



# Cat<sup>®</sup> MD6750

## Rotary Blasthole Drill

### Specifications

#### Mainframe Components

##### Air Compressor

|   |          |
|---|----------|
| 101.9 m <sup>3</sup> /min (3600 icfm) free air and 2 552 kPa (80 psi) | Standard |
|---|----------|

##### Leveling Jacks (4)

|                           |   |
|---------------------------|---|
| Automatic Leveling System | Standard                                    |
| Jack Size                 | 229 mm (9 in) dia x 1 676 mm (66 in) stroke |
| Jack Pad Diameter         | 1 118 mm (44 in)                            |
| Machine Lift - Rear       | 1 143 mm (45 in)                            |
| Machine Lift - Front      | 1 016 mm (40 in)                            |
| Operating Leveling Grade  | to 19%                                      |

##### Lubrication

|                                      |          |
|--------------------------------------|----------|
| Automatic Single Line PLC Controlled | Standard |
|--------------------------------------|----------|

#### Drilling

|                              |                                |
|------------------------------|--------------------------------|
| Hole Diameter                | 273 - 444 mm (10.75 - 17.5 in) |
| Hole Depth - Single Pass Std | 18.29 m (60 ft)                |

#### Lower Works

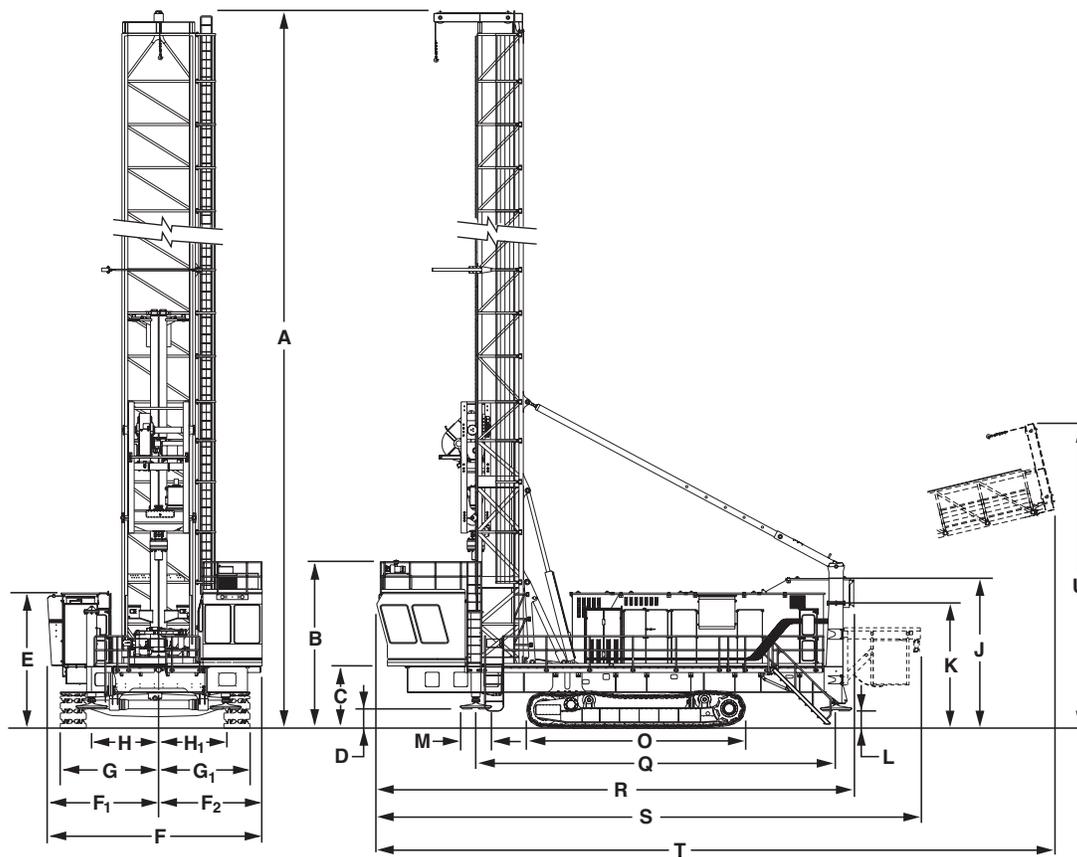
##### Crawler Mounting

|                                    |                            |
|------------------------------------|----------------------------|
| Dual Axles                         | Fixed Rear & Pivotal Front |
| Overall Length                     | 7.75 m (25 ft 5 in)        |
| Overall Tread Width - Standard     | 6.68 m (21 ft 11 in)       |
| Tread Widths - Standard            | 914 mm (36 in)             |
| Tread Widths - Optional Wide Links | 1 067 mm (42 in)           |

##### Propel

|   |                    |
|---|--------------------|
| Chainless Hydraulic Drive, Counter-rotating Tracks, Crawler-mounted Disc Brakes and Tow Brake Release | Standard           |
| Propel Speed  | 1.45 kph (0.9 mph) |
| Operating Propel Guide  | <sup>3</sup> 25%   |

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## Optimal Working Ranges

|                |   |                       |
|----------------|---|-----------------------|
| A              | Overall height w/mast for 60' single pass                         | 32.36 m (106 ft 2 in) |
| B              | Height to top of handrails on operator cab                        | 5.92 m (19 ft 5 in)   |
| C              | Groundline to top of deck   | 2.18 m (7 ft 2 in)    |
| D              | Groundline to bottom of rear jack pads                            | 0.53 m (1 ft 9 in)    |
| E              | Groundline to top of machinery house roof                         | 4.77 m (15 ft 8 in)   |
| F              | Overall width of machine  | 7.65 m (25 ft 1 in)   |
| F <sub>1</sub> | Centerline of machine to LH side                                  | 3.91 m (12 ft 10 in)  |
| F <sub>2</sub> | Centerline of machine to RH side                                  | 3.73 m (12 ft 3 in)   |
| G              | Centerline of machine to LH outside edge of 914 mm (36 in) tracks | 3.47 m (14 ft 4.5 in) |
| G <sub>1</sub> | Centerline of machine to RH outside edge of 914 mm (36 in) tracks | 3.21 m (10 ft 6.5 in) |
| H              | Centerline of machine to centerline of LH rear leveling jack      | 2.36 m (7 ft 9 in)    |
| H <sub>1</sub> | Centerline of machine to RH outside edge of 914 mm (36 in) tracks | 2.36 m (7 ft 9 in)    |
| J              | Height to top of machinery house pressurizing unit                | 5.28 m (17 ft 4 in)   |
| L              | Groundline to bottom of front jack panels                         | 0.66 m (2 ft 2 in)    |
| M              | Diameter of jack pads   | 1.12 m (44 in)        |
| O              | Overall length of crawlers  | 7.75 m (25 ft 5 in)   |

|   |   |                       |
|---|---|-----------------------|
| Q | Centerline of rear jacks to centerline of front jacks                           | 12.70 m (41 ft 8 in)  |
| R | Overall length of machine   | 16.21 m (53 ft 2 in)  |
| S | Overall length of machine with optional cable reel                              | 19.81 m (65 ft)       |
| T | Overall length of machine w/mast for 60' single pass drill depth - mast at rest | 32.49 m (106 ft 7 in) |
| U | Groundline to high point w/mast for 60' single pass drill depth - mast at rest  | 9.60 m (31 ft 6 in)   |

## Weight\*

|                        |                          |
|------------------------|--------------------------|
| Base machine           | 158 730 kg (350,000 lbs) |
| Average working weight | 183 673 kg (405,000 lbs) |

\* Type and number of options will affect machine weight.

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## Mast Components

### Mast

|   |  |
|---|--|
| Standard mast for drill pipe & one pipe rack                        | 18.29 m (60 ft)                                |
| Computer analyzed, HD tubular lattice construction with back braces |  |
| Raising and Lowering  | (2) 220 mm (9 in) diameter hydraulic cylinders |
| Angle Hole Drilling   | <sup>1</sup> 25° off vertical in 5° increments |

### Hoist/Pulldown

|  |                          |
|--|--------------------------|
| Chainless rack-and-pinion system driven by head-mounted excavator grade DC motor |                          |
| Bit Loading  | 74 800 kg (165,000 lbs)  |
| Feed Rate  | 7.62 m/min (to 25 fpm)   |
| Hoist Rate   | 30.48 m/min (to 100 fpm) |
| Lowering Rate  | 30.48 m/min (to 100 fpm) |
| Auxiliary Winch - Std. Capacity  | 5 443 kg (to 12,000 lbs) |

### Pipe Racks

|   |                            |
|---|----------------------------|
| Single Rack   | Standard                   |
| Max drill pipe diameters with 25.4 mm (1 in) wall thickness |                            |
| 1 Pipe Rack   | 273-445 mm (10.75-17.5 in) |
| 2 Pipe Racks  | 273-445 mm (10.75-17.5 in) |
| 4 Pipe Racks  | 273 mm (to 10.75 in)       |

### Rotary Drive

|                                  |                 |
|----------------------------------|-----------------|
| Rotary Drive - Continuous Output | 153 kw (205 hp) |
| Bit Maximum Speed                | 120 rpm         |

## Electrical

### Equipment

Static DC Variable Output

### Power Requirements

Voltage <sup>3</sup>3 Phase, 60 Hz, 4,160V

### Main Electrical Systems

|   |   |
|---|---|
| Air Compressor/AC Induction Motor                                       |   |
| Dual Shaft  | 522-746 kw (700-1000 hp) @ 475V                   |
| Rotary Drive - DC Motor (205 continuous output HP)                      | 145 kw (195 hp) @ 475V                            |
| Hoist/Pulldown - DC Motor (205 continuous output HP)                    | 145 kw (195 hp) @ 475V                            |
| Main Hydraulic Oil Pumps - Driven from Main Air Compressor Motor        | 186.4 kw (250 hp) Nominal                         |
| Machinery House Pressurization - @ 530 m <sup>3</sup> /min (18,700 cfm) | 15 kw (20 hp) @ 460V with 2.2 kw (3 hp) bleed fan |
| Operator Cab Pressurization with Heater and Air Conditioner             | Standard  |
| Compressor Radiator Fan - AC-TEFC Motor                                 | 15 kw (20 hp) @ 460V                              |
| Lighting and Control  | 120V  |

### Transformer Capacity

|                              |                           |
|------------------------------|---------------------------|
| Standard Machine - Drive     | 3 Phase, 500 KVA Dry-Type |
| Standard Machine - Auxiliary | 3 Phase, 250 KVA Dry-Type |

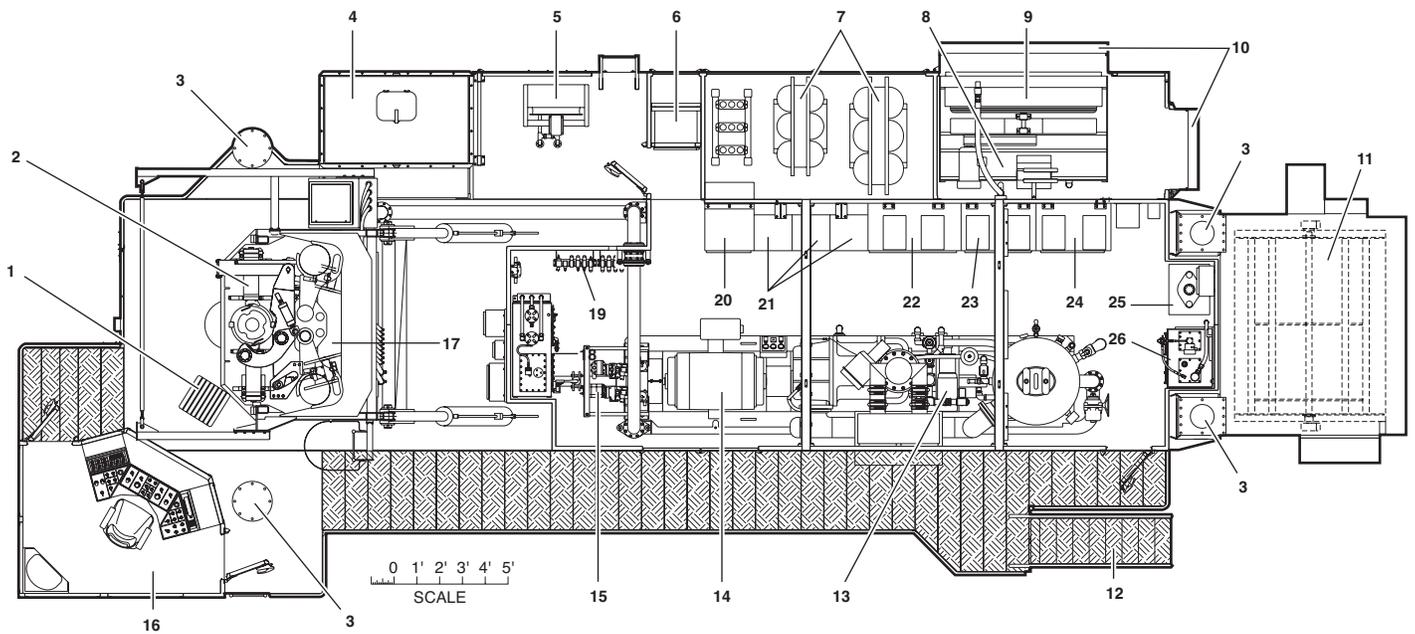
<sup>1</sup> With optional angle hole equipment.

<sup>2</sup> Standard conditions - Sea level and 26.7° (80° F) inlet temperature 60 Hz electrical power

<sup>3</sup> Stability limitations apply.

<sup>4</sup> For alternate power configurations consult Caterpillar.

# Rotary Blasthole Drill—MD6750



## Components

|  |  |   |
|--|--|---|
| 1. Bit Viewing Hatch                                     | 9. Hydraulic Oil Cooler & Guard            | 18. Hydraulic Oil Reservoir                   |
| 2. Tool Wrench   | 10. Cold Weather Damper (optional)         | 19. Hydraulic Valves                          |
| 3. Leveling Jack (4)                                     | 11. Cable Reel (optional)                  | 20. Air Compressor Motor Control Center (MCC) |
| 4. Water Injection Dust Control -<br>3,785 L (1,000 gal) | 12. Boarding Stairs                        | 21. Low Voltage Motor Control Center (MCC)    |
| 5. Hydraulic Oil Cooler                                  | 13. Main Air Compressor Package            | 22. Programmable Controller (PLC)             |
| 6. High Voltage Disconnect                               | 14. Main Drive Motor                       | 23. Rotary Drive Control Cabinet              |
| 7. Transformers  | 15. Hydraulic Pumps & Gearcase             | 24. Hoist/Pulldown Drive Control Cabinet      |
| 8. Heater (optional)                                     | 16. Operator's Cab                         | 25. Isolator                                  |
|  | 17. Pipe Racks - 1 Standard (2-4 optional) | 26. Auto-Lube System                          |

## Options

|   |  |
|---|--|
| 16.76 m (55 ft) or 19.81 m (65 ft) Alternate Mast Lengths | Front Tow Bar                          |
| Angle Hole Drilling                                       | Hydraulic Breakout Wrench              |
| Automatic Fire Suppression Systems                        | Hydraulic Drive Cable Reel             |
| Cold Weather Options                                      | Programmed Drill Control               |
| Dry Dust Control System                                   | FastFil System for Oils and Lubricants |
| Water Injection Dust Control System                       | Remote Propel                          |
| Rotary Shock Coupling                                     |  |

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at [mining.cat.com](http://mining.cat.com) and [www.cat.com](http://www.cat.com)

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