



**Mechanical  
Drill**

## PERFORMANCE SPECIFICATIONS

### Hydraulic Feed System

**Pulldown force:** 20,000 lbs [9,072 kg]  
**Retract force:** 30,000 lbs [13,608 kg]  
**Feed speed, down:** 62 ft/min [18.8 m/min]  
**Feed speed, retract:** 41 ft/min [12.4 m/min],  
Rapid: 80 ft/min [24.3 m/min]  
**Feed stroke:** 6 ft [1.83 m]

### Power Unit

**Diesel Engine:** John Deere Tier 3, 125 HP (93 kW)  
or Deutz Tier 3, 116 hp (86.5 Kw)

Engines include: 12V starting circuit, electronic engine module installed in the operators control panel, 18 gallon (68 l) fuel tank with lock, lockable battery box, cold weather starting package.

### Right Angle Drive

Single speed heavy duty right angle drive with tapered roller bearings and a ring gear and pinion. All bearings and gears are lubricated through an oil bath.  
2 in. [50.8 mm] hardened output shaft with flex chain coupling to a 1-3/4 in. [44.5 mm] kelly bar.

### Drill Head Rotary

- Total enclosed “dry box” with tapered roller bearings.
- 1-3/4 in. [44.5] heat treated alloy steel kelly drive bar.
- 3-1/4 in. [82.6 mm] ID hollow spindle

### Maximum torque and Maximum rpm (engine specific):

#### HIGH TORQUE OPTION

**John Deere** - 1st gear: 11,420 ft-lb [15,483 Nm]  
6th gear: 672 rpm  
**Deutz** - 1st gear: 8,880 ft-lb [12,039 Nm]  
6th gear: 644 rpm

#### HIGH SPEED OPTION

**John Deere** - 1st gear: 7,990 ft-lb [10,832 Nm]  
6th gear: 960 rpm  
**Deutz** - 1st gear: 6,210 ft-lb [8,420 Nm]  
6th gear: 920 rpm

### SPT Automatic Hammer

ASTM D-1586 standards, standard duty and heavy duty  
140 lb [63.5 kg], 170 lb [77.1 kg]  
300 lb [136.1 kg]  
340 lb [154.2 kg] slugs available  
Hydraulic self compensating

### Leveling Jacks

**Single front/dual rear,** 36 in [914.4 mm] stroke

### Estimated Operating Capacities

**Hollow stem augers,** 4-1/4 in [108 mm] ID: 250 ft [76 m]  
**Continuous flight auger,** 6 in [152.4 mm] OD: 300 ft [91 m]  
**Rotary drilling,** NWJ/NW drill rod with 5 in [127 mm] OD bit:  
1,500 ft [457 m]  
**Diamond core drilling:**  
N wireline: 1,600 ft [487 m]  
H wireline: 1,100 ft [335 m]  
P wireline: 730 ft [222 m]

**Note:** Above drilling capacities may vary according to subsurface conditions, hoist capacity and rotary head option.

### Hoist

**MAIN—SINGLE LINE CAPACITY:** 8,500 lbs [3,855.5 kg]

**Line speed:** 0-75 ft/min [0-22.9 m/min], 0-325 ft/min [0-99.1 m/min] reverse

**Cable diameter:** 1/2 in (.500) [12.7 mm]

**Cable length:** 100 ft [30.5 m] standard

**AUXILIARY—SINGLE LINE CAPACITY:** 4,500 lbs [2,041.2 kg]

**Line speed:** 0-135 ft/min [41.2 m/min]

**Cable diameter:** 5/16 in (.325) [8.3 mm]

**Cable length:** 100 ft [30.5 m] standard

**AUXILIARY—SINGLE LINE CAPACITY:** 3,000 lbs [1,361 kg]

**Line speed:** 0-126 ft/min [38 m/min]

**Cable diameter:** 5/16 in (.325) [8.3 mm]

**Cable length:** 75 ft [22.9 m] standard

**SAFE-T DRIVER—SINGLE LINE CAPACITY:** 900 lbs [408.2 kg]

**Line speed:** variable up, freefall down

**Cable diameter:** 1/4 in (.250) [6.4 mm]

**Cable length:** 300 ft [91.4 m] standard

### WIRELINE HOISTS - A wide variety are available

Line capacities from 700 ft [213 m] to 7,500 ft [2,286 m]

### Optional Equipment

- Mast: 20 ft [6 m], 25 ft [7.6 m] or 30 ft [9.1 m]
- In-out slide base/Side-to-side slide base
- Rod clamp, manually adjusted, 1-5/8" [41.3 mm] through 8-1/4" [209.6 mm]
- Rod clamp, hydraulically adjusted, 1-3/8" [34.9 mm] through 5-7/8" [149.2 mm]
- Drive tool quick change adapters
- Wide selection of auger/rod racks
- Top mount water/air swivels for rotary and coring
- 2 in [50.8 mm] Standpipe
- Water pumps - piston, centrifugal and progressive cavity
- Hydraulic chuck - various sizes
- Break-out wrench, hydraulic activated
- Driller/helper platforms
- Night Lights

### Mounting Options

Truck, trailer, track carrier

NOTE: Engineering specifications are theoretical, actual performance will be different, specifications are subject to change without notice.

