

## Safety

The Linde Electric Pallet Stacker is equipped with three independent braking systems. A special booster circuit prevents the truck rolling back when starting on a gradient. Automatic speed reduction when cornering ensures stability in operation. The rounded contours of the chassis contribute to safe load handling whilst the long, low mounted tiller ensures that the operator is kept well away from the chassis.

## Performance

A chassis width of only 800 mm allows the truck to work easily in narrow aisles. Advanced chassis design and mast construction results in market leading residual capacity. Linde OptiLift® control provides true proportional lifting and lowering. A rated capacity of 1,600 kg and a powerful 3 kW lift motor ensure superior performance and optimum productivity.

### Comfort

Electric power steering and the ergonomic Linde tiller make the truck very easy to manoeuvre. All controls can be operated with either hand without having to let go of the tiller. Due to the long tiller, the operator stands well back from the mast ensuring excellent visibility of the load right up to maximum lift height.

## Reliability

Linde Material Handling

These rugged trucks incorporate tried and tested technology and components to ensure consistent reliability. They have already proved their ability to deliver faster, safer load handling over an extended working life in the toughest industrial environments. For heavy duty applications, twin castor wheels are available as an option.

Linde

### Service

Linde Pallet Stackers are designed to reduce maintenance costs and deliver the highest levels of productivity over many years. Fast, easy access to all components, electronics sealed in aluminium housings isolating them from road shocks, dust and humidity all play a part in guaranteeing high availability.

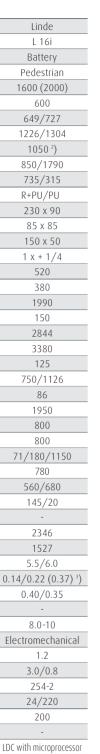
# Technical data

| '                | 1.1  | Manufacturer   |            | Linde                   | Linde                   | Linde                   |
|------------------|------|--|------------|-------------------------|-------------------------|-------------------------|
| '                | 1.2  | Model designation  |            | L 14                    | L 16                    | L 14i                   |
| ,, !             | 1.3  | Power unit: Battery, diesel, gasoline, LP gas, AC                    |            | Battery                 | Battery                 | Battery                 |
| Characteristics  | 1.4  | Operation: manual, pedestrian, rider seat, rider stand, order picker |            | Pedestrian              | Pedestrian              | Pedestrian              |
| teri             | 1.5  | Load capacity  | Q (kg)     | 1400                    | 1600                    | 1400 (2000)             |
| arac             | 1.6  | Load center  | c (mm)     | 600                     | 600                     | 600                     |
| Ë                | 1.8  | Load distance  | x (mm)     | 727                     | 727                     | 649/727                 |
| !                | 1.9  | Wheelbase  | y (mm)     | 1304                    | 1304                    | 1226/1304               |
| ıts              | 2.1  | Service weight   | kg         | 1050 ²)                 | 1050 ²)                 | 1050 ²)                 |
| Weights          | 2.2  | Axle load with load, operator/load side                              | kg         | 850/1600                | 860/1790                | 850/1600                |
| >                | 2.3  | Axle load without load, operator/load side                           | kg         | 735/315                 | 735/315                 | 735/315                 |
| '                | 3.1  | Tyres: operator/load side: Rubber (R), polyurethane (PU)             |            | R+PU/PU                 | R+PU/PU                 | R+PU/PU                 |
| /res             | 3.2  | Tyre size, operator side   | mm         | ø 230 x 90              | 230 x 90                | 230 x 90                |
| ld t)            | 3.3  | Tyre size, load side   | mm         | ø 85 x 85               | 85 x 85                 | 85 x 85                 |
| s an             | 3.4  | Auxiliary wheels, size   | mm         | ø 150 x 50              | 150 x 50                | 150 x 50                |
| Wheels and tyres | 3.5  | Wheels, number operator/load side (x=driven)                         |            | 1 x + 1/2               | 1 x + 1/2               | 1 x + 1/4               |
| ×                | 3.6  | Track width, operator side   | mm         | 520                     | 520                     | 520                     |
| !                | 3.7  | Track width, load side   | mm         | 380                     | 380                     | 380                     |
|                  | 4.2  | Mast height, lowered   | h1 (mm)    | 1990                    | 1990                    | 1990                    |
| '                | 4.3  | Free lift  | h2 (mm)    | 150                     | 150                     | 150                     |
| '                | 4.4  | Lift   | h3 (mm)    | 2924                    | 2844                    | 2924                    |
|                  | 4.5  | Mast height, extended  | h4 (mm)    | 3460                    | 3380                    | 3460                    |
|                  | 4.6  | Initial lift   | h5 (mm)    | -                       | -                       | 125                     |
| '                | 4.9  | Tiller height, travel position, min./max.                            | h14 (mm)   | 750/1126                | 750/1126                | 750/1126                |
| l s              | 4.15 | Fork height, lowered   | h13 (mm)   | 86                      | 86                      | 86                      |
| Measurements     | 4.19 | Overall length   | l1 (mm)    | 1950                    | 1950                    | 1950                    |
| Jren             | 4.20 | Length to fork face  | 12 (mm)    | 800                     | 800                     | 800                     |
| eası             | 4.21 | Overall width  | b1/b2 (mm) | 800                     | 800                     | 800                     |
| Ž                | 4.22 | Fork dimensions  | s/e/l (mm) | 71/180/1150             | 71/180/1150             | 71/180/1150             |
| '                | 4.24 | Fork carriage width  | b3 (mm)    | 780                     | 780                     | 780                     |
| '                | 4.25 | Fork spread  | b5 (mm)    | 560/680                 | 560/680                 | 560/680                 |
| '                | 4.32 | Ground clearance, centre of wheelbase                                | m2 (mm)    | 30                      | 30                      | 145/20                  |
| '                | 4.33 | Aisle width, 1000 x 1200 mm pallet crosswise                         | Ast (mm)   | -                       | -                       | -                       |
| '                | 4.34 | Aisle width, 800 x 1200 mm pallet lengthwise                         | Ast (mm)   | 2346                    | 2346                    | 2346                    |
| '                | 4.35 | Turning radius   | Wa (mm)    | 1527                    | 1527                    | 1527                    |
|                  | 5.1  | Travel speed, with/without load                                      | km/h       | 5.6/6.0                 | 5.5/6.0                 | 5.6/6.0                 |
| e                | 5.2  | Lift speed, with/without load  | m/s        |                         |                         | 0.16/0.25 (0.40) 1)     |
| тапсе            | 5.3  | Lower speed, with/without load                                       | m/s        | 0.45/0.45               | 0.40/0.35               | 0.45/0.45               |
|                  | 5.7  | CLimbing ability, with/without load                                  | m/s        | -                       | -                       | -                       |
| Perfo            | 5.8  | Max. climbing ability, with/without load                             | 0/0        | 9.0-10                  | 8.0-10                  | 9.0-10                  |
| !                | 5.10 | Service brake  |            | Electromechanical       | Electromechanical       | Electromechanical       |
|                  | 6.1  | Drive motor output (60 min. rating)                                  | kW         | 1.2                     | 1.2                     | 1.2                     |
| '                | 6.2  | Lift motor output (15 % rating)                                      | kW         | 3.0                     | 3.0                     | 3.0/0.8                 |
| ا پ              | 6.3  | Battery (IEC)  |            | 254-2                   | 254-2                   | 254-2                   |
| Drive            | 6.4  | Battery voltage  | V/Ah       | 24/220                  | 24/220                  | 24/220                  |
| '                | 6.5  | Battery weight   | kg         | 200                     | 200                     | 200                     |
| !                | 6.6  | Energy consumption, VDI Cycle  | kWh/h      | -                       | -                       | -                       |
| -                | 8.1  | Drive controller   | ,          | LDC with microprocessor | LDC with microprocessor | LDC with microprocessor |
| Other            | 8.4  | Sound level at driver's ear  | dB (A)     | <65                     | <65                     | <65                     |
| -                |      | 300110 1616. 36 3.116. 3 63.   | (,         |                         |                         |                         |

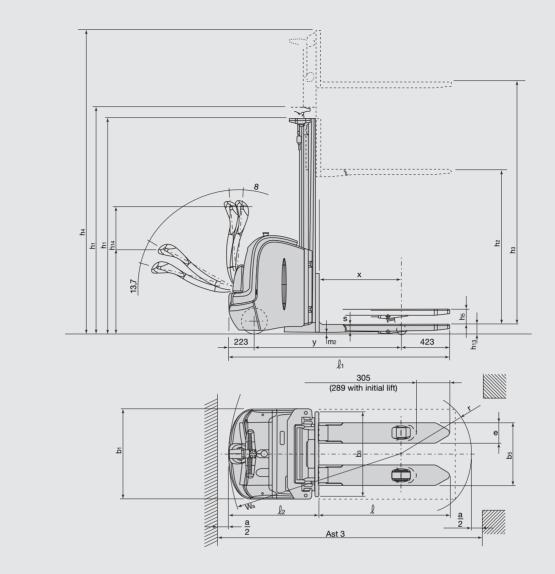
Figures for standard version may vary when optional equipment is fitted.

<sup>1)</sup> Figures in parentheses for optional ultra fast lifting.

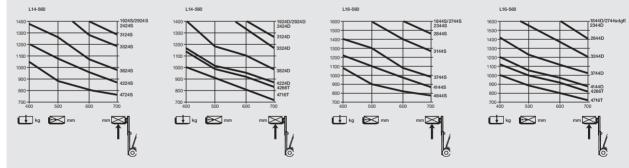
<sup>2)</sup> Including battery weight stated in Line 6.4.



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Turning radius Ast = Wa + r + a (Safety clearance a = 200 mm)



| Mast (in mm)         | L14    | 1924S | 2424S  | 2924S | 3324\$ | 38245 | 42245 | 4724S | 1924D | 2424D | 2924D | 3324D | 3824D | 4224D | 4266T | 47161 |
|----------------------|--------|-------|--------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lift                 | h3     | 1924  | 2424   | 2924  | 3324   | 3824  | 4224  | 4724  | 1924  | 2424  | 2924  | 3324  | 3824  | 4224  | 4266  | 4716  |
| Lift and fork height | h3+h13 | 2010  | 2510   | 3010  | 3410   | 3910  | 4310  | 4810  | 2010  | 2510  | 3010  | 3410  | 3910  | 4310  | 4352  | 4802  |
| Height lowered       | h1     | 1490  | 1740   | 1990  | 2190   | 2440  | 2540  | 2890  | 1415  | 1665  | 1915  | 2115  | 2365  | 2565  | 1915  | 2065  |
| Height extended      | h4     | 2460  | 2960   | 3460  | 3860   | 4360  | 4760  | 5260  | 2460  | 2960  | 3460  | 3860  | 4360  | 4760  | 4802  | 5252  |
| Free lift            | h2     | 150   | 150    | 150   | 150    | 150   | 150   | 150   | 862   | 1212  | 1462  | 1662  | 1912  | 2112  | 1379  | 1529  |
|                      |        |       |        |       |        |       |       |       |       |       |       |       |       |       |       |       |
| Mast (in mm)         | L16    | 1844S | 2344\$ | 2844S | 32445  | 3744S | 4144S | 4644S | 1844D | 2344D | 2844D | 3344D | 3744D | 4144D | 4266T | 47161 |
| Lift                 | h3     | 1844  | 2344   | 2844  | 3244   | 3744  | 4144  | 4644  | 1844  | 2344  | 2844  | 3244  | 3744  | 4144  | 4266  | 4716  |

| Mast (in mm)         | L16    | 18445 | 23445 | 28445 | 32445 | 37445 | 41445 | 4644S | 1844D | 2344D | 2844D | 3344D | 3744D | 4144D | 4266T | 4716T |
|----------------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lift                 | h3     | 1844  | 2344  | 2844  | 3244  | 3744  | 4144  | 4644  | 1844  | 2344  | 2844  | 3244  | 3744  | 4144  | 4266  | 4716  |
| Lift and fork height | h3+h13 | 1930  | 2430  | 2930  | 3330  | 3830  | 4230  | 4730  | 1930  | 2430  | 2930  | 3330  | 3830  | 4230  | 4352  | 4802  |
| Height lowered       | h1     | 1490  | 1740  | 1990  | 2190  | 2440  | 2640  | 2890  | 1415  | 1665  | 1915  | 2115  | 2365  | 2565  | 1915  | 2065  |
| Height extended      | h4     | 2380  | 2880  | 3380  | 3780  | 4280  | 4680  | 5180  | 2380  | 2880  | 3380  | 3780  | 4280  | 4680  | 4760  | 5252  |
| Free lift            | h2     | 150   | 150   | 150   | 150   | 150   | 150   | 150   | 879   | 1129  | 1379  | 1579  | 1829  | 2029  | 1379  | 1529  |

Other masts on request



## Equipment

## Standard equipment

Linde OptiLift®: fully proportional
lifting control on the tiller head
Initial lift with equalizing linkage
(level compensator) on L14i, L16i
Soft lowering of fork carriage
Electric power steering
Linde Digital Control (LDC)
with programmable operating parameters
Automatic speed reduction when cornering

Automatic braking with Linde Brake Control (LBC)
Polycarbonate/mesh mast protection
Cushion rubber drive wheel
Single polyurethane load wheels with string guard
Polyurethane swiveling castor wheel
Vertical battery change (2 & 3 PzS)
Battery charger cable and plug
Protection to -10°C

## Optional equipment

Drive wheels: polyurethane,
wet grip or treaded cushion rubber
Load wheels: tandem polyurethane,
tandem polyurethane greasable
Twin swiveling castor wheels for heavy duty applications
Load backrest (h=1000 mm)
Alternative fork dimensions
Different mast types and lift heights:
standard, duplex, triplex

Ultra fast lifting for loads up to 300 kg
Side battery change (2 & 3 PzS)
Battery changing stand or trolley for side battery change
Built-in charger (vertical battery change,
max. 240Ah capacity)
Cold store version to -35°C

Other options available on request

## **Features**

#### Chassis & Mast

- → Rounded contours, no sharp edges
- → Heavy gauge steel chassis results in superior rigidity and durability
- → Low chassis skirt for operator safety
- → Rigid clearview mast optimizes visibility
- → Wide choice of masts



#### Initial Lift Versions: L14i, L16i

- → Initial lift of load arms increases ground clearance to cope with ramps or dock levellers and bridging plates
- → The equalising linkage provides enhanced stability when turning across uneven surfaces
- → A 2000 kg load can be lifted using the initial lift function



#### Tiller

- → The operator's hands are well protected by the sturdy aluminium quard
- → Low and central tiller mounting position provides maximum manoeuvrability
- → Long tiller ensures operator is well away from the chassis when working
- → All traction and lift functions are integrated into the tiller and can be operated with either hand

#### Power steering

- → Effortless, electric power steering, ensures superior driving comfort
- → Precise and easy manoeuvring thanks to the long tiller
- → Automatic speed reduction when cornering quarantees stability



#### Motor

- → Powerful, smooth-running 1.2kW DC traction motor
- → Adjustable LDC drive controller all parameters can be customized to suit the application
- → No rollback when starting on a gradient
- → Max. traction speed of 6 km/h

#### Automatic braking

- → On releasing the traction butterfly
- → By selecting the opposite direction of travel
- → By moving tiller to fully up or down position

Emergency brake: emergency isolator interrupts all power to the truck and actuates electro-mechanical brake



#### **Batteries & Chargers**

- → 24V batteries from 250 Ah (2PzS) to 375 Ah (3PzS)
- → Vertical battery change as standard (2 & 3 PzS), side change as option
- → Wide range of battery chargers: standard wall-mounted type or high frequency chargers
- → Optional built-in charger for batteries with max. 240 Ah capacity



