# Geoprobe<sup>®</sup> DM450 Water Well Rig

## **Top Head Carriage**

Top head carriage uses rollers instead of slides, providing smoother travel, easier maintenance, and longer life.

## Drill Mast

Comes with 25,000 lbs. of pullback and 15,000 lbs. of crowd force along with 32-inch side shift (or 16-inch with the single rod loader) of the 2-speed rotary drive with 4,600 ft-lb torque. The rigid drill mast design makes drilling straighter holes easier.

## **Rod Carousel**

1450

Backfeeding while running drill pipe allows operators to reach total depth from the carousel. Options accommodate preferred pipe size:

• 3.5-inch rod: 12 rods in carousel (240 feet) + 18 rods in optional box (360 feet) = 600 feet

• 4.5-inch rod: 10 rods in carousel (200 feet) + 15 rods in optional box (300 feet) = 500 feet

## Mud Pump & Air Compressor

Mud pump options up to 5.5 x 8 piston and air compressor options up to 500/200 make this a strong, compact drill rig.

Using the helper side controls to operate the jib and winch functions, the helper loads the drill pipe in the single rod loader. This makes the DM450 drill rig easy to operate with a two-man crew and minimizes top head movement which facilitates faster production.

## **Table Assembly & Breakout Wrench**

The table assembly has clearance for 16-inch PVC casing. Air-powered holding fork and hydraulically-operated, adjustable breakout wrench make tripping out fast and safe.

Be a



Single Rod Loader

Stable, Stout Drill Rig Powers Through Tough Sites

Top head offering both torque and speed

to the impressive power to weight ratio make the DM450 well suited for water well, geothermal, and/or cathodic protection

drilling while minimizing maintenance.

Water Well Rigs | DM450

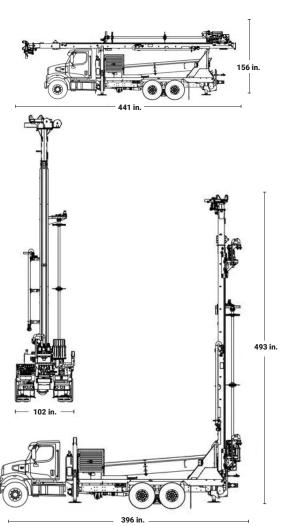
VIDEOS AVAILABLE AT  $\bigcirc$ GEOPROBE.COM/DM450 WHEN YOU SEE THIS SYMBOL

## **Control Pane**

Durable, mechanical controls simplify operation and training of new drillers. Organized control panel includes engine monitoring, safety E-stop, hydraulic pressure gauges, friction control levers for mud pump and rotation circuits, and electronic throttle controls.

## **WEIGHT & DIMENSIONS**

Base Unit Weight: 44,760 lb.



## TOOLING

## Typical Geoprobe® Tooling for the DM450

DM Drill Pipe

## DM Spring Assisted Swivel Hoist Plug

DM Adapter Subs



## **Air Compressor**

Air Compressor, 500 CFM Kit

#### **Mud & Water Pumps**

- Centrifugal Pump 4 x 3 x 13 Centrifugal Desander Pump 3 x 2 x 13 3 in. Diaphragm Pump Kit Duplex Pump 5.5 x 8

  - Duplex Pump 5 x 6 Duplex Pump 5 x 6 Duplex Pump 5 x 6 & 4 x 3 x 13 A x 3 x 13 Series Pump Kit 5 x 6 Duplex w/ Mud System Water Injection Pump Kit

#### Carousel

- Carousel 3.5 in. x 12 Rod
  Carousel 3 in. x 15 Rod
  Carousel 4.5 in. x 10 Rod
  Rod Spinner Assembly
  Carousel Rod Box Assembly 3.5 in. Casing

#### Rod Loader & Box

- Single Rod Loader 3 in. Casing
   Rod Box 3 in. Casing
   Single Rod Loader 3.5 in. Casing
   Rod Box 3.5 in. Casing
   Single Rod Loader 4.5 in. Casing
   Rod Box 4.5 in. Casing
   Rod Box 4.5 in. Casing

#### Winches

- Primary
   12,000 lbf
- Secondary 1,800 lbf

### Spindle Adapters

- Sub 3-1/2 IF Box x 3-1/2 IF Pin 8 S-S Sub 2-3/8 MJ Box x 3-1/2 IF Pin 16 S-S Sub 2-3/8 MJ Pin x 2-3/8 MJ Pin 16 S-S Sub 3-1/2 IF Box x 3-1/2 IF Pin 8 S-S Sub 2-3/8 MR Box x 3-1/2 IF Pin 16 S-S Sub 2-3/8 MR Pin x 2-3/8 MR Pin 16 S-S Sub 2-3/8 IF Box x 3-1/2 IF Pin 16 S-S Sub 2-3/8 IF Box x 3-1/2 IF Pin 16 S-S Sub 2-3/8 IF Pin x 2-3/8 IF Pin 16 S-S Sub 3-1/2 IF Box x 3-1/2 IF Pin 16 S-S Sub 3-1/2 IF Box x 3-1/2 IF Pin 16 S-S Sub 3-1/2 IF Box x 3-1/2 IF Pin 16 S-S Sub 3-1/2 IF Box x 3-1/2 IF Pin 16 S-S Sub 3-1/2 IF Box x 3-1/2 IF Pin 16 S-S

#### Breakout Fork

- Breakout Fork Weldment (Mayhew & Mayhew JR)
   Breakout Fork Weldment (IF)
   Breakout Fork Weldment (4.5 in.)
   Centralizer Kit

#### **Tool Storage**

- HD Toolbox Assembly, 60 in.
  Front Open Toolbox Assembly

#### Additional Options

- Hydraulic Velder with Leads & 8 in. HMR Tray
   Hammer Lubricator Assembly
   Air Hose Reel Kit
   Hammer Air 8 in. with Casing Drive
   DM450 Centralizer Kit 4 in. Casing
   Mud System Deck Mount
   Winch Mast Extension Kit
   Breakout Wrench
   Aux Fuel Tank Kit
   Stabilizer Tray
   Down the Hole Hammer Holder
   Control Panel Cover
   Ladder w/ Full Arrestor

Rig shown with optional features. Weights & dimensions subject to change without notice







Water Well Rigs | DM450