

# Product Specifications For MD6200



## Pull-Down/Hoisting Capacity

|                    |                                   |
|--------------------|-----------------------------------|
| Pull-Down Capacity | Up to 15 876 kg (Up to 35,000 lb) |
|--------------------|-----------------------------------|

## Specifications

|               |                          |
|---------------|--------------------------|
| Hole Diameter | 140-200 mm (5.5-7.87 in) |
|---------------|--------------------------|

|        |          |
|--------|----------|
| Engine | Cat® C18 |
|--------|----------|

|          |                             |
|----------|-----------------------------|
| Bit Load | Up to 16 964 kg (37,400 lb) |
|----------|-----------------------------|

## Basic Specs

|                                     |                 |
|-------------------------------------|-----------------|
| U.S. EPA Tier 2 Equivalent - Engine | C18 @ 1,800 rpm |
|-------------------------------------|-----------------|

|  |                            |
|--|----------------------------|
| U.S. EPA Tier 2 Equivalent - Emissions | U.S. EPA Tier 2 equivalent |
|--|----------------------------|

|                                |                 |
|--------------------------------|-----------------|
| U.S. EPA Tier 4 Final - Engine | C18 @ 1,800 rpm |
|--------------------------------|-----------------|

|                                   |                       |
|-----------------------------------|-----------------------|
| U.S. EPA Tier 4 Final - Emissions | U.S. EPA Tier 4 Final |
|-----------------------------------|-----------------------|

|                              |  |
|------------------------------|--|
| Compressor - Rotary Drilling | 32.6 cmm (1,150 cfm) @ 8.6 bar (125 psi) |
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|--------------------------|--|
| Angle Drilling Available | 30 degrees to 0 degrees in 5-degree increments |
|--------------------------|--|

|                        |          |
|------------------------|----------|
| Bit Load (single-Pass) | 37400 lb |
|------------------------|----------|

|             |          |
|-------------|----------|
| Hoist Speed | 4.3 ft/s |
|-------------|----------|

|                     |                          |
|---------------------|--------------------------|
| Hole Diameter Range | 140-200 mm (5.5-7.87 in) |
|---------------------|--------------------------|

|                                      |       |
|--------------------------------------|-------|
| Hole Depth Range - Single-Pass Depth | 36 ft |
|--------------------------------------|-------|

|                           |  |
|---------------------------|--|
| Compressor - DTH Drilling | 29.7 m <sub>3</sub> /min (1,050 ft <sub>3</sub> /min) @ 24.1 bar (350 psi) |
|---------------------------|--|

|  |                                   |
|--|-----------------------------------|
| <b>Pull-Down Capacity</b>                                    | Up to 15 876 kg (Up to 35,000 lb) |
| <b>Hoist Capacity</b>  | Up to 11 907 kg (Up to 26,250 lb) |
| <b>Hole Depth Range - Multi-Pass Depth</b>                   | Down to 47.58 m (Down to 156 ft)  |
| <b>U.S. EPA Tier 4 Final - Power Rating (ISO 14396)</b>      | 589 hp                            |
| <b>U.S. EPA Tier 2 Equivalent - Power Rating (ISO 14396)</b> | 587 hp                            |

## Compressor Choices

|   |   |
|---|---|
| <b>DTH Drilling</b>                       | Includes tool lubrication system  |
| <b>Rotary Drilling</b>                    | Optional tool lubrication system  |
| <b>Note</b>                               | With the compressor's electronic controls plus variable volume control, the operator can adjust air output to reach optimal match of tool, flushing air and ground conditions. Both high and low pressure compressors contain this feature. |
| <b>DTH Drilling - 1050 cfm/350 psi</b>    | 29.7 cmm (1,050 cfm) @ 24.1 bar (350 psi) with 113.5 L (30 gal) tool oiler  |
| <b>Rotary Drilling - 1150 cfm/125 psi</b> | 32.6 cmm (1,150 cfm) @ 8.6 bar (125 psi)  |

## Receiver Tank Choices

|                   |                                  |
|-------------------|----------------------------------|
| <b>Choice (1)</b> | Low pressure 8.6 bar (125 psi)   |
| <b>Choice (2)</b> | High pressure 24.1 bar (350 psi) |

## Cooling

|                       |   |
|-----------------------|---|
| <b>Components (1)</b> | Coolers with easy cleaning access                         |
| <b>Components (2)</b> | All cooler core sections are replaceable                  |
| <b>Components (3)</b> | Functional in ambient temperature of up to 52❖ C (125❖ F) |

**Components (4)**

Automatic variable speed fan control

## Climate Choices

**Climate Level 1 Standard Fluids and Lubricants (1)**

Rated down to -1C (30 F)

**Climate Level 1 Standard Fluids and Lubricants (2)**

Withstands high heat up to 52 C (125 F)

**Climate Level 2 Arctic Fluids and Lubricants, Engine Block and Manifold Heater 120V or 240V**

Rated down to -18 C (0 F)

## Frame And Work Deck

**Features (1)**

Jacks, mast pivot and deck are welded integrally to mainframe for maximum durability and long life

**Features (2)**

Slip resistant surfaces

**Features (3)**

Fuel tank capacity 833 L (220 gal)

**Components (1)**

Three leveling jacks provide leveling on a 7♦ bench (any orientation)

**Components (2)**

Heavy duty tow hooks (non-drill end)

**Components (3)**

Four (4) lift lugs, for use with cables or chains

## Frame Access Choices

**Choice (1)**

Fixed access steps to the cab area

**Choice (2)**

Small platform to the cab includes fixed access steps

**Choice (3)**

Platform access to the cab with full length service access walkway includes fixed access steps and self-closing gates

## Drill Deck Misc.

**Components (1)**

Drill pipe thread greaser with remote fill tank that also accommodates disposable grease bucket

## Undercarriage

|                            |   |
|----------------------------|---|
| <b>Model</b>               | Cat® 336 Excavator type                               |
| <b>Carrier Rollers</b>     | Three (3)   |
| <b>Triple Grousers (1)</b> | 600 mm (23.6 in); 0.89 bar (12.6 psi) ground pressure |
| <b>Drawbar Pull</b>        | 262 000 Nm (193,241 lbf-ft)                           |
| <b>Components (1)</b>      | Track chain guards and guides                         |
| <b>Lower rollers</b>       | Eight (8)   |
| <b>Travel Speed - High</b> | 2 mile/h  |
| <b>Travel Speed - Low</b>  | 1.3 mile/h  |

## Hydraulics

|                       |  |
|-----------------------|--|
| <b>Components (1)</b> | Two (2) main pumps: 85 cc (piston with proportional electronic controls) |
| <b>Components (2)</b> | One (1) auxiliary circuit pump: 45 cc (piston, load sensing)             |
| <b>Components (3)</b> | One (1) fan pump: 45 cc (piston with proportional electronic controls)   |
| <b>Components (4)</b> | One (1) charge pump: 73.8 cc (gear, fixed displacement)                  |
| <b>Components (5)</b> | Scheduled Oil Sampling (S-O-S SM) ports                                  |

## Dust Control Choices

|   |   |
|---|---|
| <b>High Volume Water Injection - Maximum<br/>- Tank Above Deck - Capacity</b> | 200 gal (US)  |
| <b>Water Injection - Tank Mounted Below<br/>Front Deck - Components</b>       | Water flow meter, volume control, tank fill level indicator |
| <b>High Volume Water Injection - Maximum<br/>- Tank Below Deck - Capacity</b> | 200 gal (US)  |

|   |  |
|---|--|
| <b>Water Injection - Tank Mounted Below Front Deck</b>              | 200 gal (US)   |
| <b>High Volume Water Injection - Maximum - Tanks Total Capacity</b> | 400 gal (US)   |
| <b>Water Injection plus Dust Collector (1)</b>                      | 76.5 cmm (2,700 cfm) dust collector; includes standard water injection   |
| <b>Water Injection plus Dust Collector (2)</b>                      | Self-cleaning filters, dust chute clean-out door   |
| <b>Choices (1)</b>  | Static dust curtains, four sides boxed enclosed  |
| <b>Choices (2)</b>  | Dust curtain hydraulic lifters raise front and rear dust curtains (option) (recommended with dry dust collector) |
| <b>Choices (3)</b>  | Tram off spray system (option)   |

## Mast Packages

|  |                                   |
|--|-----------------------------------|
| <b>Single-Pass Depth</b>                                       | 36 ft                             |
| <b>Multi-Pass Depth</b>  | Down to 47.58 m (Down to 156 ft)  |
| <b>Pulldown - Rated Single Cylinder Pull-Down/Hoist System</b> | Up to 15 876 kg (Up to 35,000 lb) |
| <b>Hoist</b>   | Up to 11 907 kg (Up to 26,250 lb) |

## Engine Features

|                    |  |
|--------------------|--|
| <b>Feature (3)</b> | Tier 4 Final package complete with DEF/Engine Shutdown Control Package |
| <b>Feature (1)</b> | Dual starter motors  |
| <b>Feature (2)</b> | Ether starting aid   |

## Tool Package DTH

|                       |         |
|-----------------------|---------|
| <b>Components (8)</b> | Top sub |
|-----------------------|---------|

|                       |  |
|-----------------------|--|
| <b>Components (7)</b> | Drill tool lubricator is included with selection of DTH Compressor |
| <b>Components (1)</b> | Two-piece bushing  |
| <b>Components (2)</b> | Pipe positioner clamps   |
| <b>Components (3)</b> | Deck wrench  |
| <b>Components (4)</b> | Shock sub  |
| <b>Components (5)</b> | Cross over subs  |
| <b>Components (6)</b> | Pipe wiper seal  |

## Dimensions (Approximate)

|                          |          |
|--------------------------|----------|
| <b>Width cab end*</b>    | 13.7 ft  |
| <b>Width non-cab end</b> | 11.7 ft  |
| <b>Height mast up</b>    | 54.3 ft  |
| <b>Body Length</b>       | 31 ft    |
| <b>Length mast down</b>  | 57.5 ft  |
| <b>Height mast down</b>  | 11.75 ft |
| <b>Mast only length</b>  | 52.1 ft  |

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| <b>Note</b> | *Contact the factory for width with platform access to cab or service platform walkway. |
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## Drill Pipe

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|---|--------|
| <b>9.14 m (30 ft) pipes - Accepts quantity of four (4) - Option 5</b> | 6 in   |
| <b>9.14 m (30 ft) pipes - Accepts quantity of four (4) - Option 4</b> | 5.5 in |

## Tool Package Rotary

|                |                                  |
|----------------|----------------------------------|
| Components (7) | Drill tool lubricator (optional) |
| Components (1) | One-piece roller deck bushing    |
| Components (2) | Pipe positioner clamps           |
| Components (3) | Deck wrench                      |
| Components (4) | Bit sub                          |
| Components (5) | Top sub                          |
| Components (6) | Pipe wiper seal                  |

## Mast And Pipe Carousel Features

|               |   |
|---------------|---|
| Features (1)  | Pipe carousel:<br>Accepts quantity of four (4) 9.14 m (30 ft) pipes   |
| Features (2)  | Standard angle drilling package (0 to 30 degrees, in 5-degree increments)                                     |
| Features (4)  | Hydraulically actuated, self-indexing pipe carousel accepts pipe diameters up to 152 mm (6 in)                |
| Features (5)  | Drills strings configured for bit changes above deck  |
| Features (6)  | Single cylinder pulldown/hoist system   |
| Features (7)  | Sliding deck wrench assembly  |
| Features (8)  | Configured with roller deck bushing (for low pressure/tricone drilling)                                       |
| Features (9)  | Two-piece deck bushing (for high pressure DTH drilling)   |
| Features (10) | Overhead winch with cable and hook plus remote control; variable speed drive with a 1361 kg (3,000 lb) rating |

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|----------------------|---|
| <b>Features (11)</b> | Variable grip hydraulic break out wrench grip range 101-152 mm (4.0-6 in)                         |
| <b>Features (12)</b> | Closed circuit camera mounted in mast to view pipe carousel/top drive operation                   |
| <b>Features (13)</b> | Pipe positioner for angle drilling, multi-pass pipe handling                                      |
| <b>Features (14)</b> | Manual pipe catcher: One (1) wire rope, pipe catcher, pipe positioner, optional manual bit basket |

## Rotary Head Top Drive System

|                              |                                       |
|------------------------------|---------------------------------------|
| <b>Torque - Single Motor</b> | 6166 lb/ft                            |
| <b>Rotation Speed</b>        | 0-150 rpm                             |
| <b>Components (1)</b>        | Rotary torque control                 |
| <b>Components (2)</b>        | Virtual rotary head travel interlocks |
| <b>Components (3)</b>        | Virtual rotary head travel interlocks |

## Operator Environment

|                     |   |
|---------------------|---|
| <b>Cab Design</b>   | <p>Falling Object Protective Structure (FOPS) certified cab includes:</p> <ul style="list-style-type: none"> <li>- Rubber shock-mounts to absorb mechanical vibration</li> <li>- Operator station design that integrates an ergonomic seat, joystick controls with full instrumentation, dual 254 mm (10 in) high-definition color screens and 12 volt power port</li> <li>- Additional display screen for cc cameras; color, high-definition 254 mm (10 in)</li> <li>- Power convertor 24V to 12V</li> <li>- Radio-ready for communication and entertainment stereo</li> <li>- Two swing out doors and Cat keyed locks</li> <li>- Literature holder</li> <li>- Storage area suitable for lunchbox</li> </ul> |
| <b>Cab Packages</b> | <p><b>Standard configuration</b> includes a fabric seat, removable floor mat, single pane window glass and driller window guard</p> <p><b>Premium configuration</b> includes a leather seat with heat and ventilation, heavy duty suspension, dual pane window glass and driller window guard.</p>  |



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| <b>Seating</b> | <ul style="list-style-type: none"><li>- Swivel seat is fully ergonomic, with tilt (5° adjustment), lumbar support, and fore/aft seat adjustment 80 mm (3.1 in)</li><li>- Seat locks and has two point retractable, 76 mm (3 in) seat belt</li></ul> |
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| <b>Windows</b> | <ul style="list-style-type: none"><li>- Large windows on the front, rear and right cab side; full length drill window with guard</li><li>- Window shades (option)</li><li>- Windshield wiper with a common washer tank</li><li>- Manometer Pressure Gauge (option)</li></ul> |
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| <b>Lighting</b> | <ul style="list-style-type: none"><li>- LED interior lights, backlit joysticks and keypads</li><li>- Flood lights for the drill perimeter; area spotlights</li><li>- Mast beacon and tram flashing strobe light (option)</li></ul> |
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|-------------|---|
| <b>HVAC</b> | <ul style="list-style-type: none"><li>- Floor heating vent</li><li>- Filter access from deck, 500 hour service interval</li><li>- Defogging HVAC vents on main window</li></ul> |
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|----------------|--|
| <b>Cameras</b> | <ul style="list-style-type: none"><li>- Three (3) CC cameras (front, right and left sides) provide 360° visibility from operators seat; camera on the mast to view pipe carousel/top drive operation</li></ul> |
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## Operating System Controls - Standard

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|-----------------------|---|
| <b>Components (1)</b> | Electric controls for drilling, tramming, leveling plus auxiliary functions |
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|-----------------------|-----------------------|
| <b>Components (2)</b> | Rotary torque control |
|-----------------------|-----------------------|

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|-----------------------|----------------------------------|
| <b>Components (3)</b> | Virtual rotary head travel stops |
|-----------------------|----------------------------------|

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|-----------------------|--|
| <b>Components (4)</b> | Pipe positioner engaged/disengaged indicator |
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|-----------------------|-------------------|
| <b>Components (5)</b> | Drill depth meter |
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| <b>Components (6)</b> | Drill performance and display system |
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| <b>Components (7)</b> | Delayed engine shut down |
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| <b>Components (8)</b> | Filter indicators for hydraulic, fuel, compressor and engine |
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| <b>Components (9)</b> | Jack pressure sensors |
|-----------------------|-----------------------|

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| <b>Components (10)</b> | Data logging of machine health with warnings and fault code records with export capability |
| <b>Components (11)</b> | Dust suppression control   |
| <b>Components (12)</b> | Mast lock indicator  |
| <b>Components (13)</b> | ECM proportional fan speed control system  |
| <b>Components (14)</b> | Tram interlock, machine stability limits   |
| <b>Components (15)</b> | Tram interlock, pipe in hole   |
| <b>Components (16)</b> | Tram interlock, mast up and locked or down and parked                                      |
| <b>Components (17)</b> | Tram interlock, jacks retracted  |
| <b>Components (18)</b> | Tram interlock, winch parked   |
| <b>Components (19)</b> | Cab environment controls (AC, heat, fan speeds)  |
| <b>Components (20)</b> | Pre wired for Terrain and Autonomous Operation   |

## Automation And Technology

|                       |                   |
|-----------------------|-------------------|
| <b>Type (1)</b>       | Autonomous ready  |
| <b>Components (1)</b> | Drill depth meter |

|                       |   |
|-----------------------|---|
| <b>Components (2)</b> | Drill Assist Automated Functionality (onboard technology): <ul style="list-style-type: none"> <li>- Auto Level (with auto retract jacks)</li> <li>- Auto Mast (raise, lower and lock into place)</li> <li>- Auto Drill (single pass)</li> </ul> |
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|                       |                   |
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| <b>Components (3)</b> | Cat Terrain ready |
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|                       |                     |
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| <b>Components (4)</b> | Product Link™ Elite |
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## Safety And Security

|                    |  |
|--------------------|--|
| <b>Feature (1)</b> | Approach angle of 15-degrees facilitates loading and unloading on a lowboy |
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|                       |                                  |
|-----------------------|----------------------------------|
| <b>Components (1)</b> | Seven (7) emergency stop buttons |
|-----------------------|----------------------------------|

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|-----------------------|--|
| <b>Components (2)</b> | Hinged window guard over the full length of the front drill window |
|-----------------------|--|

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| <b>Components (3)</b> | Conditional safety interlocks |
|-----------------------|-------------------------------|

|                       |                    |
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| <b>Components (4)</b> | Self-closing gates |
|-----------------------|--------------------|

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|-----------------------|---|
| <b>Components (5)</b> | Electric horn activated by push button in the cab |
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|-----------------------|-------------------------------|
| <b>Components (6)</b> | Automatic, audible tram alarm |
|-----------------------|-------------------------------|

|                       |   |
|-----------------------|---|
| <b>Components (7)</b> | Battery disconnect and starter switches can be locked out |
|-----------------------|---|

|                       |                            |
|-----------------------|----------------------------|
| <b>Components (8)</b> | Air hose retention devices |
|-----------------------|----------------------------|

|                       |                                  |
|-----------------------|----------------------------------|
| <b>Components (9)</b> | Slip resistant platform surfaces |
|-----------------------|----------------------------------|

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|------------------------|----------------------------|
| <b>Components (10)</b> | Machine lifting provisions |
|------------------------|----------------------------|

|                        |                             |
|------------------------|-----------------------------|
| <b>Components (11)</b> | FOPS Certified Operator Cab |
|------------------------|-----------------------------|

## Service Packages

|                    |   |
|--------------------|---|
| <b>Package (1)</b> | Basic Package: Centralized manual lubrication for all pivot points, gravity fill for fuel and water |
|--------------------|---|

|                    |   |
|--------------------|---|
| <b>Package (2)</b> | Standard Package: Automated lubrication system, fast fill for fuel and water (option) |
|--------------------|---|

|                    |  |
|--------------------|--|
| <b>Package (3)</b> | Premium Package: Automated lubrication system, fast fill fuel and water, service center for lubricant drain and fill plus blowdown hose (option) |
|--------------------|--|

## Weights

|                             |  |
|-----------------------------|--|
| <b>Working Weight Range</b> | 40 823 - 45 359 kg (90,000 - 100,000 lb) |
|-----------------------------|--|

## MD6200 Standard Equipment

### FRAME ACCESS

Fixed access steps to cab area

Small platform to the cab includes access steps

Platform access to the cab with full-length service access walkway includes access steps (option) and self-closing gates

### UNDERCARRIAGE

Cat 336 Excator type

Track chain guards and guides

### ENGINE

Cat C18 (Tier 4 final/EU Stage V)

Cat C18 (U.S. EPA Tier 2 Equivalent)

## MD6200 Optional Equipment

### MAST

Overhead winch assembly with cable and hook, plus remote control; variable speed drive with a 1361 kg (3,000 lb) rating

Tool lubrication system for Rotary Drilling with 113.5 L (30 gal) capacity

Pipe thread greaser with reloadable tank or disposable grease bucket

Manual bit basket

### SERVICE TOOLS

Bushing retention tool – 89 to 152 mm (3.5 to 6.0 in) wrench flats

Lifting bails (available on request; required for commissioning)

API thread 89 mm (3.5 in)

API thread 114 mm (4.5 in)

BECO thread 76 mm (3.0 in)

BECO thread 89 mm (3.5 in)

BECO thread 101 mm (4.0 in)

BECO thread 114 mm (4.5 in)

## **OPERATOR ENVIRONMENT**

Cab pressure gauge

Window shades

Drill assist; single pass auto drill

## **TECHNOLOGY PRODUCTS**

Product Link Elite; satellite, cellular or dual

Terrain guidance system hardware

## **DUST SUPPRESSION**

Dust curtains, four sides boxed in, with hydraulic lifters to raise front and rear dust curtains (recommended with dry dust collector)

Tram off spray system

## **DRILL BITS, ROTARY TRICONE**

Recommended for rotary applications

All bits have standard nozzles

Obtain S/M/H codes from the Rock Formation to Bit Conversion table <https://catpublications.com> search for PEXQ1027

Ship out plans for each drill configuration allow for one pallet of bits. Additional pallets may require an additional truck.

- 171 mm (6.75 in), Option 1, (S2)
- 171 mm (6.75 in), Option 2, (M1)
- 171 mm (6.75 in), Option 3, (M3)
- 200 mm (7.875 in), Option 1, (S2)
- 200 mm (7.875 in), Option 2, (M1)
- 200 mm (7.875 in), Option 2, (M3)

## **DRILL PIPE**

9.14 m (30 ft) pipes – Accepts quantity of four (4)

- 101 mm (4 in) pipe (2.875 in API Reg Threads)
- 114 mm (4.5 in) pipe (3 in BECO Threads)
- 127 mm (5 in) pipe (3.5 in BECO Threads)
- 140 mm (5.5 in) pipe (4 in BECO Threads)
- 152 mm (6 in) pipe (4.5 in BECO Threads)