

MCLAUGHLIN® VACUUM EXCAVATION SYSTEMS



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MCLAUGHLIN: HISTORY OF SUCCESS

For more than 90 years, McLaughlin has been an active leader in the underground construction industry — developing a reputation for designing and building dependable, low-maintenance trenchless construction equipment. Since 1921, we've taken pride in providing workable solutions for our customers. From planning to installation, McLaughlin offers contractors a complete package for trenchless construction needs.



McLaughlin product lines

- Vacuum excavation systems.
- Auger boring systems.
- Pneumatic piercing tools.
- Utility locators.
- Pit-launch directional drill.

Vacuum industry innovations

- Exclusive three-stage cyclonic filtration system.
- Patented in-tank washdown system.
- Patented "Cam-Over" external hydraulic rear door.
- First air/water combination trailer units.
- First 1200-gallon (4542.5 L) spoil tanks mounted to trailers.
- First STRONG ARM load-carrying attachment.

Vermeer partnership

McLaughlin vacuums are backed by the industry-leading Vermeer dealer network, and brought to you through our exclusive partnership with Vermeer Corporation.

McLAUGHLIN®

MCLAUGHLIN VACUUMS IN ACTION

Vacuum excavation saves time, money, material handling costs, and most of all, reduces surface disruption. McLaughlin vacuums are made to get your tough jobs done.

Vacuum excavation applications:

- *Surgical excavation in sensitive landscapes and crowded underground infrastructures.*
- *Removing drill fluids from HDD projects.*
- *Exposing utilities for visual inspection.*
- *Cleaning out catch basins, storm drains and valve boxes.*
- *Exercising city water valves and hydrants.*
- *Emergency response cleanup and dewatering.*
- *Pipeline: cathodic pipe installations and repairs.*

Specialty applications:

- *Installing electric poles, guard rails and fences.*
- *Bridge piling projects.*
- *Mining conveyor cleanup systems.*
- *Animal waste and animal bedding cleanup.*
- *Dewatering of marina vessels and cleanup of cargo and train containers.*
- *Micro-trenching and saw-cutting applications.*



SKID-MOUNTED VACUUM EXCAVATION SYSTEMS



These multipurpose track-mounted vacuums can be configured based on your project needs.

- Spoil tank sizes: 100, 250, 500, 800 or 1200 gallons (378.5, 946.4, 1892.7, 3028.3 and 4542.5 L).
- Diesel-powered blower options: 575, 1025 or 1200 cfm (16.3, 29 or 34 m³/min).
- Air/water combination available on the 500-, 800- or 1200-gallon tank (1892.7, 3028.3 or 4542.5 L).



VACUUM EXCAVATION SYSTEMS

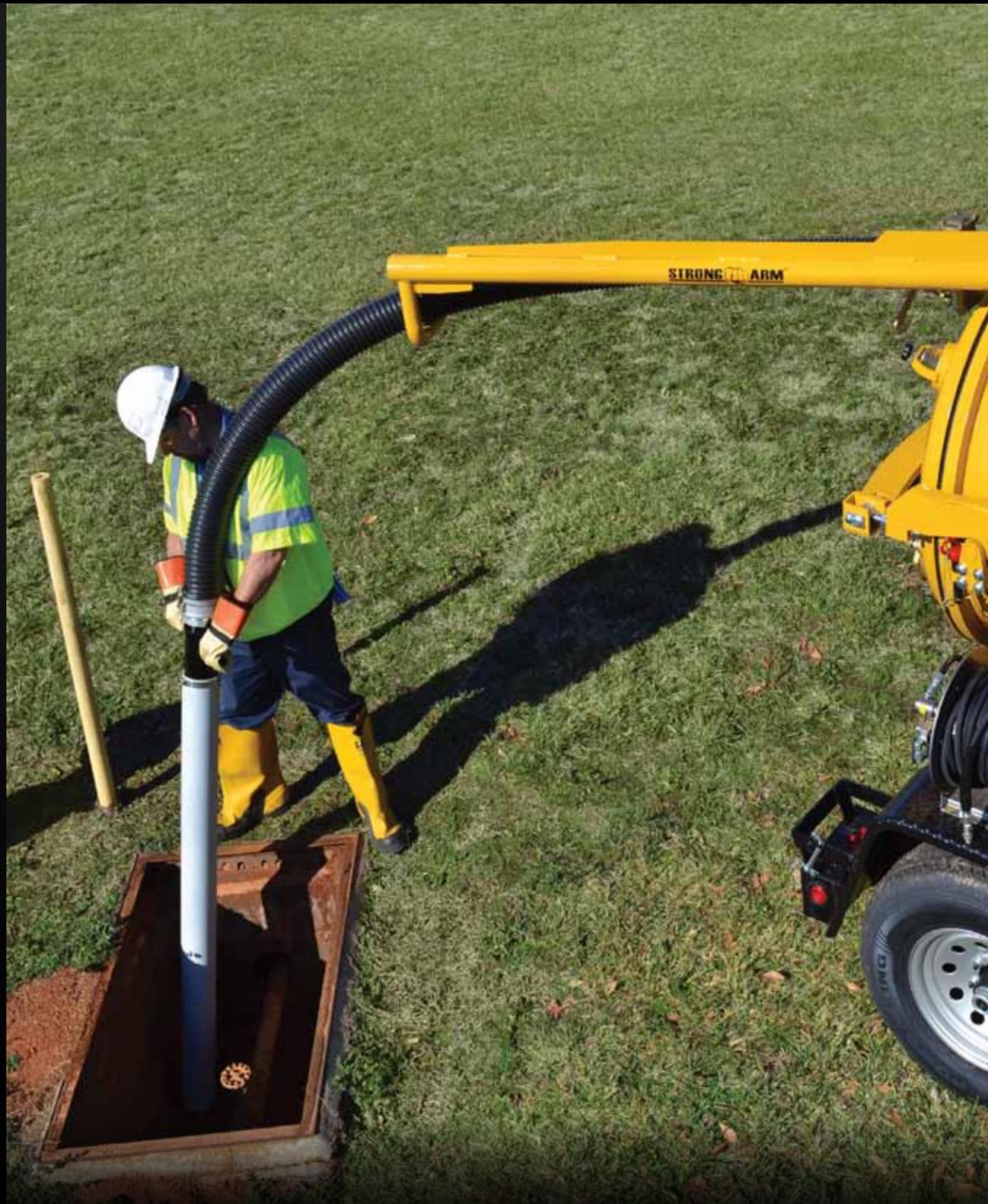
McLaughlin offers a full lineup of trailer vacuum excavation systems for various applications. Vacuum trailers are available in 250-, 500-, 800- or 1200-gallon (946.4, 1892.7, 3028.3 or 4542.5 L) units with a number of different water, engine and blower configurations and options to fit your jobsite requirements.

Vacuum-only models

V500, V800 and V1200 vacuums

Gain powerful vacuum excavation capabilities, with 500-, 800- or 1200-gallon (1892.7, 3028.3 or 4542.5 L) options for either trailer or skid operation.

- Economical vacuum for removing drill mud.
- Features a reliable 24 hp (17.9 kW) engine.
- Wet or dry spoil excavation is possible.





McLaughlin trailer vacuums are available in the low profile LE Series or the standard V Series. Build your unit based on your needs.

LE Series (Low Profile)

- Highly portable trailer vacuum excavator line.
- Available in 250-, 500- or 800-gallon (946.4, 1892.7 or 3028.3 L) spoil tanks.
- 500LE-LT/500LE-LTHD (Lite) package is less than 9999 GVW.
- 575 and 1025 cfm (16.3 and 29 m³/min) blower options.

V Series

- High clearance I-beam trailers for right-of-way work.
- Available in 500-, 800- or 1200-gallon (1892.7, 3028.3 or 4542.5 L) spoil tanks.
- 575, 1025 or 1200 cfm (16.3, 29, 34 m³/min) blower options.
- Air/water combinations available.



I-Beam Trailers

- High clearance I-beam trailers for right-of-way work.
- 8" (20.3 cm) and 12" (30.5 cm) I-beam trailers available.

MEGA VACUUMS

Get big power for big jobs with this full line of skid-mounted vacuum excavation systems. You pick the truck and vacuum configuration specifications, and we'll build it for you.

- Tank capacities ranging from 1600 to 3000 gallons (6056.7 to 11,356.2 L).
- Power pack options available in 67 hp or 99 hp (50 or 73.8 kW) Kubota.
- Both power pack options produce 15 inches of mercury (0.5 bar).
- Blower options available in 1025 or 1200 cfm (29 or 34 m³/min).
- A deep vacuum blower option is also available, featuring the 99 hp (73.8 kW) engine with 1200 cfm (34 m³/min) and **23 inches of mercury (0.8 bar)**.
- Dual hydraulic lift cylinders for efficient and stable tank dumping.
- Curbside operator controls.
- Air/water combination units available.





Industry-leading hydraulic boom

Simplicity, speed, reliability and ease of operation were factored into McLaughlin's industry-leading boom design.

- *This exclusive telescoping boom design maintains hose length during boom extension.*
- *Incorporates a 14" (35.6 cm) bearing with a 270-degree range of motion.*
- *14' (4.3 m) reach capability.*
- *Wireless remote control operation of the boom.*
- *The spring-actuated boom end design increases productivity and range of operation.*



THE MCLAUGHLIN DIFFERENCE



An industry first

Three-stage cyclonic filtration

McLaughlin uses an industry exclusive, three-stage filtration system that allows for both wet and dry vacuum excavation.

- First, material enters the tank at high speed and the large soil particles lose velocity and fall out of the air stream.
- Second, the air moves to the McLaughlin Cyclonic Filtration System where small dust-size particles are cyclonically removed.
- Third, the pre-filtered clean air stream passes through a removable, washable micron-poly filter.



Patented by McLaughlin

Exclusive "Cam-Over" external hydraulic rear door (Pat. #7837050)

McLaughlin developed the first fully hydraulic door with a mechanical Cam-Over locking system.

- The full open rear door opens from the operator console hydraulically.
- Cam-Over auto-locking design provides a positive door seal, even under reverse pressure without additional clamping requirements.
- The McLaughlin cross-beam design equally loads the rear door, providing 360° positive sealing.
- Highly reliable Cam-Over design has NO in-tank moving parts, so all maintenance is external.



Patented by McLaughlin

In-tank washdown system (Pat. #6615849)

This McLaughlin breakthrough saves you cleanup time and makes it easier to remove difficult debris.

- Delivers a high-pressure water spray to the tank interior.
- Helps to simultaneously dump material and clean the inside of the tank.
- Allows faster dump times.
- Prevents the operator from getting dirty.
- Patented washdown system eliminates plastic "in-tank" liners.



Industry leader

Quieter operation

McLaughlin invests in silencing equipment for quieter operation.

- The external engine compartment baffle system works to dampen sound before it's released into the atmosphere.
- In addition, blower and relief silencers reduce the amount of sound generated by McLaughlin's powerful airflow.
- The Quiet Pack full soundproofing package inside the heavy gauge engine enclosure reduces vibration and the amount of engine noise that escapes the compartment.

McLAUGHLIN

Leading the way with a number of patents, industry firsts and added features, McLaughlin is equipped to meet your needs today and tomorrow.



Dual-tank shut-off system

This feature reduces the risk of material entering the blower — in turn, adding greater longevity to your system.

- Includes an electronic float that senses when the tank is full and shuts down the engine.
- A mechanical float provides a secondary auto shutdown function — turning off the vacuum flow.



Enclosed hose storage

McLaughlin vacuums offer the benefits of segmented hose storage.

- Easy to store securely.
- Reduces exposure to UV light during storage — in turn, lengthening hose life.
- Keeps hose straight for reduced wear.
- Helps keep you and your vac clean.



Reverse air-flow option

Keep your work moving forward with the ability to reverse airflow.

- Allows for offloading liquids without opening the door.
- Enables you to clear hose clogs. Simply reverse the airflow by changing the valve position for positive tank pressure.
- The patented Cam-Over hydraulic door holds a positive seal even during reverse flow operation with no external fasteners.



Dual oil bath blower

McLaughlin vacuums feature two oil ports reducing maintenance and service.

- Reduces operator maintenance of daily greasing.
- Longer service intervals.
- Increased blower component reliability.



An industry first

STRONG ARM load-carrying attachment

The STRONG ARM is a heavy-duty steel arm that extends from the vacuum excavator.

- The tank-mounted attachment carries the weight of the hose and debris being vacuumed, rather than the operator bearing the weight.
- Reduces operator fatigue and improves productivity.
- Allows 200° of rotation and extends 6' (1.8 m) from the tank for a wide work range.
- Available on all McLaughlin 500- and 800-gallon (1892.7 and 3028.3 L) models.

AIR/WATER COMBO VACUUMS

McLaughlin vacuums combine high-pressure water and compressed air in one unit to meet the needs of varying soil conditions and contractor applications. Air excavation keeps spoil dry and presents the opportunity for on-site reuse of the excavated material.

You can enjoy the benefits of air/water vacuum excavation by simply adding an air/water power pack to a McLaughlin 500-, 800- or 1200-gallon (1892.7, 3028.3 or 4542.5 L) vacuum excavator.



ACCESSORIES

A wide range of accessories, attachments and options are available for your McLaughlin vacuum.



Combination potholing tool — Combines water and vacuum hoses for a one-man potholing tool.



Wobble nozzle — Allows for higher water pressure to be used without damaging underground utilities.



Washdown wand — Cleanup tool for equipment and jobsite.



Air spade — Provides high velocity at tip of the tool and on/off control for the operator for digging with compressed air.



Hot box — Allows you to work with water heated up to 165° Fahrenheit (73.9° C) to more effectively remove substances such as oil.



Hydraulic jack — Saves time and labor in hooking up the trailer and truck.



Arrow board — Add increased visibility to your jobsite and keep traffic moving smoothly with this safety feature.



Suction tool — 4" (10.2 cm) T-handle suction tool with coupler for vacuum excavation.



Jetter system — Adds versatility to clean pipes and ducts.



Valve exerciser system — Hydraulically exercise water valves, hydrants and gas valves.



Keyhole core saw — This coring unit allows you to cut and remove 12"-diameter (30.5 cm) cores from paved surfaces.



Surface cleaner — Water-powered spinner head washes surfaces while the vacuum sucks up the water after the surface has been pressure-washed.



VACUUM SPECIFICATIONS

Model	V100	V250	V500LEG	V500LE-LT/LE-HD*	V500HD
GENERAL					
Spoil tank capacity	100 gal (378.5 L)	250 gal (946.4 L)	500 gal (1892.7 L)	500 gal (1892.7 L)	500 gal (1892.7 L)
Engine options	24 hp (17.9 kW) Honda gas 31 hp (23.1 kW) Yanmar diesel	31 hp (23.1 kW) Yanmar diesel	31 hp (23.1 kW) Kohler gas	31 hp (23.1 kW) Yanmar diesel 49 hp (36.5 kW) Kubota diesel	67 hp (50 kW) Kubota diesel
Blower output	575 cfm (16.3 m ³ /min)	575 cfm (16.3 m ³ /min)	575 cfm (16.3 m ³ /min)	575 cfm (16.3 m ³ /min) 1025 cfm (29 m ³ /min) – 49 hp (36.5 kW)	1025 cfm (29 m ³ /min)
Water tank capacity	50 gal (189.3 L)	100 gal (378.5 L)	100 gal (378.5 L) 250 gal (946.4 L)	100 gal (378.5 L) 250 gal (946.4 L)	100 gal (378.5 L) 250 gal (946.4 L)
Water pump	4 gpm @ 3000 psi (15.1 L/min @ 206.8 bar) 5.6 gpm @ 3000 psi (21.2 L/min @ 206.8 bar)	5.6 gpm @ 3000 psi (21.2 L/min @ 206.8 bar)	4 gpm @ 3000 psi (15.1 L/min @ 206.8 bar)	5.6 gpm @ 3000 psi (21.2 L/min @ 206.8 bar)	5.6 gpm @ 3000 psi (21.2 L/min @ 206.8 bar)
Standard door	Manual	Manual	Manual	Hydraulic	Hydraulic
Air compressor	N/A	N/A	N/A	N/A	N/A
TRAILER MOUNT					
Length	N/A	145" (368.3 cm)	180" (457.2 cm)	207" (525.8 cm)	195" (495.3 cm)
Width	N/A	91" (231.1 cm)	94" (238.8 cm)	97" (246.4 cm)	92" (233.7 cm)
Height	N/A	87" (221 cm)	82" (208.3 cm)	83" (210.8 cm)	90" (228.6 cm)
GVWR	N/A	7000 lb (3175.1 kg)	9999 lb (4535.5 kg)	9999 lb (4535.5 kg) 12,000 lb (5443.1 kg)	12,000 lb (5443.1 kg) 14,000 lb (6350.3 kg)
Axles	N/A	(2) 3500 lb (1587.6 kg)	(2) 6000 lb (2721.6 kg)	(2) 6000 lb (2721.6 kg)	(2) 6000 lb (2721.6 kg)
Brakes	N/A	Electric	Electric	Electric	Electric
SKID MOUNT					
Length	98" (248.9 cm)	160" (406.4 cm)	N/A	N/A	186" (472.4 cm)
Width	54" (137.2 cm)	87" (221 cm)	N/A	N/A	82" (208.3 cm)
Height	80" (203.2 cm)	66" (167.6 cm)	N/A	N/A	67" (170.2 cm)

*V500LE series with 100 gallons of water under 10,000 lb GVW

VACUUM SPECIFICATIONS

Model	V Series (vac only)	V800LE/V800HD	V1200/V1200HD	McLaughlin Air/Water	Mega Vacs
GENERAL					
Spoil tank capacity	500 gal (1892.7 L) 800 gal (3028.3 L) 1200 gal (4542.5 L)	800 gal (3028.3 L)	1200 gal (4542.5 L)	500 gal (1892.7 L) V500AW 800 gal (3028.3 L) V800AW 1200 gal (4542.5 L) V1200AW	1600 gal (6056.7 L) 2000 gal (7570.8 L) 2200 gal (8327.9 L) 2600 gal (9842.1 L) 3000 gal (11,356.2 L)
Engine options	24 hp (17.9 kW) Honda gas	31 hp (23.1 kW) Kubota diesel 49 hp (36.5 kW) Kubota diesel 67 hp (50 kW) Kubota diesel	31 hp (23.1 kW) Kubota diesel 49 hp (36.5 kW) Kubota diesel 67 hp (50 kW) Kubota diesel	99 hp (73.8 kW) Kubota diesel	67 hp (50 kW) Kubota diesel 99 hp (73.8 kW) Kubota diesel
Blower output	575 cfm (16.3 m ³ /min)	575 cfm (16.3 m ³ /min) 1025 cfm (29 m ³ /min)	575 cfm (16.3 m ³ /min) 1025 cfm (29 m ³ /min)	1025 cfm (29 m ³ /min) 1200 cfm (34 m ³ /min) XT Series	1025 cfm (29 m ³ /min) 15" Hg (0.5 bar) 1200 cfm (34 m ³ /min) 15" Hg (0.5 bar) 1200 cfm (34 m ³ /min) 23" Hg (0.8 bar)
Water tank capacity	N/A	250 gal (946.4 L) 410 gal (1552 L)	250 gal (946.4 L) 410 gal (1552 L)	250 gal (946.4 L) 410 gal (1552 L)	410 gal (1552 L) 935 gal (3539.4 L)
Water pump	N/A	5.6 gpm @ 3000 psi (21.2 L/min @ 206.8 bar)	5.6 gpm @ 3000 psi (21.2 L/min @ 206.8 bar)	5.6 gpm @ 3000 psi (21.2 L/min @ 206.8 bar)	5.6 gpm @ 3000 psi (21.2 L/min @ 206.8 bar)
Standard door	Manual	Hydraulic	Hydraulic	Hydraulic	Hydraulic
Air compressor	N/A	N/A	N/A	185 cfm (5.2 m ³ /min) @ 100 psi (68.9 bar)	185 cfm (5.2 m ³ /min) @ 100 psi (68.9 bar)
TRAILER MOUNT					
Length	195" (495.3 cm)	237" (602 cm)	180" (457.2 cm)	235" (596.9 cm)	N/A
Width	91" (231.1 cm)	102" (259.1 cm)	92" (233.7 cm)	97" (246.4 cm)	N/A
Height	90" (228.6 cm)	90" (228.6 cm)	83" (210.8 cm)	94" (238.8 cm)	N/A
GVWR	12,000 lb (5443.1 kg)	16,000 lb (7257.5 kg) 18,000 lb (8164.7 kg)	24,000 lb (10,866.2 kg)	18,000 lb (8164.7 kg) 24,000 lb (10,866.2 kg)	N/A
Axles	(2) 6000 lb (2721.6 kg)	(2) 9000 lb (4082.3 kg)	(2) 12000 lb (5443.1 kg)	(2) 9000 lb (4082.3 kg)	N/A
Brakes	Electric	Electric	Electric	Electric	N/A
SKID MOUNT					
	(800 gal model)				(2600 gal model)
Length	171" (434.3 cm)	210" (533.4 cm)	283" (718.8 cm)	186" (472.4 cm)	271" (688.3 cm)
Width	74" (188 cm)	96" (243.8 cm)	98" (248.9 cm)	94" (238.8 cm)	98" (248.9 cm)
Height	69" (175.3 cm)	82" (208.3 cm)	82" (208.3 cm)	66" (167.6 cm)	109" (276.9 cm)

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A GLOBAL INITIATIVE

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