## ONSHORE DRILLING RIG



## CATALOGUE 2009

OILMAN RIG CO.,LTD

## OILMAN

## Rig Design <br> Rig Fabricating

The following components are API Specified with API monogram on.

- Mast: API 4F
- Substructure: API 4F
- Drawworks: API 7K
- Mud pump: API 7K
- Hoisting equipments: API 7K, 8A and 8 C
- Rotary table: API 7K
- Rotary hose: API 7K
- Drilling line: API 9A
- Tubular handling tools: API 7K, 8A, and 8C -BOP and accessories: API 16A, 16C, and 16D



## The power control system and electricity system are designed as per

## the following standards:

- API RP 500: Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities

Classified as Class I, Division I and Division 2.

- IEC 60439: Low-voltage switchgear and control gear assemblies
- IEEE: Institute of Electrical and Electronics Engineers.
- IEC 60079: Electrical Apparatus for Explosive Gas Atmospheres.
- NEMA

Rig Build and Assembly

## Painting Procedure

Standard three coat epoxy paint system consisting of:

- Blast to near white metal (SSPC-10)
- zinc rich primer (3 mils D.F.T.)
- epoxy intermediate coat (4 mils D.F.T.)


[^0]
## E1000SCR

## 1000HP SCR Drilling Rig

E1000SCR rig is designed and manufactured as per API Specification with the

## following features:

- Sling-shot or swing up type substructure
- Cantilever (K) type Mast
- DC motor double drum Drawworks
- DC motor driven Mud pumps
- Equipped with Hydraulic Disc braking system.
- Independent DC motor driven Rotary table by universal shaft via gear box.
- Accommodate to VARCO TDS-11A Top Drive.


## The key specifications are:

- Max. input Horse power of Drawworks: 1000 HP
- Drilling Capacity by 4-1/2"DP: 4000 meters
- Max. Hook load: 250 tons ( $500,000 \mathrm{lbs}$ )
- Hosting system: $5 \times 6$ (10 lines)
- Rotary Table: 27 1/2"
- Prime Power: 3 Nos. CAT 3512B GENSETS
- Auxiliary Power: 1 Nos. CAT C-16 GENSETS
- Drilling line: 1-1/4", IWRC + EIPS
- Height of mast: 140 ft (43m)
- Height of Substructure: 30 ft clear from ground up to bottom of Rotary table beam.
- Mud pump: $2 \times 1300 \mathrm{HP}$
- Drilling Instrument: MD/Totco


## E1000VFD

## 1000HP VFD Drilling Rig



E1000VFD rig is designed and manufactured as per API Specification with the

## following features:

- Sling-shot or swing up type substructure
- Cantilever (K) type Mast
- AC motor gear driven single drum Drawworks
- AC motor driven Mud pumps
- Equipped with Hydraulic Disc braking system.
- Independent AC motor driven Rotary table by universal shaft via gear box. - Accommodate to VARCO TDS-11A Top Drive.


## The key specifications are:

- Max. input Horse power of Drawworks: 1000 HP
- Drilling Capacity by 4-1/2"DP: 4000 meters
- Max. Hook load: 250 tons (500,000 lbs)
- Hosting system: $5 \times 6$ (10 lines)
- Rotary Table: 27 1/2"
- Prime Power: 3 Nos. CAT 3512B GENSETS
- Auxiliary Power: 1 Nos. CAT C-16 GENSETS
- Drilling line: 1-1/4", IWRC + EIPS
- Height of mast: $140 \mathrm{ft}(43 \mathrm{~m})$
- Height of Substructure: 30 ft clear from ground
up to bottom of Rotary table beam.
- Mud pump: $2 \times 1300 \mathrm{HP}$
- Drilling Instrument: MD/Totco



## E1500SCR 1500HP SCR Drilling Rig

## E1500SCR rig is designed and manufactured as per API Specification with

 the following features:- Sling-shot or swing up type substructure
- Cantilever (K) type Mast
- DC motor driven double drum Drawworks
- DC motor driven Mud pumps
- Equipped with Hydraulic Disc braking system.
- Independent DC motor driven Rotary table by universal shaft via gear box.
- Accommodate to VARCO TDS-11A Top Drive.

The key specifications are:

- Max. input Horse power of Drawworks: 1500 HP
- Drilling Capacity by 5"DP: 4500 meters
- Drilling Capacity by 4-1/2"DP: 5000 meters
- Max. Hook load: 350 tons ( $700,000 \mathrm{lbs}$ )
- Hosting system: $6 \times 7$ (12 lines)
- Rotary Table: 37 1/2"
- Prime Power: 4 Nos. CAT 3512B GENSETS
- Auxiliary Power: 1 Nos. CAT C-16 GENSETS
- Drilling line: 1-3/8", IWRC + EIPS
- Height of mast: 147 ft
- Height of Substructure: 30 ft clear from ground up to bottom of Rotary table beam.
- Mud pump: $2 \times 1600 \mathrm{HP}$
- Drilling Instrument: MD/Totco


## E1500VFD

## 1500HP VFD Drilling Rig

E1500VFD rig is designed and manufactured as per API Specification with the following features:

- Sling-shot or swing up type substructure
- Cantilever (K) type Mast
- AC motor gear driven single drum Drawworks
- AC motor driven Mud pumps
- Equipped with Hydraulic Disc braking system.
- Independent AC motor driven Rotary table by universal shaft via gear box.
- Accommodate to VARCO TDS-11A Top Drive.


## The key specifications are:

- Max. input Horse power of Drawworks: 1500 HP
- Drilling Capacity by 5"DP: 4500 meters
- Drilling Capacity by 4-1/2"DP: 5000 meters
- Max. Hook load: 350 tons $(700,000 \mathrm{lbs})$
- Hosting system: $6 \times 7$ (12 lines)
- Rotary Table: 37 1/2"
- Prime Power: 4 Nos. CAT 3512B GENSETS
- Auxiliary Power: 1 Nos. CAT C-16 GENSETS
- Drilling line: 1-3/8", IWRC + EIPS
- Height of mast: 147 ft
- Height of Substructure: 30 ft clear from ground up to bottom of Rotary table beam.
- Mud pump: $2 \times 1600$ HP
- Drilling Instrument: MD/Totco



## E1500SCR/VFD 1500HP SCR/VFD Drilling Rig

## E1500SCR/VFD rig is designed and manufactured as per API Specification with the following features:

- Sling-shot or swing up type substructure
- Cantilever (K) type Mast
- AC motor gear driven single drum Drawworks
- DC motor driven Mud pumps
- Equipped with Hydraulic Disc braking system.
- Independent AC motor driven Rotary table by universal shaft via gear box.
- Accommodate to VARCO TDS-11A Top Drive.


## The key specifications are:

- Max. input Horse power of Drawworks: 1500 HP
- Drilling Capacity by 5"DP: 4500 meters
- Drilling Capacity by 4-1/2"DP: 5000 meters
- Max. Hook load: 350 tons ( $700,000 \mathrm{lbs}$ )
- Hosting system: $6 \times 7$ (12 lines)
- Rotary Table: 37 1/2"
- Prime Power: 4 Nos. CAT 3512B GENSETS
- Auxiliary Power: 1 Nos. CAT C-16 GENSETS
- Drilling line: $1-3 / 8^{\prime \prime}$, IWRC + EIPS
- Height of mast: 147 ft
- Height of Substructure: 30 ft clear from ground up to bottom of Rotary table beam.
- Mud pump: $2 \times 1600 \mathrm{HP}$
- Drilling Instrument: MD/Totco



## E2000SCR rig is designed and manufactured as per API Specification with the following features:

- Sling-shot or swing up type substructure
- Cantilever (K) type Mast
- DC motor driven double drum Drawworks
- DC motor driven Mud pumps
- Equipped with Hydraulic Disc braking system.
- Independent DC motor driven Rotary table by universal shaft via gear box.
- Accommodate to VARCO TDS-11A Top Drive.


## The key specifications are:

- Max. input Horse power of Drawworks: 2000 HP
- Drilling Capacity by 5"DP: 6000 meters
- Drilling Capacity by 4-1/2"DP: 7000 meters
- Max. Hook load: 500 tons (1,000,000 lbs)
- Hosting system: $6 \times 7$ (12 lines)
- Rotary Table: 37 1/2"
- Prime Power: 4 Nos. CAT 3516B GENSETS
- Auxiliary Power: 1 Nos. CAT3412 GENSETS
- Drilling line: 1-1/2", IWRC +EIPS
- Height of mast: 157 ft
- Height of Substructure: 30 ft clear from ground up to bottom of Rotary table beam.
- Mud pump: $3 \times 1600 \mathrm{HP}$
- Drilling Instrument: MD/Totco



## E2000VFD

2000HP VFD Drilling Rig

## The key specifications are:

- Max. input Horse power of Drawworks: 2000 HP
- Drilling Capacity by 5"DP: 6000 meters
- Drilling Capacity by 4-1/2"DP: 7000 meters
- Max. Hook load: 500 tons ( $1,000,000 \mathrm{lbs}$ )
- Hosting system: $6 \times 7$ (12 lines)
- Rotary Table: 37 1/2"
- Prime Power: 4 Nos. CAT 3516B GENSETS
- Auxiliary Power: 1 Nos. CAT3412 GENSETS
- Drilling line: $1-1 / 2^{\prime \prime}$. IWRC +EIPS
- Height of mast: 157 ft
- Height of Substructure: 30 ft clear from ground up to bottom of ${ }^{\text {* }}$

Rotary table beam.

- Mud pump: $3 \times 1600 \mathrm{HP}$
- Drilling Instrument: MD/Totco

E2000SCR/VFD rig is designed and manufactured as per API Specification with the following features:

- Sling-shot or swing up type substructure
- Cantilever (K) type Mast
- AC motor gear driven single drum Drawworks
- AC motor driven Mud pumps
- Equipped with Hydraulic Disc braking system.
- Independent AC motor driven Rotary table by universal shaft via gear box.
- Accommodate to VARCO TDS-11A Top Drive.



## E2000SCR/VFD 2000HP SCR/VFD Drilling Rig

E2000SCR/VFD rig is designed and manufactured as per API Specification with the following features:

- Sling-shot or swing up type substructure
- Cantilever (K) type Mast
- AC motor gear driven single drum Drawworks
- DC motor driven Mud pumps
- Equipped with Hydraulic Disc braking system.
- Independent AC motor driven Rotary table by universal shaft via gear box.
- Accommodate to VARCO TDS-11A Top Drive.

The key specifications are:

- Max. input Horse power of Drawworks: 2000 HP
- Drilling Capacity by 5"DP: 6000 meters
- Drilling Capacity by 4-1/2"DP: 7000 meters
- Max. Hook load: 500 tons (1,000,000 Ibs)
- Hosting system: $6 \times 7$ (12 lines)
- Rotary Table: 37 1/2"
- Prime Power: 4 Nos. CAT 3516B GENSETS
- Auxiliary Power: 1 Nos, CAT 3412 GENSETS

- Drilling line: 1-1/2", IWRC +EIPS
- Height of mast: 157 ft
- Height of Substructure: 30 ft clear from ground up to bottom of Rotary table beam.
- Mud pump: $3 \times 1600$ HP
- Drilling Instrument: MD/Totco



## E3000SCR 3000HP SCR Drilling Rig

E3000SCR rig is designed and manufactured as per API Specification with the

## following features:

- Sling-shot or swing up type substructure
- Cantilever (K) type Mast
- DC motor driven double drum Drawworks
- DC motor driven Mud pumps
- Equipped with Hydraulic Disc braking system.

Independent DC motor driven Rotary table by universal shaft via gear box.
Accommodate to VARCO TDS-8SA Top Drive


E3000VFD 3000HP VFD Drilling Rig

## The key specifications are:

- Max. input Horse power of Drawworks: 3000 HP
- Drilling Capacity by 4-1/2"DP: 9000 meters
- Max. Hook load: 650 tons (1,500,000 lbs)
- Hosting system: $7 \times 8$ (14 lines)
- Rotary Table: 37 1/2" (49 1/2")
- Prime Power: 5 Nos. CAT 3516B GENSETS
- Auxiliary Power: 2 Nos. CAT3412 GENSETS
- Drilling line: 1-5/8", IWRC +EIPS
- Height of mast: 157 ft
- Height of Substructure: 35 ft clear from ground up to bottom of Rotary table beam.
-Mud pump: $3 \times 2200 \mathrm{HP}$
- Drilling Instruments: MD/Totco


## E3000VFD rig is designed and manufactured as per API Specification with the following features:

. Sling-shot or swing up type substructure

- Cantilever (K) type Mast
- AC motor single shaft gear driven single drum Drawworks
- AC motor driven Mud pumps
- Equipped with Hydraulic Disc braking system.
- Independent AC motor driven Rotary table by universal shaft via gear box.
- Accommodate to VARCO TDS-8SA Top Drive.


## The key specifications are:

- Max. input Horse power of Drawworks: 3000 HP
- Drilling Capacity by 4-1/2"DP: 9000 meters
- Max. Hook load: 650 tons ( $1,500,000 \mathrm{lbs}$ )
- Hosting system: $7 \times 8$ (14 lines)
- Rotary Table: $371 / 2^{\prime \prime}\left(491 / 2^{\prime \prime}\right)$
- Prime Power: 5 Nos. CAT 3516B GENSETS
- Auxiliary Power: 2 Nos. CAT3412 GENSETS
- Drilling line: 1-5/8", IWRC + EIPS
- Height of mast: 157 ft
- Height of Substructure: 35 ft clear from ground up to bottom of Rotary table beam.
- Mud pump: $3 \times 2200$ HP
- Drilling Instruments: MD/Totco



## E3000SCR/VFD <br> 3000HP SCR/VFD Drilling Rig

## E3000SCR/VFD rig is designed and manufactured as per API Specification with the following features:

- Sling-shot or swing up type substructure
- Cantilever (K) type Mast
- AC motor single shaft gear driven single drum Drawworks
- DC motor driven Mud pumps
- Equipped with Hydraulic Disc braking system.
- Independent AC motor driven Rotary table by universal shaft via gear box.
- Accommodate to VARCO TDS-8SA Top Drive.


## The key specifications are:

- Max. input Horse power of Drawworks: 3000 HP
- Drilling Capacity by 4-1/2"DP: 9000 meters
- Max. Hook load: 650 tons ( $1,500,000 \mathrm{lbs}$ )
- Hosting system: $7 \times 8$ (14 lines)
- Rotary Table: 37 1/2" (49 1/2")
- Prime Power: 5 Nos. CAT 3516B GENSETS
- Auxiliary Power: 2 Nos. CAT3412 GENSETS
- Drilling line: 1-5/8", IWRC +EIPS
- Height of mast: 157 ft
- Height of Substructure: 35 ft clear from ground up to bottom of Rotary table beam.
- Mud pump: $3 \times 2200 \mathrm{HP}$
- Drilling Instruments: MD/Totco



## ELECTRICAL-DRIVE TRAILER-MOUNTED DRILLING RIG

- These drilling rigs are designed and manufactured in accordance with API Spec Q1, $4 \mathrm{~F}, 7 \mathrm{k}, 8 \mathrm{C}$ and RP500, GB3826.1, GB3836.2, GB7258, SY6584 standards as well as " 3 C " compulsory standard.
- These the drilling rigs consist of trailer-mounted main unit, drive system, drill floor, DP slide way, control system and auxiliary system, etc.
- The drawworks and rotary table are driven by DC brushless - excitation motors, and the driving control is realized by digital AC-SCR-DC system.
- The hydraulic disc brake is for main brake and FDWS is for auxiliary brake, The derrick which is front- open type and two - section structure with an inclination angle or erective sections can be raised up or lain down and telescoped.
- The substructure with the height of 5.5 m has a parallelogram integral structure with two sections supported by 6 setbacks, which can be raised spirally.
- The structure is simple, but easy for installation, movement and the transmission is reliable.
- Safety and inspection measures are strengthened under the guidance of the design concept of "Humanism Above All" to meet the requirements of HSE





## TRUCK-MOUNTED DRILLING RIG

- These drilling rigs are designed and manufactured in accordance with API Spec Q1, 4F, 7K, 8C and RP500, GB3826.1, GB3836.2, GB7258, SY6584 standards as well as " 3 C " compulsory standard.
- The whole rig is very compact, which requires a small installation space due to its high integration. The heavy-duty and self-propelled chassis: $8 \times 6$, $10 \times 8,12 \times 8,14 \times 8,14 \times 12,16 \times 12$ and hydraulic steering system is utilized respectively, which ensures the drilling good accessibility and cross-country capability
- The reasonable assembly of the CATERPILLAR engine and the ALLISON transmission box can ensure high driving efficiency and working reliability.
- The main brake adopts disc brake or band brake and air brake or water brake or FDWS brake can be applied as auxiliary brake.
- The rotary table transmission box provides forward-reverse shift, which can be suitable for all of kinds of DP rotary operations, and the anti-torque releasing device can be used to make the DP deformation force release safely.
- The mast, which is front - open and double-section type with an inclination angle is an erective double-section type, can be raised up or laid down and telescoped hydraulically.
- The drill floor is twin-body telescopic type or with parallelogram structure, which is convenient for easy hoist and transportation. The height of the drill floor can be designed in accordance with the client's requirements.
- The perfect configurations of the solid control system, well control system, hi-pressure pipe manifold system, generator house, engine pump house, doghouse and other auxiliary facilities can meet user's different requirements.
- Safety and inspection measures are strengthened under the guidance of the design concept of "Humanism Above All" to meet the requirements of HSE.




## THE MAIN TECHNICAL PERFORMANCES AND PARAMETERS FOR TRUCK -MOUNTED DRILLING RIGS





## RIG MOVING SYSTEM

Mast assembly moving system

| Description | Parameter |
| :---: | :---: |
| Total weight of Mast | 130 t |
| Capability of moving | 140 t |
| Max moving speed | $5 \mathrm{~km} / \mathrm{h}$ |
| Type of tyre | Desert 36.00-51 |
| Qty. of tyres | 2 |
| Min clearance from ground | 1200 mm |
| Overall moving dimension | $57 \times 12.4 \times 5.6(\mathrm{~m})$ |
| Type of traction pin | $31 / 2$ |
| Required road width | 9 m |
| Operating temperature range | $-17 \sim 55^{\circ} \mathrm{C}$ |
| Operating road surface | Hard surface in desert |

Substructure assembly moving system



## TRAVELLING BLOCK

## FEATURES

- The wire line is kept taut when hoisting or lowering down the unload Block.

The Sheave grooves are hardened by medium frequency induction to provide extended services life.
Equipped with double-row conical roller bearings and each bearing are individually lubricated.
The sheaves and bearing are interchangeable with those of corresponding crown block
The traveling blocks conform to API Specification 8A and API monogram will be marked.


| Model | YC135 | YC170 | YC225 | YC315 | YC450 | YC585 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Max. Hook load (ton) | 135 | 170 | 225 | 315 | 450 | 585 |
| OD of Sheaves (in) | 36 | 36 | 44 | 50 | 60 | 60 |
| No of Sheaves | 4 | 5 | 5 | 6 | 6 | 7 |
| Size of wire rope (in) | 1 | $11 / 8$ | $11 / 4$ | $13 / 8$ | $11 / 2$ | $15 / 8$ |

## HOOK

## FEATURES

E Equipped with a hydraulic snubber assembly to protect tools joints when making up /breaking out connection.
E Equipped with the reliable safety devices on the hook.

- The high stress parts of every hook are subjected to non-destructive testing.

The hooks confirm to API specifications 8A and API monogram will be marked.


| Model | DG135 | DG170. | DG225 | DC315 | DC450 | DG585 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Max.Hook Load (ton) | 135 | 170 | 225 | 315 | 450 | 585 |
| Major Hook opening (mm) | 165 | 180 | 190 | 220 | 220 | 238 |
| Spring travel (mm) | 180 | 180 | 180 | 200 | 200 | 200 |
| Width Overall (mm) | 720 | 750 | 780 | 890 | 890 | 930 |
| Length (mm) | 2200 | 2450 | 2548 | 2960 | 2960 | 3156 |
| Weight (kg) | 1910 | 2020 | 2180 | 3410 | 3496 | 3900 |

## BLOCK HOOK UNIT



| Model | YG90 | YG135 | Ye170 | YC225 | YG450 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Miax．Hook Load（ton） | 90 | 135 | 170 | 225 | 450 |
| OD of Sheave（in） | 30 | 36 | 36 | 44 | 60 |
| No of Sheave | 4 | 4 | 5 | 5 | 6 |
| Size of Wire Rope（in） | 1 | 1 | $11 / 8$ | $11 / 4$ | $11 / 2$ |
| Major Hook opening（mm） | 155 | 165 | 180 | 190 | 220 |
| Major tbok Dia（mm） | 116 | 140 | 150 |  | 180 |
| Associate Hook Dia（mm） | 80 | 90 | 90 |  | 120 |
| Spring Travel（mm） |  | 170 | 140 | 180 |  |

## SWIVEL

## FEATURES

The standard bails and alloy steel sub with double pin ends．
圖 The wash pipe and packing assembly are cartridge type and can be replaced on the floor without disconnecting the rotary hose and／or gooseneck．
回 The gooseneck is provided with an outlet for wire line logging．
－Offer $4^{\prime \prime}$ hose connector conforms to API spec．
国 Swivels conform to API Spec 8A and are granted to use API monogram


| Mode | SW135 | SW170 | SW225 | SW450 | SW685 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Max．Static Load rating（ton） | 135 | 170 | 225 | 450 | 585 |
| Max．Rotating Speed（\％pm） | 300 | 300 | 300 | 300 | 300 |
| Max．Working Pressure（PSI） | 5000 | 5000 | 5000 | 5000 | 5000 |
| Hook Clearance over Cooseneck（in） | $191 / 2$ |  | $211 / 4$ | 21 19／32 | 23 |
| Stem（inch） | 21／2 | 21／2 | 3 | 3 | 3 |
| Cooseneck Thread Reg | 41／2＂Reg．LH | $41 / 2^{\prime \prime}$ Reg．LH | 65／8＇Reg．LH | 75／8＂Reg．＂LH | 75／8 Reg．LH |
| Stem Thread（lower end） | 65／8＂Reg．LH | $65 / 8^{\prime \prime}$ Reg．LH | $65 / 8^{\prime \prime} \mathrm{Reg}$ ．LH | $65 / 8^{\prime \prime} \mathrm{Reg} \mathrm{LH}$ | $65 / 8^{\prime \prime} \mathrm{Reg} \mathrm{L}$ |

## ROTARY TABLE

## FEATURES

Both C. Emsco and National Oilwell designs are available.
The pinion and gear are made of alloy steel.
The extension and its keyway of the pinion shaft all meet API Spec.
㩖 The master bushing is made of steel casting with API Standard square Kelly or Hexagonal Kelly as per Varco designs.

- Mechanical and electrical independent table drives can be furnished.


| Model | RT175 | RT205 | RT275 | RT375 | RT495 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Equivalent | T-1750-44 | T-2050 | 1-2750 | T-3750 | T-4950 |
| Max, Opening (in) | 17.5 | 20.5 | 27.5 | 37.5 | 49.5 |
| Distance from tableaxis to center inner row of sprocket teeth (in) | 44 | 53.25 | 53.25 | 53.25 | 65 |
| Max. Working Torque (bit) | 10,132 | 16,646 | 20,265 | 23,883 | 26,778 |
| Max. Speed (RPM) | 300 | 300 | 300 | 300 | 300 |
| Gear Ratio | 3.58 | 3.22 | 3.67 | 3.56 | 3.93 |

## F SERIES MUD PUMPS

图 F Series Triplex Single Acting Mud pumps are machined under C. Emsco designs with all fluid end parts interchangeable to those for C. Emsco OEM pump.


| Model | Max. Line Size $\times$ Stroke (in) |
| :---: | :---: |
| F-500 | $63 / 4 \times 71 / 2$ |
| F-800 | $63 / 4 \times 9$ |
| F-1000 | $63 / 4 \times 10$ |
| FB-1300 | $7 \times 12$ |
| FB-1600 | $7 \times 12$ |
| F-1600HL | $71 / 2 \times 12$ |
| F-2200 | $9 \times 14$ |
| F-2200HL | $9 \times 14$ |


| Strokes rating |
| :---: |
| $($ SPM $)$ |
| 165 |
| 150 |
| 140 |
| 120 |
| 120 |
| 120 |
| 105 |
| 105 |


| Power Rating |
| :---: |
| $(\mathrm{HP})$ |
| 500 |
| 800 |
| 1000 |
| 1300 |
| 1600 |
| 1600 |
| 2200 |
| 2200 |


| Discharge outlet |
| :---: |
| (inch) |
| $4^{\prime \prime} \mathrm{F}, 5 \mathrm{M}$ |
| $5^{\prime \prime} \mathrm{F}, 5 \mathrm{M}$ |
| $5^{\prime \prime} \mathrm{F}, 5 \mathrm{M}$ |
| $5^{\prime \prime} \mathrm{F}, 5 \mathrm{M}$ |
| $5^{\prime \prime} \mathrm{F}, 5 \mathrm{M}$ |
| $5^{\prime \prime} \mathrm{F}, 5 \mathrm{M}$ |
| $5^{n} \mathrm{~F}, 5 \mathrm{M}$ |
| $5^{\prime \prime} \mathrm{F}, 5 \mathrm{M}$ |


| Valve Pot, API |
| :---: |
| $\#$ |
| 5 |
| 6 |
| 6 |
| 7 |
| 7 |
| 7 |
| 8 |
| 8 |

## PZ SERIES PUMP

PZ series Pump is machined assembly and tested under Gardner Denver designs with all fluid end parts interchangeable.


| Model | ax liner size \& Stroke(in) | Displacement (GPM) | Max. RPM | Power Rating (HP) | Gear Ratio | Weight(l) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PAH275 | $5 \times 8$ | 357 | 175 | 275 | 4.7:1 | 9810 |
| P27 | $7 \times 7$ | 507 | 145 | 550 | 4.625:1 | 16,765 |
| P2.9 | $7 \times 9$ | 585 | 130 | 1000 | 4.48:1 | 24,368 |
| PZ-11 | $7 \times 11$ | 632 | 115 | 1600 | $4.38: 1$ | 37,000 |

## SCR/MCC

## Well Site Electrical



## 




[^0]:    - urethane top coat (2 mils D.F.T.) in customer's color

