical motor to power press heads

Very reliable power unit with integrated valve and control unit and with 2 hydraulic quick couplings to power double acting presses.
Basic frame with 4 wheels for easy handling
Operation pressure: 700 bar
Engine: 220 V three phase A.C. motor with 2.2 kW
Weight: 58 kg
Dimensions: 590 x 378 x 525 mm

Model 77-75.. Hydraulic hoses set

Consists of 2 highest pressure hoses with quick couplings. In order to connect the press head with the hydraulic power unit or a Zeck Tensioner with integrated press power unit.
Standard lengths: (optional other lengths)

Model 77-7530 Length: 1.5 m
Model 77-7531 Length: 3 m
Model 77-7532 Length: 5 m
Model 77-7533 Length: 10 m
Model 77-7545 Box for hoses

F 2

Modifications and errors excepted.

ZECK GMBH
Columba-Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

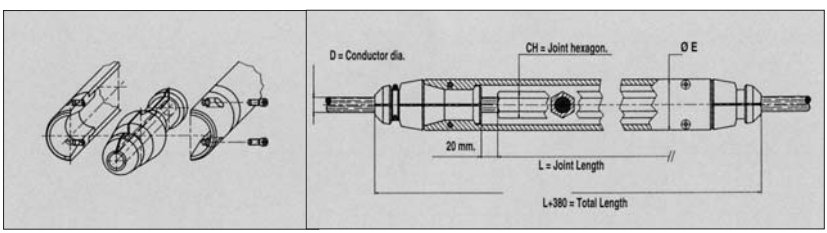
Model 77-04.. Joint Stiffener

Designed to protect the mid-span joint during the passage over the pulley-blocks

Please specify on the order:

L = joint length after compression
D = conductor Ø
CH = hexagonal joint dimensions after compression

Model	E-Ø mm	D Ø mm	
		min.	max
77-0450	60	12	22
77-0452	80	24	40



Art. Nr. 60-8150 Cable trimmer „Ridgid"

Cable trimmer with adjustable cutter wheel for accurate splice preparation of aluminium by ACSR conductors up to max. 34 mm. Incl. bushing holder and case.

Art. Nr. 60-8160 Bushing

Bushing for ACSR conductor

Please specify conductor on the order.

Conductor Ø ACSR	
125/30	25/4
150/25	35/6
185/30	44/32
210/50	50/8
240/40	50/30
265/35	70/12
300/50	95/15
380/50	95/55
435/55	120/20
490/65	120/70

Other bushings for ACSR available.

F 2

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Model 77-30.. Hydraulic cutter

Superior cutter with double piston hydraulic and express feed in order to cut ropes and conductors.
With overload protection by hydraulic pressure valve.

Model	Max. conductor ø (mm)	Length (mm)	Width (mm)	Working pressure (bar)	Weight (kg)
77-3000	25	382	129	600	3,2
77-3060	45	550	144	700	5,8
77-3080	50	497	129	600	4,4
77-3083	55	595	144	880	8,3

Art. Nr. 77-30.. Hydraulic cutter with storage battery

Superior cordless 14,4 V hydraulic cutter, with battery condition display and protection by hydraulic pressure valve.

Model	Max. conductor ø (mm)	Length (mm)	Height (mm)	Width (mm)	Battery	Weight (kg)
77-3085	25	295	302	94	14,4 V 3,0 h	4
77-3087	45	438	198	94	14,4 V 3,0 h	6,7
77-3088	55	483	298	94	14,4 V 3,0 h	9,1

Cutting capacity

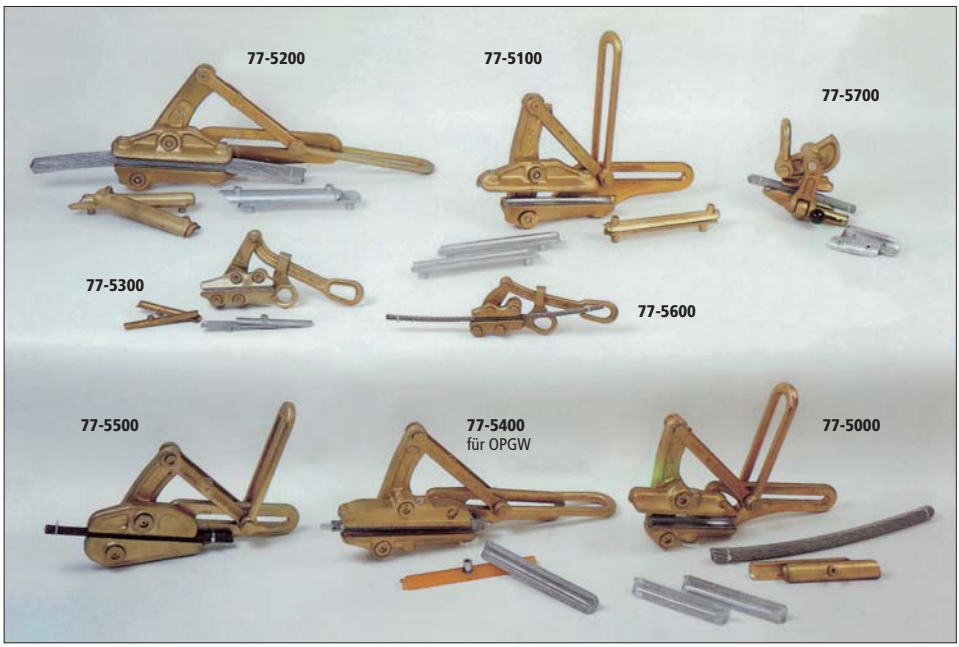
	Material	Tensile strength (daN/mm²)	Max. cutting dia. (mm) 77-3000 77-3085	77-3060 77-3087	77-3080	77-3083 77-3088
ROPES & CONDUCTORS	ACSR	≤ 180	25	45	-	50
	Aluminium	≤ 20	25	45	50	55
	Almelec	≤ 34	25	45	50	55
	Steel	≤ 180	Example: 19 x 2,3: ø = 11,5	Example: 19 x 2,3: ø = 11,5	-	Example: 19 x 2,3: ø = 11,5
	Multi strands steel (strands q-ty ≥ 200)	≤ 180	18	18	-	22
	Copper	≤ 41	25	45	50	55
RODS	Steel	≤ 60	13	18	-	20
		≤ 42	16	20	-	22
	Copper	≤ 30	20	30	-	34
		≤ 25	23	32	-	385
	Aluminium	≤ 16	25	45	-	50

F 2

Modifications and errors excepted.

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com



Model 77-5... Self-gripping clamp

The self-gripping clamps are used in order to anchor and to string conductors (aluminium, ACSR and copper) and steel ropes.
The clamps are made of high-tensile steel, heat-treated, hot forged and cadmium plated. Please specify on the order of clamps with changeable liners the rope diameter.

Model	Breaking load daN	changeable liners	aluminium conductors Ø mm	copper conductors Ø mm	braided steel ropes, ground wires Ø mm	weight Kg
77-5000	18.000	yes model liner=>	6 - 23 Nr. 77-5010	6 - 23 Nr. 77-5020	6 - 16 Nr. 77-5030	7
77-5100	27.500	yes model liner=>	12 - 32 Nr. 77-5110	12 - 32 Nr. 77-5120	8 - 22 Nr. 77-5130	13,5
77-5200	30.000	yes model liner=>	8 - 41 Nr. 77-5210	23 - 41 Nr. 77-5220	8 - 26 Nr. 77-5230	17
77-5200-S	30.000	yes model liner=>	41 - 44,8 Nr. 77-5210-S	41 - 44,8 Nr. 77-5220-S	--	17
77-5500	12.500	no	7,5 - 18	7,5 - 18	7,5 - 18	7
77-5600	4.900	no	2,5 - 15	2,5 - 15	2,5 - 15	1,5
77-5300	6.400	yes model liner=>	7 - 16 Nr. 77-5310	7 - 16 Nr. 77-5320	7 - 13 Nr. 77-5330	2,5
77-5400	15.000	yes model liner=>	especially for OPGW Ø 6 – 23 mm liner Model 77-5410			7
77-5700	9.800	yes model liner=>	especially for lifting of conductors Ø 7 - 38 mm liner model 77-5710			5,5

Modifications and errors excepted.

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Art. Nr. 76-50.. Self-gripping clamp

The self-gripping clamps are used in order to anchor and to string conductors (aluminium, ACSR and copper) and steel ropes.
The clamps are made of high-tensile steel, heat-treated, hot forged and cadmium plated.

max. working load 2.000 daN.			
Model	Conductors Ø mm	Jaw Length (mm)	Appros. Weight (kg)
76-5010	5,04 - 10,11	102	1,36
76-5011	8,24 - 12,75	121	1,70
max. working load 3.600 daN.			
76-5012	13,46 - 18,83	140	3,76
76-5013	21,80 - 24,48	140	3,76
76-5014	21,80 - 24,48	140	3,71

max. working load 6.700 daN.			
Model	conductors Ø mm	Jaw Length (mm)	Appros. Weight (kg)
76-5110	7,87 - 8,33	184	7,73
76-5111	7,87 - 9,90	184	7,73
76-5112	10,11 - 11,34	184	7,73
76-5113	11,53 - 13,08	184	7,73
76-5114	13,10 - 14,68	184	7,73
76-5115	14,70 - 16,25	184	7,73
76-5116	16,28 - 17,35	184	7,73
76-5117	17,88 - 19,43	184	7,73
76-5118	19,61 - 20,44	184	7,73
76-5119	21,49 - 22,40	184	7,73
max. working load 8.900 daN.			
76-5210	21,49 - 22,40	273	12,27
76-5211	22,63 - 24,20	273	12,27

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

ACCESSORIES

Line cars
Bicycles
Inspections line cars

LINE CAR
Model: LF 923 + LF 947

- **All-purpose line car, hydraulic driven, and with hydraulic lifting arms => easy and quick passage of suspension tower chains, vibration dampers, spacers and compression or notch connectors**
- **Usable for 2, 3 or 4 bundled conductors**
- **conductor distance: LF 923 max. 500 mm / LF 947 max. 600 mm**
- **Robust frame made of screwed aluminium profiles => easy maintenance and repairing => no welding seams**
- **Superior hydraulic proportional driving technique for sensitive controlling of the speed and of the lifting arms**
- **Driving wheels with superior wear-resistant tread of groove for a long service life; easily to change**
- **Corresponds to the actual european norm EN 50374. Type tested by German "BG" with "GS-Certificate"!**

Technical Data for operation:

Speed infinitely variable:	0 - 4,5 km/h
Rope diameter:	min. 19 mm ; max. 70 mm
Permissible inclination:	max. 15° on wet conductor
	max. 20° on dry conductor

Weight and dimensions:

LF 923	Weight:	approx. 235 kg
	Max. working load:	200 kg
	Length x width x height:	approx. 2.330 x 1.030 x 1.680 mm
LF 947	Weight:	approx. 250 kg
	Max. working load:	200 kg
	Length x width x height:	approx. 2.400 x 1.160 x 1.800 mm

Drive and brake system of the line car:

With a hand control lever the speed of the 4 drive wheels is continuously adjustable in both directions

In case of a malfunction the drive can be disconnected, and the line car can be town off

The 4 drive wheels are used as wheel brakes; that becomes possible due to a self-locking gear unit and a special valve control unit for the hydraulic power unit

In addition, 2 mechanic shoe brakes are used to work independently from each other as parking brakes

Hydraulic drive system:

Large dimensioned driving gear for highest durability and reliability

Driving wheels with superior wear-resistant treat of groove for a long service life; easily to be change

Superior control technology for exact driving of the vehicle and to spread and lift the arms

Superior hydraulic cylinders with strengthened piston rod, with special clamp devices and with joint eyes on both sides. With blocking valves in order to hold lifting arms in position safely

Hydraulic hoses and screw connections with special sealing system for a long service life without leakage

With biodegradable hydraulic oil

Adaptation on bundle distance and conductor configuration:

The 4 driving wheels and spacer wheels can be adapted without problems to different conductor distances

Can be adapted for the following conductor distances:
=> 4 and 3 bundles with 400/450 or 500 mm (LF 947: 600 mm)
=> 2 bundles horizontal and vertical with 400/450 or 500 mm (LF 947: 600 mm)
=> single conductors also with aircraft warning balls

Engine:

HONDA 4-stroke gasoline engine with 4,8 kW (6,5 PS); with electric starter and with additional hand starter

12 V electric system with high powered and maintenance-free gel battery => safe starting even at cold temperatures

Sound insulated exhaust system => for low noise level

With special engine bearing => nearly no vibrations transmitted to the frame and the hydraulic system => prevents leakages

Diesel tank with 3,6 l for approx. 7 operation hours

Extinguisher

Frame:

Robust frame made of screwed aluminium profiles => easy maintenance and repairing => no welding seams

Special joining technique and screw locks for durably stable frame

Best possible safety for the operator, due to a large distance of the bottom plate and the bundle spacer => operator can bend down and is out of danger area = below bundle spacer

Large operator space (inside length: 1,150 mm; inside width: 710 mm)

4 lifting rings to anchor the optional lifting chain or lifting ropes => for easy lifting and loading

Rings on each side for anchoring towing ropes

With 4 supporting foots => easy handling by a fork lift or hand pallet truck and prevents the buttom chassis against damage and mud

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Optional equipment:

- Easily adjustable lifting chain => line car always in a perfect lifting position
- Robust meter counter, easily to be set up on a hinged bracket
- Tool box can be laterally attached and easily fixed
- Axle and 2 wheels => line car is positioned on the axle and automatically fixed by a holding device => easy handling at site
- Longer bottom plate => more material can be stored
- Special equipment or special models on request
- Conductor roller unit; suitable to fix at the conductors for raising and lowering line cars

F 3

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Model 77-61.. Hydraulic driven line car

for 2, 3 or 4 bundled conductors. Frame made of tubular aluminium alloy structure.

Powered by a 5 HP engine and a hydraulic power supply for max. 40 m/min running speed and max. 18° (equivalent to 40%) inclination. 4 opening axels with sheaves suitable to pass over the suspension towers. Driving axle with 2 powered sheaves.

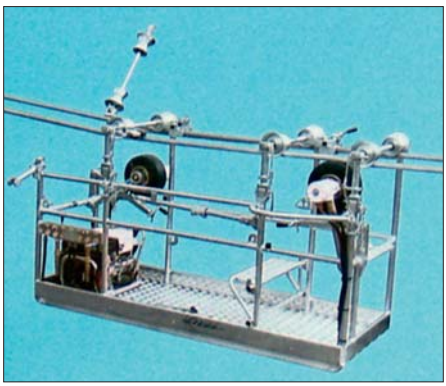
With parking brake and meter counter included.

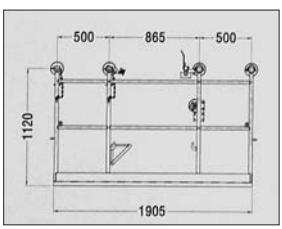
Working load: 200 kg

Weight: approx. 165 kg

Please specify on the order:
- Distance between conductors

Model	Suitable for:
77-6130	2 bundles
77-6131	3 bundles
77-6132	4 bundles





Model 77-61.. Line car

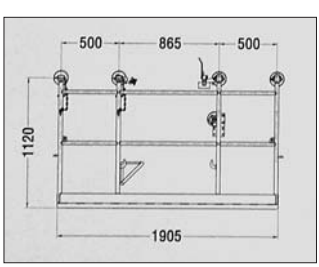
Made as above, but without drive unit.

Working load: 200 kg

Weight: approx. 80 kg

Please specify on the order:
- Distance between conductors

Model	Suitable for:
77-6133	2 bundles
77-6134	3 bundles
77-6135	4 bundles



F 3

Model 77-61.. Bicycle (new generation)

For fitting of spacers and aircraft warning balls.
The innovative mode of drive transmission by "Cardan Joint", permits to avoid the old roller chain system. The slender structure added to the "dynamic negative" brake device aligns the equipment at the more actual safety standards.
The very low transmission ratio requires a very low effort on the pedals for an easy operation until an inclination of 11° (equivalent to 25 %).
The adaptability of seat (height and inclination) enables the operator to achieve an optimum of working position.
The quick interchangeability of sheave groups makes it possible to adapt the frame quickly for 2 or 4 bundle.
The bicycle can also be adapted for single and triple bundle conductors.

Further characteristics:

- High-tensile ball-bearing nylon sheaves with groove protection
- Static braking device with jaws locking on conductors, controlled by lever
- Dynamic disc braking device at the drive shaft, controlled by lever
- Easy regulation of distance between sheaves:
  2 and 4 bundle: 400, 457 or 500 mm
  3 bundle: 400 mm
- Comfortable seat
- Safety belt
- Meter counter device

Optional:

- Storage and transport case
- Mounted engine drive unit

Please specify on the order:
- Distance between conductors

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Model 77-6150 Bicycle for single conductor

Weight: approx. 25 kg
Load capacity: 100 kg (safety factor 5)

Model 77-6151 Bicycle for single conductor with engine-drive unit

2-stroke engine, 2,4 HP; weight: 37 kg
Load capacity: 100 kg (safety factor 5)

Model 77-6152 Bicycle for 2 bundle conductor

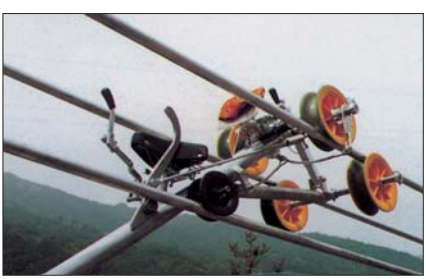
Weight: approx. 32 kg
Load capacity: 100 kg (safety factor 5)

Model 77-6153 Bicycle for 2 bundle conductor with engine-drive unit

2-stroke engine, 2.4 HP; weight: 44 kg
Load capacity: 100 kg (safety factor 5)

Model 77-6154 Bicycle for 3 bundle conductor

Weight: approx. 38 kg
Load capacity: 100 kg (safety factor 5)

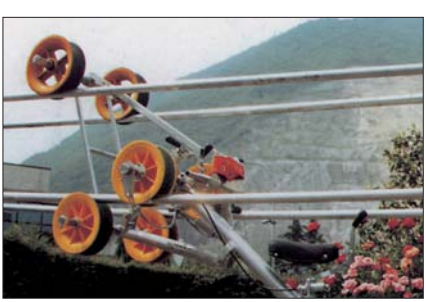


Model 77-6155 Bicycle for 3 bundle conductor with engine-drive unit

2-stroke engine, 2.4 HP; weight: 50 kg
Load capacity: 100 kg (safety factor 5)

Model 77-6156 Bicycle for 4 bundle conductor

Weight: approx. 42 kg
Load capacity: 100 kg (safety factor 5)



Model 77-6157 Bicycle for 4 bundle conductor with engine-drive unit

2-stroke engine, 2.4 HP; weight: 54 kg
Load capacity: 100 kg (safety factor 5)

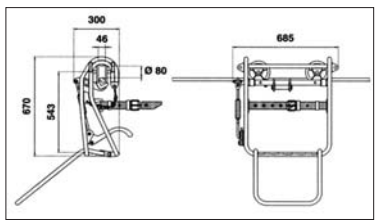
ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

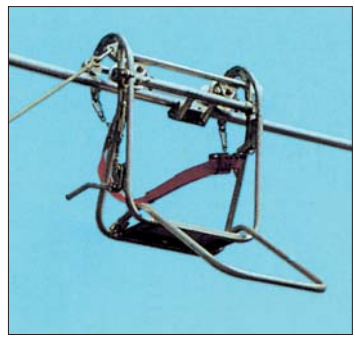
Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Model 77-6125 Inspection line car for single conductors

Aluminium frame for 1 operator. Equipped with footrest, ball-bearing nylon sheaves and hand brake. Optional with meter counter

Load capacity: 100 kg
Weight: 12 kg





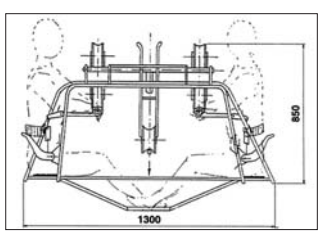
Model 77-612.. Inspection line car for bundled conductors

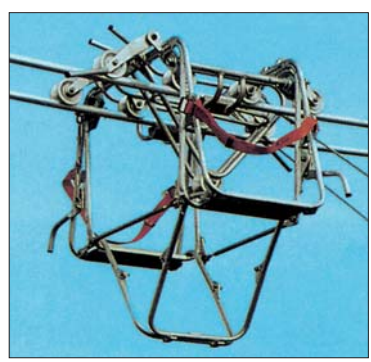
Aluminium frame for 2 operators. Equipped with footrest, ball-bearing nylon sheaves and hand brake. Optional with meter counter

Load capacity: 300 kg
Weight: 42 kg

Please specify on the order:
- Distance between conductors

Model 77-6126 for 2 bundles
Model 77-6127 for 3 bundles
Model 77-6128 for 4 bundles





F 3

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Pulling Robots Accessories

ACCESSORIES

PULLING ROBOT
Model: LKE 75

Performance:

- Pulling force: approx. 75 kg
- Speed: approx. 29 m/min (1.7 km/h)
- Conductor-Ø: 10 - 45 mm

Control and electric system:

- Radio remote control:
  - type tested (by German TÜV). Additionally with "Reflektomat" => highest safety, no malfunction because of external interferences
  - Transmitter with 2 push buttoms for forward / backward
  - effective radius: approx. 1.000 m
- Electric system:
  - robust and shock resistant control box
  - with battery charge control and with on/off switch
  - battery pack with housing, electric socket and fixing device => change of pack within 2 minutes

Drive system:

- 2 drive wheels are driven by 24 V electric motor
- the wheels are provided with high quality groove linings with very high abrasion resistance
- it is possible to run over compression connectors due to the special clamping system

Weights:

- Aluminium pulling robot: 27 kg (without batteries)
- Battery pack: 30 kg
- Transport box: 37 kg
- Recovering device: 9 kg

Dimensions:

- Pulling robot with battery (l x w x h): 700 x 345 x 960 mm
- Transport box (l x w x h): 1.100 x 460 x 840 mm

Delivery package:

- robot with radio remote control system including transmitter
- second battery pack
- special charger for gel batteries
- spare battery and battery charger for radio remote control
- lockable transport box
- recovering device for tow off the robot in the case of malfunction

Optional equipment:

- special equipment or special models on request

F 4

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

ROLLER UNITS FOR PULLING ROBOTS

Model 77-2000 Roller unit for 2-rope-system

The roller units will be installed by the pulling robot on the ground wire of the overhead transmission line. This operation system is specially designed for replacement of existing ground wires by new Optical Ground Wires (OPGW) – even under life line conditions.

Can also be used instead of building a scaffhold when crossing a road or railway line.

Suitable for the 2-rope-system (GroundWire/OPGW + fibre rope as supporting rope)

Frame made of high-strength aluminium; polyamide or aluminium rollers with maintenance free ball bearings; robust and very easy to handle rope clamping unit and opening device to install the rope.

The OPGW is perfectly protected by the rollers.

Weight: approx. 2 kg

Working load: 200 daN

Optional:

Model 77-2010 Roller unit for 2-rope-system with aluminium rollers

Weight: approx. 3,25 kg

Model 77-2020 Roller unit for 3-rope-systems (also suitable for 2-rope-system)

The roller units will be installed by the pulling robot on the ground wire of the overhead transmission line. This operation system is specially designed for replacement of existing ground wires by new Optical Ground Wires (OPGW) – even under life line conditions.

Can also be used instead of building a scaffhold when crossing a road or railway line.

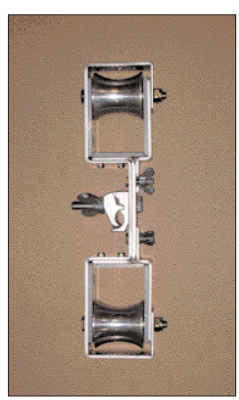
Suitable for the 3-rope-system (GroundWire/OPGW + fibre rope as supporting rope + fibre rope as pulling rope) and also suitable for the 2-rope-system.

Frame made of high-strength aluminium; aluminium rollers with maintenance free ball bearings; robust and very easy to handle rope clamping unit and opening devices to install the ropes.

The OPGW is perfectly protected by the polyamid plates and the rollers.

Weight: approx. 2 kg

Working load: 200 daN



suitable for 3-rope-system

suitable for 2-rope-system

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

ACCESSORIES

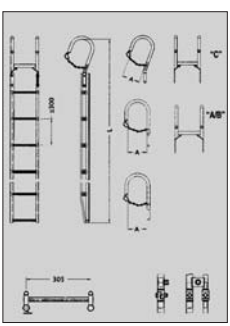
Ladders
Platforms
Gin poles

Model 77-07.. Suspension ladder

Suitable for suspension ladder (vertical) for overhead transmission line work. Made of superior aluminium alloy with corrugate steps.
With interchangeable galvanized steel hooks (standard type "C") with safety chain device and special antifall "T" profile.

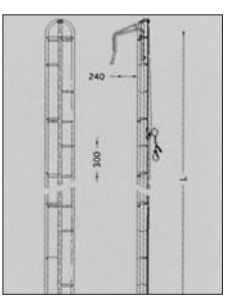
Model	vertical working load daN	Length m	Section number	(„A") mm	Weight kg
77-0709	300	2,5	1	220	9,5
77-0710	300	3	1	220	11
77-0711	300	3,5	1	220	12,4
77-0712	300	4	1	220	13,8
77-0713	300	5	1	220	17
77-0714	300	6	1	220	19,9
77-0714-2	300	6 (4+2)	2	220	20
77-0715	300	8 (4+4)	2	220	26,4
77-0716	300	10 (5+5)	2	220	32,3

Optional:
- hook type "A/B"
- hook opening (measure A) up to 400 mm
- antifall device 77-0705



Model 77-073. Ladder for tower climbing

Suitable for tower climbing. Made of superior tubular aluminium alloy with galvanized steel hooks and with complete antifall device



Model	Vertical working load daN	Length m	Weight kg
77-0730	100	3,7	9
77-0731	100	4,7	11

Model 77-0705 Antifall device

Personal safety equipment for operators. Self-locking safety equipment, carried along the "T" profile (40 mm) ladder rod. With wide ring for a safety belt with spring safety hook attachment and with fall absorber. Corresponds to European standards and with CE mark.
Weight: 0.77 kg

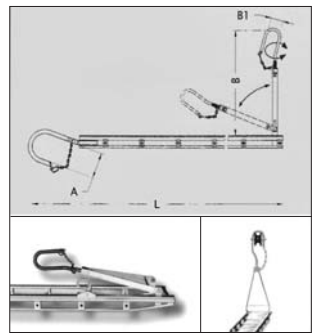
Modifications and errors excepted.

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Model 77-076. Suspension ladder/Platform

Suitable as suspension ladder (vertical) and as horizontal platform for overhead transmission line work. Made of superior aluminium alloy with corrugate steps and "T" profile for optional antifall device. With interchangeable galvanized steel hook for the tower side (standard type "C") and a foldable and turnable conductor hook for use as horizontal working platform.



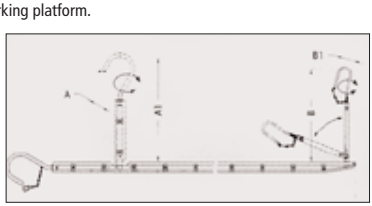
Optional:

- Conductor twisting hook with neoprene sheave type RK (e.g. 77-0760-RK)
- Conductor twisting hook with aluminium sheave type RA (e.g. 77-0760-RA)
- Antifall device 77-0705

Model	Vertical working load daN	Horizontal working load daN	Length m	Section number	Opening tower hook measure "A" mm	Height conductor hook measure "B" mm	Opening conductor hook measure "B1" mm	Weight kg
77-0760	300	100	2,5	1	220	900	100	15
77-0761	300	100	3	1	220	900	100	16,5
77-0762	300	100	3,5	1	220	900	100	18,5
77-0763	300	100	4	1	220	900	100	20
77-0764	300	100	5	1	220	900	100	23,5
77-0765	300	100	6	1	220	900	100	29,5
77-0766	300	100	6 (4+2)	2	220	900	100	30,5

Model 77-077. Suspension ladder/Platform

Suitable as suspension ladder (vertical) and as horizontal platform for overhead transmission line work. Made of superior aluminium alloy with corrugate steps and "T" profile for optional antifall device. With foldable and turnable tower hook (standard type "C") for easy aligning and a foldable and turnable conductor hook for use as horizontal working platform.



Model	Vertical working load daN	Horizontal working load daN	Length m	Section number	Opening tower hook measure "A" mm	Height tower hook measure "A1" mm	Height conductor hook Measure "B" mm	Opening conductor hook measure "B1" mm	Weight kg
77-0770	300	100	3,13	1	220	1000	900	100	19
77-0771	300	100	3,60	1	220	1000	900	100	21
77-0772	300	100	4,16	1	220	1000	900	100	22,5
77-0773	300	100	5,03	1	220	1000	900	100	26,5
77-0774	300	100	6,25	1	220	1000	900	100	32,5
77-0775	300	100	6,25 (4,25+2)	2	220	1000	900	100	33,5

Optional: - Conductor twisting hook with neoprene sheave type RK (e.g. 77-0760-RK)
- Conductor twisting hook with aluminium sheave type RA (e.g. 77-0760-RA)
- Antifall device 77-0705

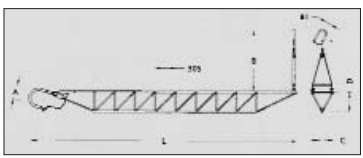
Modifications and errors excepted.

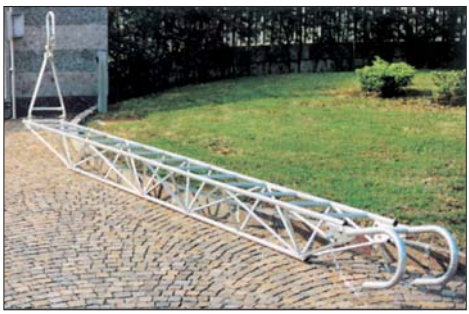
ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Model 77-125. Horizontal platform with triangular structure

Suitable as horizontal working platform and as suspension ladder (vertical). Made of superior aluminium alloy with corrugate steps. With interchangeable galvanized tower hook (standard type "C") and with a foldable and turnable conductor hook for use as horizontal working platform.





Optional:

- Conductor hook with polyamide sheave type: R (e.g. 77-1250-R)
- Tower hook opening up to 400 mm

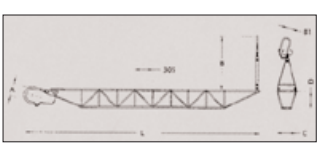
Model	Vertical working load daN	Horizontal working load daN	Length m	Opening tower hook measure "A" mm	Height conductor hook measure "B" mm	Opening conductor hook measure "B1" mm	C mm	D mm	Weight kg
77-1250	300	200	3,5	220	900	100	320	320	17
77-1251	300	200	4	220	900	100	320	320	18,5
77-1252	300	200	4,5	220	900	100	320	320	20
77-1253	300	200	5	220	900	100	320	320	21,5
77-1254	300	200	6	220	900	100	320	350	24,5
77-1255	300	200	6 (4+2)	220	900	100	320	350	26
77-1256	300	200	7 (4+3)	220	900	100	320	350	30,5
77-1257	300	200	8 (4+4	220	900	100	320	350	34

Model 77-126. Horizontal platform with trapezoidal structure

Suitable as horizontal working platform and as suspension ladder (vertical).
Made of superior aluminium alloy with corrugate steps.
With interchangeable galvanized tower hook (standard type "C") and
with a foldable and turnable conductor hook for use as horizontal working platform.

Optional:

- Conductor hook with polyamide sheave type: R (e.g. 77-1260-R)
- Tower hook opening up to 400 mm



Model	Vertical working load daN	Horizontal working load daN	Length m	Opening tower hook measure "A" mm	Height conductor hook measure "B" mm	Opening conductor hook measure "B1" mm	C mm	D mm	Weight kg
77-1260	300	300	3,5	220	900	100	320	320	19
77-1261	300	300	4	220	900	100	320	320	21
77-1262	300	300	4,5	220	900	100	320	320	23
77-1263	300	300	5	220	900	100	320	320	24,5
77-1264	300	300	6	220	900	100	320	350	28
77-1265	300	300	6 (4+2)	220	900	100	320	350	29,5
77-1266	300	300	7 (4+3)	220	900	100	320	350	34,5
77-1267	300	300	8 (4+4	220	900	100	320	350	39

Modifications and errors excepted.

ZECK

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

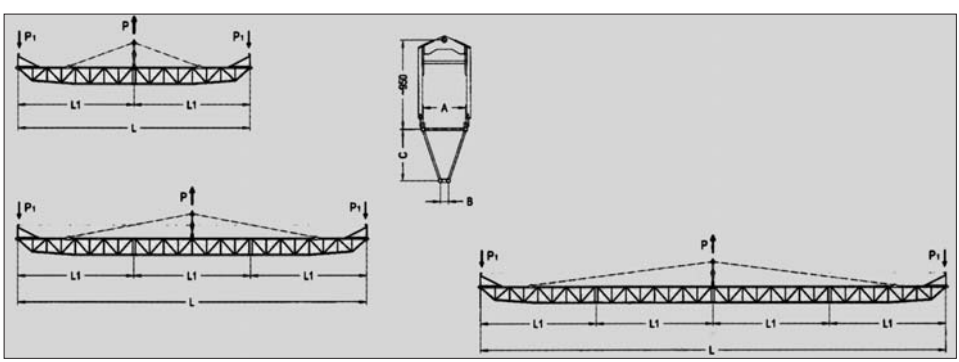
Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

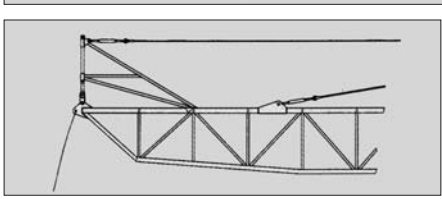
Model 77-12.. Working platform

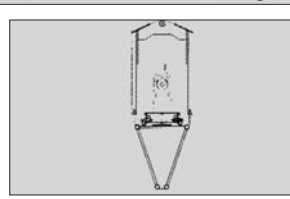
Working platform in trapezoidal structure, made of superior aluminium alloy.
Composed in sections for large lengths – is delivered with suspension device (incl. ropes).

Optional:
- Railway profile for press trolley, type: 77-1200-PP2 (weight 2 kg/m)
- Press trolley; turnable at 360°, type: 77-1200-P2 (weight 12 kg)
- Antifall barrier 77-1200-AB

Model	Working load P=P1+P2 daN (P1)	Breaking load daN	Total length m	Section number and length (L1) m	A	B	C	Weight kg
77-1200	300	1800	4	4	350	85	390	50
77-1201	300	1800	5	5	350	85	390	56
77-1202	300	1800	6	6	350	85	390	62
77-1203	300	1800	6	3+3	350	85	390	65
77-1204	300	1800	7	3,5+3,5	350	85	446	77
77-1205	300	1800	8	4+4	350	85	446	86
77-1206	300	1800	10	4+2+4	350	85	446	103
77-1207	300	1800	12	4+4+4	350	85	446	115
77-1208	300	1800	14	5+4+5	350	85	446	126
77-1209	300	1800	16	4+4+4+4	350	85	446	144
77-1210	300	1800	18	6+6+6	350	85	446	160
77-1211	300	1800	20	5+5+5+5	450	85	550	200
77-1212	300	1800	24	6+6+6+6	450	85	550	254







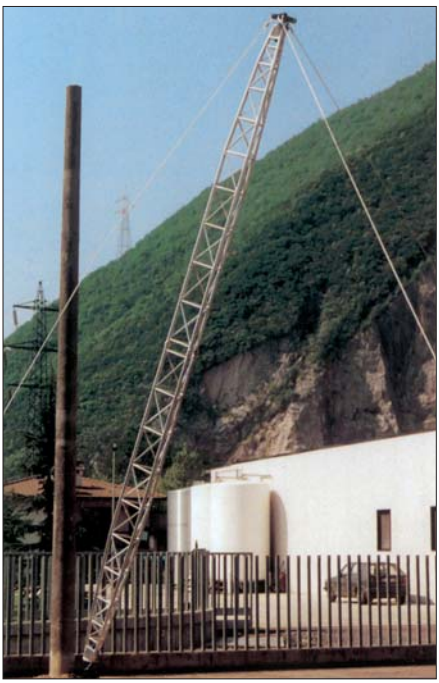
Modifications and errors excepted.

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Art. Nr. 77-22.. Gin Pole

For erection of towers. Delivered with 2 or more sections.
Welded aluminium alloy tubular lattice structure with working capacity up to 10.000 daN and legth up to 20 m (optional up to 25 m).



Swivelling head – external type

Swivelling base (with tower hook till to 5.000 daN) external type

Swivelling head – internal type

Swivelling base – internal type

Ground base – internal / external type

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

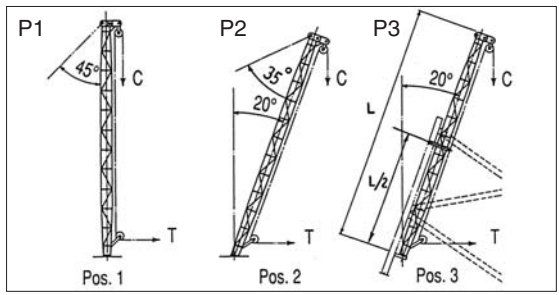
Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Art. Nr. 77-22.. Gin Pole

Working capacity from 1.000 daN up to 10.000 daN
Lenght from 6 up to 20 m. With swivelling head, swivelling base /with tower hook till to 5.000 daN) and ground base.
The capacity is shown for 3 different working modes.
In every case before using the gin pole, the maximum working capacity must be calculated by the user – taking in consideration:
- load condition
- gin pole inclination

External rope: 77-22xx-E

Internal rope: 77-22xx-I



Optional:

• available also in steel construction

Model	Capacity "P" = T + C (daN) P1 Pos. 1 α = 0°	P2 Pos. 2 α = 20°	P3 Pos. 3 α = 20°	Total length (m)	Standard number of sections and length (m)	Weight for external type (kg)	Weight for internal type (kg)	Weight ground base (kg)
77-2200	1000	600	240	6	3+3	43	54	10
77-2202	1000	600	240	8	4+4	54	66	
77-2210	1500	900	360	8	4+4	65	74	10
77-2212	1500	900	360	10	5+5	76	87	
77-2214	1500	900	360	12	4+4+4	86	98	
77-2220	2000	1200	480	8	4+4	67	75	10
77-2222	2000	1200	480	10	4+2+4	80	88	
77-2224	2000	1200	480	12	4+4+4	91	99	
77-2230	3000	1800	720	8	4+4	74	79	19
77-2232	3000	1800	720	12	4+4+4	109	117	
77-2234	3000	1800	720	16	4+4+4+4	146	155	
77-2236	3000	1800	720	18	6+6+6	162	170	
77-2240	4000	2400	960	10	4+2+4	98	116	19
77-2242	4000	2400	960	12	4+4+4	113	131	
77-2244	4000	2400	960	16	4+4+4+4	166	182	
77-2246	4000	2400	960	20	5+5+5+5	208	225	
77-2250	5000	3000	1200	12	4+4+4	139	152	19
77-2252	5000	3000	1200	16	4+4+4+4	208	221	
77-2254	5000	3000	1200	20	5+5+5+5	266	278	
77-2270	7000	4200	1680	12	4+4+4	160	198	29
77-2272	7000	4200	1680	16	4+4+4+4	210	245	
77-2274	7000	4200	1680	20	5+5+5+5	245	283	
77-2280	10000	6000	2400	16	4+4+4+4	241	278	60
77-2282	10000	6000	2400	20	5+5+5+5	291	325	

Weight without accessories

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

General accessories

ACCESSORIES

Model 77-09.. Chain lever hoist – Proprietary brand

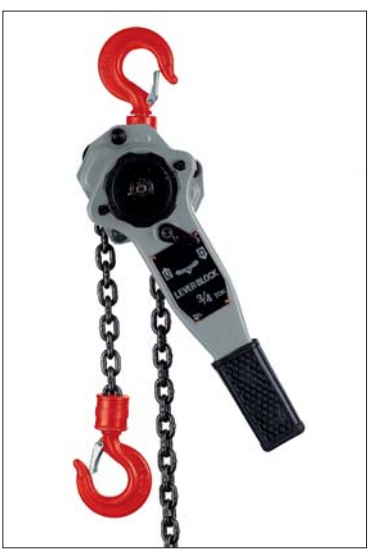
- standard lifting height 1.5 m
- galvanized round steel chain according to EN 818
- optional with overload device

Model	Lifting height m	Capacity daN	Weight kg
77-0917-1,5	1,5	1000	6,0
77-0917-3,0	3,0	1000	7,0
77-0917-6,0	6,0	1000	9,0
77-0918-1,5	1,5	1600	9,0
77-0918-3,0	3,0	1600	10,7
77-0918-6,0	6,0	1600	14,0
77-0920-1,5	1,5	3200	16,0
77-0920-3,0	3,0	3200	19,4
77-0920-6,0	6,0	3200	26,3
77-0922-1,5	1,5	6300	29,0
77-0922-3,0	3,0	6300	35,9
77-0922-6,0	6,0	6300	49,6

Model 77-09.. Chain lever hoist

- standard lifting height 1.5 m
- galvanized round steel chain

Model	Lifting height m	Capacity daN	Weight kg
77-0908-1,5	1,5	750	6,7
77-0908-3,0	3,0	750	7,8
77-0908-6,0	6,0	750	9,9
77-0910-1,5	1,5	1500	10,5
77-0910-3,0	3,0	1500	12,2
77-0910-6,0	6,0	1500	15,6
77-0912-1,5	1,5	3000	18,0
77-0912-3,0	3,0	3000	21,4
77-0912-6,0	6,0	3000	28,3
77-0914-1,5	1,5	6000	25,8
77-0914-3,0	3,0	6000	32,7
77-0914-6,0	6,0	6000	46,4



ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Model 77-095.. Grip Pullers – Made in Europe

For pulling or lifting of loads or ropes.

Advantages:

- unlimited pulling length
- type tested for lifting operation

Model	Working load daN	Rope ø mm	Weight without rope kg
77-0954	800	8,3	6,6
77-0955	1600	11,5	13
77-0956	3200	16,3	22

Model 77-098.. Grip Pullers – Made in Germany

For pulling or lifting of loads or ropes.

Advantages:

- unlimited pulling length
- type tested for lifting operation

Model	Working load daN	Rope ø mm	Weight without rope kg
77-0984	800	8,4	6
77-0985	1600	11,5	11
77-0986	3200	16	21

Model 77-09... Rope for model 77-095.

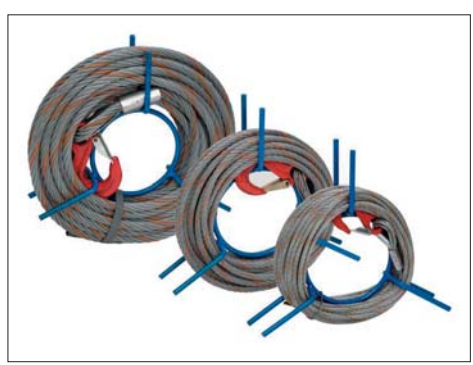
Special rope with hook on one side.

Model	Rope lenght m	Rope Ø mm	Breaking load daN
77-0957	10	8,3 (0,25 kg/m)	5.500
77-0958	20		
77-0959	30		
77-0960	40		
77-0961	10	11,5 (0,55 kg/m)	9.025
77-0962	20		
77-0963	30		
77-0964	40		
77-0965	10	16,3 (0,98 kg/m)	18.050
77-0966	20		
77-0967	30		
77-0968	40		

Model 77-09... Rope for model 77-098.

Special rope with hook on one side.

Model	Rope length m	Rope ø mm	Breaking load daN
77-0988	20	8,4 (0,29 kg/m)	4.500
77-0992	20	11,5 (0,53 kg/m)	8.700
77-0996	20	16 (1,0 kg/m)	16.500



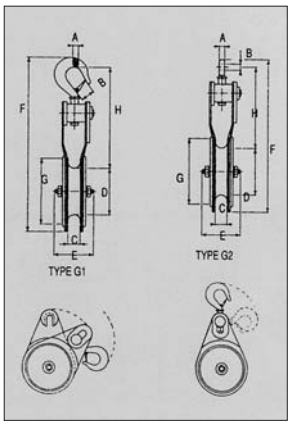
ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Model 77-14.. Heavy duty steel snatch block

One side opening, ball-bearing polyamide or steel sheave.
G2 and G3 on request.

Model	Capacity daN	Attachment	Dimensions mm				Weight Kg	Sheave
			C	D	F	G		
77-1400	500	G1	18	102	305	125	2,5	Poly-amide
77-1402	1.000	G1	18	102	310	125	2,6	
77-1404	1.500	G1	20	102	330	125	2,8	
77-1440	1.500	G1	20	105	330	125	3,6	Steel
77-1442	2.000	G1	25	135	385	155	5,6	
77-1444	3.000	G1	25	135	410	158	7,0	
77-1446	5.000	G1	30	185	520	205	15,0	



Art. Nr. 77-14.. Heavy duty aluminium snatch block

One side opening, ball bearing aluminium sheave.

Model	Capacity daN	Attachment	Dimensions mm				Weight Kg
			C	D	F	G	
77-1484	500	G1	16	60	255	80	1,0
77-1485	1.000	G1	18	80	280	100	1,5
77-1486	2.000	G1	22	80	335	110	2,5
77-1487	3.000	G1	22	106	390	130	5,0

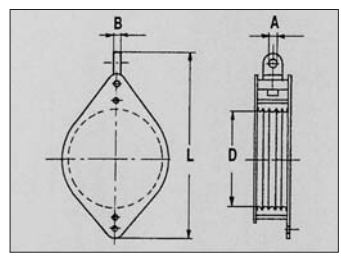
ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Model 77-803. Lifting tackles

Steel construction with ball-bearing sheaves. Each tackle block consists of 2 sheave units and can be equipped with turnable suspensions and ropes in various lengths.

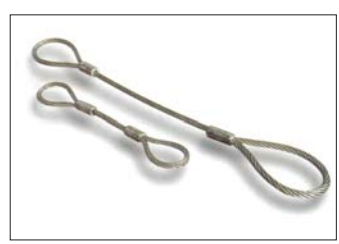
Model	Capacity daN	Rope sheaves	Dimensions					Weight kg per pair
			Ø D mm	Seil Ø mm	L max. mm	A mm	B mm	
77-8030	2500	2	160	8	380	22	22	20
77-8031	3500	3	160	8	450	25	22	27
77-8032	5500	5	160	8	500	29	22	45
77-8035	3000	2	180	9	370	22	22	25
77-8036	4500	3	180	9	430	25	22	30
77-8037	7000	5	180	9	470	29	22	45



Art. Nr. 77-81.. Wire rope sling

According to DIN EN 1344-1.
Made of galvanized steel rope with pressed eyes. Eye length: 15x rope-Ø

Model	rope-Ø mm			0°	0-45°	45-60°
		working load in kg				
77-8108	8	700	560	1400	950	700
77-8110	10	1000	800	2000	1400	1000
77-8112	12	1500	1200	3000	2100	1500
77-8114	14	2000	1600	4000	2800	2000
77-8116	16	2700	2150	5400	3800	2700
77-8118	18	3150	2500	6300	4400	3150
77-8120	20	4000	3200	8000	5600	4000
77-8122	22	5000	4000	10000	7000	5000
77-8124	24	6300	5000	12600	8800	6300



ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

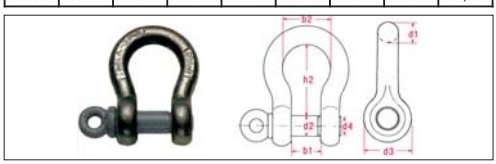
Model 77-000. Electronic Dynamometer „LLX"

In order to measure forces with highest accuracy (± 0,2 %). Delivered with robust case.
Optional:
- with cable remote control
- with suitable shackles (76-99..) or suitable hook
- with radio remote controll „LLXh"

Model	Measuring range to	Dimensions mm	Hole-Ø mm	Max. deviation ± kg	Weight kg	Suitable shackles Model
77-0002	0,5	190 x 83 x 56	16	1	1,1	76-9966
77-0003	1,25	190 x 83 x 56	16	2,5	1,1	76-9966
77-0004	2,5	214 x 83 x 56	24	5	1,4	76-9970
77-0005	5	225 x 90 x 56	32	10	1,9	76-9974
77-0006	12,5	310 x110 x 58	47	25	3,8	76-9982
77-0007	25	360 x 134 x 68	56	50	6,6	76-9986
77-0008	50	440 x 164 x 98	72	100	15	77-9990

Model 76-99.. Shackles

Model	Capacity kg	Dimensions in mm d1	d2	d3	b1	b2	h2	Weight kg
76-9960	500	6,5	8	17	12	20	28	0,05
76-9962	750	8	10	21	13	21	31	0,08
76-9964	1000	10	11	25	16	26	36	0,14
76-9966	1500	11	13	27	18	29	42	0,22
76-9968	2000	13	16	30	21	33	48	0,32
76-9970	3250	16	19	40	27	43	60	0,65
76-9972	4750	19	22	48	32	51	71	0,87
76-9974	6500	22	25	54	36	58	84	1,52
76-9976	8500	25	29	60	43	68	95	2,39
76-9978	9500	29	32	67	46	74	108	3,17
76-9980	12000	32	35	76	52	82	119	4,32
76-9982	13500	35	38	84	57	92	133	5,67
76-9984	17000	38	41	92	60	98	146	7,79
76-9986	25000	44	51	110	73	127	178	12,51
76-9988	35000	51	57	127	83	146	197	18,50
76-9990	55000	63	70	152	105	184	267	37,58



Model 76-999. Electronic Dynamometer „LLZ"

In order to measure forces with high accuracy (± 0,8 %). Delivered with cardboard box; Model 76-9997 and 76-9998 with case.
Optional:
- with suitable shackles (76-99..) or suitable hook

Model	Measuring range to	Dimensions mm	Max. deviation ± kg	Weight kg	Suitable shackles Model
76-9992	0,5	220 x 90 x 42	4	1,1	76-9966
76-9993	1	220 x 90 x 42	8	1,1	76-9966
76-9994	2	220 x 90 x 42	16	1,3	76-9970
76-9995	3,2	243 x 97 x 48	25,6	1,5	76-9972
76-9996	6,4	275 x 115x 48	52,2	2,3	76-9974
76-9997	10	325 x 110 x 62	80	4	76-9980
76-9998	20	371 x 134 x 72	160	7	77-9986

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY
Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Art. Nr. 76-971. Dynamometer

- Anodized aluminium housing
- Accuracy: appr. 0,15% of the displayed value
- Complete with plastic case, manual and calibrating certificate

Model	WLL (kg)	Resolution (kg)	A (mm)	B (mm)	C (mm)	D (mm)	F (mm)	Bow shackle (to)	Weight (kg)
76-9710	2.500	1	215	85	54	21	159	3,25 incl.	1,35
76-9711	5.000	2	232	85	54	27	168	6,5 incl.	1,85
76-9712	10.000	5	315	100	59	39	203	12,0 excl.	3,60
76-9713	20.000	10	350	126	70	55	210	25,0 excl.	7,00

Art. Nr. 76-972. Dynamometer with radio remote controll

Model	WLL (kg)	Resolution (kg)	A (mm)	B (mm)	C (mm)	D (mm)	F (mm)	Bow shackle (to)	Weight (kg)
76-9721	5.000	2	232	85	54	27	168	6,5 incl.	1,85
76-9722	10.000	5	315	100	59	39	203	12,0 excl.	3,60
76-9723	20.000	10	350	126	70	55	210	25,0 excl.	7,00

Art. Nr. 76-98.. Crane scale

- Very robust construction
- Plexiglas and rubber casing protects display
- Dustproof
- Deviation within 1% of full scale
- Low weight
- Remote reading available
- Hook with latch at capacity 200 - 5.000 Kg
- Selve aligning attachment at capacity 12.500 - 50.000 Kg

Model	Capacity in Kg	Dimension mm					Weight in Kg
		A	B	C	D	E	
76-9810	0 - 200	60	53	230	27	35	5
76-9811	0 - 320	60	53	230	27	35	5
76-9812	0 - 500	60	53	230	27	35	5
76-9813	0 - 750	60	53	230	27	35	5
76-9814	0 - 1.250	60	53	230	27	35	5
76-9815	0 - 2.000	60	53	230	27	35	5
76-9816	0 - 3.200	75	53	280	34	46	5,5
76-9818	0 - 5.000	75	53	300	42	56	6,5
76-9820	0 - 12.500	40	41	213			8,1
76-9822	0 - 25.000	55	42	267			12,9
76-9824	0 - 50.000	75	56	329			25

Modifications and errors excepted.

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Art. Nr. 77-4605 Thermometer

Robust thermometer for mounting at conductor
Measuring range: – 40° bis + 70° C
Weight: 0,6 kg

Model 77-0001 Sag-scope

Instrument suitable for an accurate measuring of the conductor sag, supplied with special clamping device for tower legs.
Delivery in hardcase.
Weight: 4,7 kg

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Safety devices
Fall protections

ACCESSORIES

Model 77-4000 Running ground

In order to dissipate the electric potential during the conductor stringing operation. Consists of 3 ball-bearing aluminium sheaves with a device due to protect the bearing from electricity flow.
With a copper ground wire (6m long - 50 mm²) and earthing clamp.

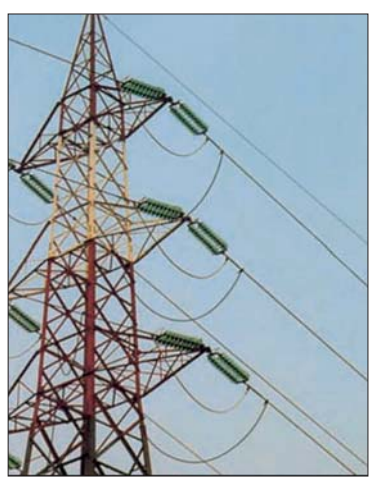
Weight: 10 Kg

Model 77-401. Grounding device set

Consisting of:

- 3 aluminium conductor clamps
- 3 flexible copper cables with transparent insulation, cross section: 50 mm², length 6 m or 8 m (cross section 95 mm² or other length on request)
- 3 grounding clamps for steel Ø 33 mm
- Insulating fibreglass stick, decomposable, length 4 - 6 m

Insulating fibreglass stick				
Model	For conductor diameter	Fibreglass stick	Copper cable	Dimensioned for voltage up to
77-4010	5 bis 60 mm	3 x 1,5 m	6 m	150 kV
77-4011	5 bis 60 mm	2 x 2,0 m	8 m	220 kV
77-4012	5 bis 60 mm	3 x 1,5 m	6 m	220 kV
77-4014	5 bis 60 mm	3 x 2,0 m	6 m	400 kV



ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com

Model 77-4110 Fall Arrest Harness with positioning function

Extreme soft material of belt; with one attachment eye backside, one in the middle of front side and three at lap belt. Wide backrest, padded leg loop, stepless adjustment of belt with quick adjustable buckles

Certificated according to EN 358 / 361 / 813

Model 77-4162 Twin Lanyard with energy aborber

Webbing belt with steel carabiner at shock absorber and two EH 60 carabiners.

Lenght 120 cm.

Certificated according to EN 355

Model 77-4100 Fall arrest harness

Soft material of belt; with one attachment eye backside and one in the middle of front side. Stepless adjustment of belt with quick adjustable buckles.

Certificated according to EN 361

Model 77-4164 Fall arrester

Guided type, foldable, mountable everywhere on slinging or guidance rope, additional roping function, manually fixable. Integrated shock absorber, incl. carabiner.

Certificated according to EN 353-2 and 341 Class C

Model 77-41.. Core-sheeting safety rope

Core-sheeting safety rope, Ø 12 mm, flexible guidance for guided fall arrester, with carabiner made of aluminium and eye.

Certificated according to EN 353-2 / EN 1891-A

Model	Lenght
77-4150	50 m
77-4151	70 m

Modifications and errors excepted.

F 7

Model 77-41.. Anti-fall unit with fixing material

Steel rope with automatic self rewinding movement. Automatic brake system in case of fall, syntetic cage, swiveling attachment, carabiner on rope, also for horizontal use..

Certificated according to EN 360

Model	Lenght	Weight
77-4170	18,0 m	6,3 kg
77-4172	24,0 m	7,3 kg

Model 77-41.. Positioning Belt

Positioning and restraining function with two fastening eyes sideways, continously abjustable buckle. Padding at the back with 100 mm width.

Certificated according to EN 358

Model	Lenght
77-4120	75 - 100 cm
77-4121	95 - 120 cm
77-4122	115 - 140 cm

Model 77-4125 Connection rope

Rope 14 mm, adjustable with clasp, one side with loop, other side with STAK carabiner.

Certificated according to EN 354

Model 77-4180 Foldable bucket

Diameter 30 cm, height approx. 42 cm, flexible syntetic basement, carrying strap

Model 77-4181 Tool bag

Size 40 x 25 cm, mounting with carabiner with small part pocket and tool fastener outside. Reinforced basement, weather-proof

F 7

ZECK GMBH
Columba-Schonath-Str. 6
D-96110 Schesslitz GERMANY

Tel. +49 / (0) 9542 / 9494 - 0
Fax +49 / (0) 9542 / 9494 - 94
www.zeck-gmbh.com · e-mail: info@zeck-gmbh.com