

# TRAILER VACUUM EXCAVATORS

 **Ditch Witch®**



**VACUUM EXCAVATION**

# COMMON APPLICATIONS

## THE MOST PRODUCTIVE VACUUM EXCAVATOR LINE IN THE INDUSTRY.

Versatile and powerful Ditch Witch® trailer-mounted vacuum excavators are designed for an extensive range of cleanup and soft excavation tasks. They are engineered from the ground up as a trailer vac system, ensuring superior functionality. And because operator safety and efficiency are the main priorities when building our vacs, they are designed with all controls, accessible from a curbside operator's station.

All Ditch Witch vacuum excavators are construction-grade, built with heavy-duty components that can withstand the demands of many types of jobsites and applications. And they can be customized with your choice of tank sizes and numerous other options such as reverse flow, water heaters, and wireless hydraulic booms.

Our trailer-mounted vacuum excavator family includes a specialty machine, the MV800, which is designed specifically for handling mud from horizontal directional drill applications.

### CLEANUP OF NON-HAZARDOUS, NON-FLAMMABLE FLUIDS AND SPILLS IN AND AROUND:

- Jobsites
- Manholes
- Catch basins
- Meter boxes
- Storm drains
- Cellars
- Conduit and pipe
- Vehicle wash pits
- Gutters
- Directional drills
- Trenches
- Utility/water/sewage lines
- Utility boxes/vaults
- Refinery tank and storage facilities
- Culverts

### SOFT EXCAVATION CAPABILITIES

- Digging postholes
- Potholing
- Slot trenching
- Setting utility boxes and valves
- Street repair
- Keyholing

### OTHER USES

- Non-hazardous wastewater cleanup
- Salt and sand removal
- Industrial machine cleaning
- Post-emergency restoration
- Mulch and gravel removal
- Tree stump shaving removal



# OPTIONAL FEATURES

## CYCLONIC FILTER



- Industry-leading triple filtration system
- Prevents dry materials from flowing downstream into mesh filter
- Increases system productivity and minimizes frequency of cleaning filter



## REVERSE FLOW

- Simplifies the removal of spoils
- Offloads spoils to a remote location
- Improves overall productivity



## WATER HEATER

- Keeps water system from freezing in inclement weather
- Increases wintertime productivity
- Increases production in tight soils
- 340,000 BTU



## TANK CAPACITIES

### FX20

- 150-gal (568-L) spoils tank
- 80-gal (303-L) freshwater tank

### FX25

- 500-gal (1893-L) spoils tank
- 80- or 200-gal (303- or 757-L) freshwater tank

### FX30

- 500- or 800-gallon (1893- or 3028-L) spoils tank
- 80-, 200- or 300-gallon (303-, 757- or 1136-L) freshwater tank

### FX50/FX65

- 500-, 800- or 1,200-gallon (1893-, 3028 or 4542-L) spoils tank
- 200-, 300- or 500-gallon (757-, 113 or 1893-L) freshwater tank

### MV800

- 800-gal (3028-L) spoils tank
- 100-gal (378-L) freshwater tank



## WIRELESS HYDRAULIC BOOM

- Saves labor, time and reduces operator fatigue
- Rotates 270 degrees and extends to 14 ft (4.3 m)
- Wireless remote operation
  - Controls tank functions, open/closes door, raises/lowers tank



## FX20 VACUUM EXCAVATOR

The 25-hp (20.1-kW) Ditch Witch® FX20 Vacuum Excavator is perfect for a wide range of projects and multiple short runs per day: municipal projects such as valve box cleanout, commercial and residential debris cleanup and landscaping, exposing utility lines, pothole digging, and many other tasks. We made the FX20 small so you can transport it in the back of your truck, but it still has big-time suction power.

**BIG PRODUCTIVITY IN  
SMALL SPACES.**

1

150-gallon (568-L) vac tank is mounted permanently at a 45-degree angle, making the dumping cycle quick and easy.

2

Curbside operator's console is designed to make controls easily accessible; console can be positioned on either side of the unit.

6

Cyclone separator cleans the air before it ever reaches the filter, minimizing maintenance.

5

Outstanding suction power of 543 cfm (15.3 m<sup>3</sup>/min) in a compact, extremely durable package; belt-driven blower is reliable and easy to maintain.

4

Skid-mounted FX20 can fit in the back of a pickup truck, on a flatbed trailer or a specially designed Ditch Witch trailer.

3

25-hp (20.1-kW) Kohler® gas engine is renowned for its reliability and ease of maintenance.



## FX25 VACUUM EXCAVATOR

For all kinds of cleanup jobs, the Ditch Witch® **FX25** is the economical solution you've been looking for. This low-maintenance, low-profile unit can operate in tight jobsites, taking care of spills and unwanted fluids with exceptional suction power. It also takes care of essential soft excavation tasks—like potholing—with a high-pressure water system. Whatever the job demands, the FX25 demands only one person to do it all.

**YOUR ALL-PURPOSE  
WORKHORSE.**

1 Standard hydraulic door opens fully horizontal to maximize spoils removal efficiency.

2 Standard 500-gallon (1893-L) spoils tank and choice of 80- or 200-gallon (303- or 757-L) water tanks for a wide range of cleanup jobs.

3 Easy-access hose and tooling storage rack are designed to improve convenience and safety.

4 Reusable, 2-micron vacuum filter and a blower relief valve air filter provide the industry's best filtration.

5 Trailer meets federal regulations (FMVSS) and comes standard with toolbox storage in tongue.

6 High-pressure water system with a 4-gpm (15.1-l/min), 3,000-psi (207-bar) water pump is adjustable from curbside operator's station; autoclutching feature disengages water pump when water not in use, allowing full system power for suction.

7 Reliable 31-hp (23.1-kW) Briggs & Stratton® Vanguard™ gas engine with high-capacity, remote air filter.

8 Optional reverse-flow feature to offload spoils quickly and easily.

9 Hydraulically controlled, dual-cylinder tank dumping system provides stability when dumping.



## FX30 VACUUM EXCAVATOR

The industry-leading Ditch Witch® FX30 Vacuum Excavator has the rugged build and customer-driven design you need for optimal productivity on the toughest jobsites. The low-maintenance FX30 is heavier and stouter than competitors' units to withstand the most demanding conditions while tackling an extensive range of soft excavation and cleanup tasks.

THE POWER TO DO IT ALL.

2 Choice of 500- or 800-gallon spoils tanks and 80-, 200- or 300-gallon water tanks for cleanups of any size.

3 24.8-hp (18.5-kW) Kubota® diesel engine powers the FX30's outstanding suction and water pressure.

1 Hydraulic door opens fully horizontal to maximize the efficiency of spoils removal.

4 Reusable, 2-micron vacuum filter and a blower relief valve air filter provide the industry's best filtration.

5 Fully enclosed, insulated, lockable power pack protects major components from weather and vandalism while leading the industry in noise reduction.

8 High-pressure water system with a 4.2-gpm (16.1-l/min). 3,000-psi (207-bar) water pump is adjustable from curbside operator's station; autoclutching feature disengages water pump when water is not in use, allowing full system power for suction.

7 Optional reverse-flow feature allows you to offload spoils quickly and easily.

6 Trailer meets federal regulations (FMVSS) and comes standard with toolbox storage in tongue.



## FX50 VACUUM EXCAVATOR

With its outstanding suction and water pressure, the Ditch Witch® FX50 is made for every phase of your installation project. From potholing to cleanup of all types of non-hazardous spills, HDD fluids, and jobsite debris, the FX50 does it all. Plus, numerous options allow you to customize your FX50 for virtually any cleanup or soft excavation task. Every jobsite begins and ends with the FX50.

**EVERY JOBSITE BEGINS AND  
ENDS WITH THE FX50.**

2 Reusable, 2-micron vacuum filter and a blower relief valve air filter provide the industry's best filtration.



4 High-pressure water system with 5.1-gpm (19-l/min), 3,500-psi (241-bar) water pump is adjustable from curbside operator's station; autoclutching feature disengages water pump when water not in use, allowing full system power for suction.

5 All operator controls, including water pressure, accessible from curbside operator's station.

6 49-hp (36-kW) Deutz® diesel engine provides ample power for all machine functions.

3 Optional hydraulic boom rotates 270 degrees; saves labor, time and reduces operator fatigue.

1 Hydraulic tank door opens fully to maximize efficiency of spoils removal.



10 Choice of spoils tanks (up to 1,200 gallons/4542 L) and water tanks (up to 500 gallons/1893 L) for any size soft excavation or cleanup job.

9 Optional reverse-flow feature for quick and easy offloading of spoils.

8 Fully enclosed, insulated and lockable power pack leads the industry in noise reduction.

7 Trailer meets federal regulations (FMVSS) and comes standard with toolbox storage in tongue.



## FX65 VACUUM EXCAVATOR

Designed for maximum payload capacity, the **FX65** is a proven workhorse that beats the competition, hands down. It features a 74-hp turbocharged Deutz® diesel engine, the best horsepower in its class. The FX65 also has the highest airflow of any trailer vacuum excavator at 1,215 cfm, 20 percent more than the next machine on the market. As with all Ditch Witch machines, it's engineered with productivity and profit in mind.

**BRING ON THE TOUGH JOBS.**



1 Three stage filtration includes a cyclonic filter which cleans the air before it reaches the 2-micron washable vacuum filter. An additional blower relief air filter provides the industry's best filtration for maximum protection of key components.

2 Optional remote control hydraulic boom saves labor, time and reduces operator fatigue.

3 1,215 cfm: highest airflow on vacuum excavator trailer for the lowest investment on the market. 20 percent more performance than the competition.

4 High-pressure water system with a 5.5 gpm (20.8-l/min), 3,000 psi (207-bar) water pump is adjustable from curbside operator's station; autoclutching feature disengages water pump when water not in use, allowing full system power for suction.

5 At 83 dBA, the FX65 includes a larger silencer to further reduce noise for minimal disturbance in noise-sensitive areas and greater operator comfort.

6 Tier 4, 74-hp (55-kW) Deutz® diesel engine powers the FX65's outstanding suction and water pressure.

7 Auxiliary hydraulic power system powers a variety of jobsite tools, everything from impact wrenches to jackhammers.



12 Hydraulic door opens fully horizontal to maximize the efficiency of spoils removal.

11 Choice of 500-\*, 800-, or 1,200-gallon spoils tanks and 200-, 300-, or 500-gallon water tanks for cleanups of any size.

10 Saddle-style tanks give the 1,200-gallon FX65 vacuum excavator a lower center of gravity and enhance trailer balance.

9 Fully enclosed, insulated, lockable power pack protects major components from weather and vandalism while leading the industry in noise reduction.

8 Trailer meets federal regulations (FMVSS) and comes standard with toolbox storage in tongue.





## MV800 MUD VACUUM EXCAVATOR

The punishing conditions of HDD jobsites demand a mud vac you can count on job after job—a perfect description for the ruggedly built Ditch Witch® MV800. Featuring the heavy-duty, field-proven components that keep all Ditch Witch vacs performing strong year after year, the competitively priced and easy-to-operate MV800 offers a dependable Briggs & Stratton® engine, reusable filter and many other cost-efficient, customer-requested features that together translate into the benefit you need most: greater uptime.

**MADE FOR THE HDD PRO—  
AND THE LONG HAUL.**



# SPECIFICATIONS

| DIMENSIONS         | FX20<br>150 GAL SPOILS/80 GAL WATER/T4S | FX25<br>500 GAL SPOILS/80 GAL WATER/T9S | FX30<br>500 GAL SPOILS/80 GAL WATER/T9S | FX50<br>800 GAL SPOILS/200 GAL WATER/T18S | FX65<br>1,200 GAL SPOILS/500 GAL WATER/T26 | MV800<br>800 GAL SPOILS/100 GAL WATER/T14 |
|--------------------|---|---|---|---|--|---|
| Length             | 174 in (4420 mm)                        | 200 in (5080 mm)                        | 200 in (5.1 m)                          | 263 in (6.7 m)                            | 249 in (6.3 m)                             | 208 in (5283 mm)                          |
| Width              | 86 in (2184 mm)                         | 96 in (2184 mm)                         | 96 in (2.3 m)                           | 102 in (2.6 m)                            | 101 in (2.6 m)                             | 96.5 in (2479 mm)                         |
| Height, w/out boom | 93 in (2362 mm)                         | 86 in (2337mm)                          | 86 in (2.2 m)                           | 92 in (2.3 m)                             | 99 in (2.5 m)                              | 91.5 in (2324 mm)                         |
| Weight, empty      | 2,576 lb (1168 kg)                      | 5,600 lb (2540 kg)                      | 5,465 lb (2479 kg)                      | 9,045 lb (4103 kg)                        | 12,245 lb (5554 kg)                        | 4,995 lb (2265 kg)                        |
| GVWR               | 4,500 lb (2041 kg)                      | 10,000 lb (4536 kg)                     | 10,000 lb (4536 kg)                     | 18,000 lb (8172 kg)                       | 26,000 lb (11793 kg)                       | 14,000 lb (6350 kg)                       |

## POWER

|                                   |                 |                              |                               |                          |                          |                              |
|-----------------------------------|-----------------|------------------------------|-------------------------------|--------------------------|--------------------------|------------------------------|
| Engine                            | Kohler® CH740S  | Briggs & Stratton® Vanguard™ | Kubota® D1105-E3B             | Deutz® D2.9 L4           | Deutz TD2.9L4            | Briggs & Stratton® Vanguard™ |
| Fuel                              | Gasoline        | Gasoline                     | Diesel                        | Diesel                   | Diesel                   | Gasoline                     |
| Cooling medium                    | Air             | Air                          | Water                         | Oil                      | Water                    | Air                          |
| Aspiration                        | Natural         | Natural                      | Natural                       | Natural                  | Turbocharged             | Natural                      |
| Number of cylinders               | 2               | 2                            | 3                             | 4                        | 4                        | 2                            |
| Manufacturer's gross power rating | 25 hp (20.1 kW) | 31 hp (23.1 kW)              | 24.8 hp (18.5 kW) (SAE J1995) | 49 hp (36 kW)            | 74 hp (55 kW)            | 31 hp (23.1 kW)              |
| Emissions compliance              |                 | EPA LSI/EU Stage II          | EPA Tier 4/EU Stage IIIA      | EPA Tier 4/EU Stage IIIA | EPA Tier 4/EU Stage IIIB |                              |
| Rated speed                       | 3,600 rpm       | 3,600 rpm                    | 3,000 rpm                     | 2,600 rpm                | 2,600 rpm                | 3,600 rpm                    |
| Fuel tank capacity                | 10 gal (38 L)   | 6.9 gal (26.1 L)             | 15 gal (57 L)                 | 25 gal (94 L)            | 25 gal (94 L)            | 6.9 gal (26.1 L)             |

## VACUUM SYSTEM

|                        |                       |                       |                                |                                       |                                       |                       |
|------------------------|-----------------------|-----------------------|--------------------------------|---------------------------------------|---------------------------------------|-----------------------|
| Air flow               | 543 cfm (15.3 m³/min) | 543 cfm (15.3 m³/min) | 500 cfm (14.2 m³/min)          | 1,027 cfm (29.1 m³/min)               | 1,215 cfm (34.4 m³/min)               | 543 cfm (15.3 m³/min) |
| Vacuum, max            | 15 in Hg (381 mm Hg)  | 15 in Hg (381 mm Hg)  | 15 in Hg (381 mm Hg)           | 16 in Hg (406 mm Hg)                  | 16 in Hg (405 mm Hg)                  | 15 in Hg (381 mm Hg)  |
| Vacuum tank capacity   | 150 gal (568 L)       | 500 gal (1893 L)      | 500/800 gal (1893/3032 L)      | 500*/800/1,200 gal (1893/3028/4542 L) | 500*/800/1,200 gal (1893/3028/4542 L) | 800 gal (3028 L)      |
| Tank outlet valve size | 4 in (102 mm)         | 6 in (152 mm)         | 6 in (152 mm)                  | 6 in (152 mm)                         | 6 in (152 mm)                         | 6 in (152 mm)         |
| Filter type            | Washable polyester    | Washable polyester    | Washable polyester             | Washable polyester                    | Washable polyester                    | Washable polyester    |
| Filter area            | 74 ft² (6.9 m²)       | 100 ft² (9.3 m²)      | 100 ft² (9.3 m²)               | 100 ft² (9.3 m²)                      | 130 ft² (12 m²)                       | 100 ft² (9.3 m²)      |
| Suction hose           | 3 in (76 mm)          | 3 in (76 mm)          | 3 in or 4 in (76 mm or 102 mm) | 4 in (102 mm)                         | 4 in (102 mm)                         | 3 in (76 mm)          |

## WATER SYSTEM

|                                     |                            |                            |                                 |                                   |                                   |                            |
|-------------------------------------|----------------------------|----------------------------|---------------------------------|-----------------------------------|-----------------------------------|----------------------------|
| Water tank capacity                 | 80 gal (303 L)             | 80/200 gal (303/757 L)     | 80/200/300 gal (303/757/1136 L) | 200/300/500 gal (757/1136/1893 L) | 200/300/500 gal (757/1136/1893 L) | 100 gal (379 L)            |
| Water pump flow                     | 2.6 gpm (9.8 l/min)        | 4 gpm (15.1 l/min)         | 4.2 gpm (16 l/min)              | 5.1 gpm (19 l/min)                | 5.5 gpm (20.8 l/min)              | 4 gpm (15.1 l/min)         |
| Water pump pressure, max            | 3,000 psi (207 bar)        | 3,000 psi (207 bar)        | 3,000 psi (207 bar)             | 3,500 psi (241 bar)               | 3,000 psi (207 bar)               | 3,000 psi (207 bar)        |
| Antifreeze system                   | 50/50 water/antifreeze mix | 50/50 water/antifreeze mix | 50/50 water/antifreeze mix      | 50/50 water/antifreeze mix        | 50/50 water/antifreeze mix        | 50/50 water/antifreeze mix |
| Pressure hose length (locking reel) | 50 ft (15.3 m)             | 50 ft (15.3 m)             | 50 ft (15.3 m)                  | 50 ft (15.3 m)                    | 50 ft (15.3 m)                    | 50 ft (15.3 m)             |
| Hydraulic system                    |                            | Gear pump                  | 12V DC power unit               | Gear pump                         | Gear pump                         | 12V DC power unit          |

## BATTERY

|                                     |          |          |          |          |          |          |
|-------------------------------------|----------|----------|----------|----------|----------|----------|
| SAE reserve capacity rating         | 41 min   | 110 min  | 110 min  | 195 min  | 195 min  | 120 min  |
| SAE cold crank rating @ 0°F (-18°C) | 340 amps | 800 amps | 800 amps | 950 amps | 950 amps | 750 amps |
| Electrical system                   | 12V      | 12V      | 12V      | 12V      | 12V      | 12V      |

## NOISE LEVEL

|                |         |         |         |         |         |         |
|----------------|---------|---------|---------|---------|---------|---------|
| Sound power    | 110 dBA | 110 dBA | 105 dBA | 110 dBA | 112 dBA | 109 dBA |
| Sound pressure | 84 dBA  | 87 dBA  | 73 dBA  | 82 dBA  | 83 dBA  | 79 dBA  |

\* Only available in a loose configuration.

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.



FX20 Vacuum Excavator



FX25 Vacuum Excavator



FX30 Vacuum Excavator



FX50 Vacuum Excavator



FX65 Vacuum Excavator



MV800 Mud Vacuum Excavator



**FIND THE SUPPORT YOU NEED AT YOUR LOCAL DITCH WITCH® DEALER:**



### **DIRECTIONAL DRILLS**

Ditch Witch vacuum excavators provide support for our industry-leading horizontal directional drills. From the compact JT5 to the heavy-duty JT100 Mach 1, there's an unbeatably efficient Ditch Witch directional drill for every type of jobsite and installation size.



### **PARTS AND SERVICE**

Your Ditch Witch dealer is your source for factory-trained service and the genuine Ditch Witch parts you need for your vacuum excavation system, including suction tools, extensions, filters, spray nozzles, and other accessories that enable you to complete a wide variety of tasks.

