



# JT24

HORIZONTAL DIRECTIONAL DRILL



Ditch Witch®

# JT24

The evolution of HDD continues with the Ditch Witch® JT24 Directional Drill. Giving you the power and footprint to be the ultimate uptime champ. Engineered from direct customer feedback, this drill is ideal for urban and residential utility, gas and fiber jobs. Boasting more power in a compact footprint, the JT24 provides 101-gross-hp, 3,000 ft-lbs of torque and 24,000 lbs of thrust and pullback at a size that easily fits in tight jobsites. Plus, its low center of gravity gives operators more stability than competitive units so you can work with confidence.

Hydraulic platform uses leading technology to deliver more horsepower where it matters most—downhole.

1

101-hp, Tier 4 and EU Stage V-compliant Cummins® diesel engine for greater power in a compact unit.

2

Two, seven-inch LED screens provide better insight into all machine functions.

3

The JT24 is equipped with radial operator control (ROC) to highlight the multifunctional controller on the machine display for better controllability.

4

Fold-out, lift-off doors make it easier for operators to conduct machine maintenance.

5

40-gpm, 1,200-psi mud pump offers increased fluid course from the mud pump to the swivel, funneling extra horsepower to the bit downhole.

7

The JT24 offers best-in-class stability without compromising footprint so operators can maneuver in urban jobsites with confidence.

6



# JT24



**1** Built with no grease zerks, a Ditch Witch standard, the JT24 simplifies maintenance and reduces the total cost of ownership.

The JT24 holds up to 400 ft of pipe onboard for longer bores and reduced cycle times, which means less downtime. Plus, a reversible pipe box increases jobsite versatility.

Dual-thrust motors provide 24,000 lbs of thrust and pullback while an exclusive single-motor system delivers up to 3,000 ft-lbs of torque for outstanding performance in tight, urban jobsites.

**2** Add-a-pipe design allows operators to manually insert extra sticks of drill pipe for greater productivity.

**3** A real-time carriage-position indicator provides operators insight into the exact carriage position for more productivity and control.

**6** Patent-pending open-sided vise wrenches are rotated toward the operator for enhanced visibility.

An integrated pipe lubricator makes it easier for operators to change out lubrication buckets for more effective maintenance.

**7**



# ENGINEERED FOR THE JOBSITE. AND THE OPERATORS.

**Productive jobs start with productive crews. Which is why the JT24 was engineered with the comfort, technology and industry-leading visibility to keep you successful. It features:**

- A wider frame, giving the JT24 more stability than any drill in its class, so operators can maneuver in urban jobsites with confidence.\*
- A simple, field-proven pipe-loading system.
- Two, seven-inch LED screens for better insight into all machine functions.
- A real-time carriage-position indicator giving operators insights into exact carriage position for more productivity.
- Radial operator control (ROC) for improved control and efficiency.

# JT24 HORIZONTAL DIRECTIONAL DRILL

| OPERATION                      | U.S.        | METRIC    |
|--------------------------------|-------------|-----------|
| Spindle speed, max             | 225 rpm     | 225 rpm   |
| Spindle torque, max            | 3,000 ft-lb | 4,076 N-m |
| Carriage thrust travel speed   | 210 fpm     | 64 m/min  |
| Carriage pullback travel speed | 216 fpm     | 66 m/min  |
| Thrust force                   | 24,000 lb   | 107 kN    |
| Pullback force                 | 24,000 lb   | 107 kN    |
| Ground travel speed            |             |           |
| Forward                        | 2.8 mph     | 4.5 km/h  |
| Reverse                        | 2.8 mph     | 4.5 km/h  |

| POWER                          |                                  |               |
|--------------------------------|----------------------------------|---------------|
| Engine                         | Cummins® F3.8                    |               |
| Fuel                           | Diesel                           |               |
| Cooling medium                 | Liquid                           |               |
| Injection                      | Direct                           |               |
| Aspiration                     | Turbocharged & charge air cooled |               |
| Number of cylinders            | 4                                |               |
| Displacement                   | 231.89 in <sup>3</sup>           | 3.8 L         |
| Bore                           | 4.02 in                          | 102 mm        |
| Stroke                         | 4.53 in                          | 115 mm        |
| Gross horsepower Tier 3/Tier 4 | 101 hp                           |               |
| Rated speed Tier 3/Tier 4      | 2,200 rpm                        |               |
| Emissions compliance Tier 3    | EPA Tier 3                       | EU Stage IIIA |
| Emissions compliance Tier 4    | EPA Tier 4                       | EU Stage V    |

| DIMENSIONS                    |           |         |
|-------------------------------|-----------|---------|
| Transport length              | 224.5 in  | 5.7 m   |
| Width                         | 65.25 in  | 1.66 m  |
| Transport height              | 83 in     | 2.11 m  |
| Weight                        | 14,850 lb | 6736 kg |
| Ground clearance              | 5.8 in    | 147 mm  |
| Entry angle                   | 18°       | 18°     |
| Entry angle, tracks on ground | 12°       | 12°     |

| DRILLING FLUID SYSTEM (ONBOARD) | U.S.      | METRIC    |
|---------------------------------|-----------|-----------|
| Pressure, max                   | 1,200 psi | 83 bar    |
| Flow, max                       | 40 gpm    | 151 L/min |

| FLUID CAPACITIES                |           |        |
|---------------------------------|-----------|--------|
| Fuel tank                       | 32 gal    | 121 L  |
| Engine lubrication oil w/filter | 15.4 qt   | 14.6 L |
| Hydraulic reservoir             | 18.75 gal | 71 L   |
| Engine cooling system           | 20 qt     | 18.9 L |
| Antifreeze tank                 | 5 gal     | 18.9 L |
| Diesel exhaust fluid tank       | 5 gal     | 18.9 L |

| POWER PIPE® HD                                   |          |           |
|--|----------|-----------|
| Length   | 120 in   | 3.05 m    |
| Joint diameter                                   | 2.625 in | 66.7 mm   |
| Pipe diameter                                    | 2.25 in  | 57.15 mm  |
| Bend radius, min                                 | 117 ft   | 35.66 m   |
| Weight of drill pipe, lined                      | 72.5 lb  | 32.89 kg  |
| Weight of lined drill pipe & large box (40 pipe) | 3,555 lb | 1612.5 kg |
| Weight of lined drill pipe & small box (28 pipe) | 2,675 lb | 1213 kg   |

| POWER PIPE FORGED                         |          |         |
|---|----------|---------|
| Length                                    | 120 in   | 3.05 m  |
| Joint diameter                            | 2.63 in  | 66.7 mm |
| Pipe diameter                             | 2.375 in | 63.5 mm |
| Bend radius, min                          | 123 ft   | 35 m    |
| Weight per drill pipe                     | 74 lb    | 33.5 kg |
| Weight w/drill pipe & large box (40 pipe) | 3,635 lb | 1649 kg |
| Weight w/drill pipe & small box (28 pipe) | 2,720 lb | 1234 kg |

| BATTERY (2 USED)                    |          |  |
|-------------------------------------|----------|--|
| SAE reserve capacity rating         | 110 min  |  |
| SAE cold crank rating @ 0°F (-18°C) | 800 amps |  |

| NOISE LEVEL          |         |  |
|----------------------|---------|--|
| Operator sound       | 83 dBA  |  |
| Exterior sound power | 101 dBA |  |

Specifications are general and subject to change without notice. If exact measurements are required, equipment should be weighed and measured. Due to selected options, delivered equipment may not necessarily match that shown.

\*Stability claim based on lab test of competitive equipment.





## THE DITCH WITCH® HDD SYSTEM INCLUDES :



### HDD TOOLING

For your directional drill, we offer a complete line of genuine Ditch Witch drill bits, HD backreamers, drill pipe, and beacon housings, the most reliable and durable in the horizontal directional drilling industry.



### MUD MIXERS

Ditch Witch fluid-management systems include the innovative FM5X or FM13X, a fluid-mixing system that features a pump that lubricates itself during mixing and works so efficiently that it delivers 20 percent more fluid than other models.



### VACUUM EXCAVATORS

Featuring an innovative, low-profile design that doesn't sacrifice power or ground clearance, our hydro excavation line of vacs delivers unrivaled versatility and performance.



### TRAINING

Your Ditch Witch HDD system comes with more than just equipment. It comes with the training to keep your crews confident and efficient, with courses online, in-the-classroom and even on-the-job from certified industry pros.

