

CBM48 *Cradle Boring Machine*

McLAUGHLIN[®]

Established 1921

CASED AUGER BORING, 16 TO 48 INCHES

The McLaughlin CBM48 cradle earth boring machine helps speed the installation of steel casing used in cross-country pipeline applications. More efficiency equates to more bores completed in a day, helping enhance productivity in the field.

Safe

McLaughlin re-engineered this proven machine design to include state-of-the-art safety and control features. The patented operator presence control (OPC) hydraulic clutch ensures quick drive-line shutdown in an emergency.

Self-contained

Powered by an onboard 162-horsepower air-cooled, turbocharged Deutz diesel engine, the CBM48 produces 170,000 ft-lb of auger torque. Since the unit is self-contained, no outside hydraulic source is required.

More productive

The cradle boring method helps save pipeline contractors time, because it's not necessary to set up the project as a construction pit, which is necessary with pit-launched auger boring.

Time-efficient

This machine enables contractors to install longer sections of pipeline casing — up to 120 feet — in a more efficient manner compared to traditional pit-launched auger boring.

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The McLaughlin CBM48 cradle boring machine helps reduce setup time, allowing pipeline contractors to complete more bores.

Specifications

Boring range	16" to 48" (40 to 122 cm) cased bore
Engine	Air-cooled, in-line 6-cylinder diesel, turbocharged; 12 VDC electric system; 162 hp ISO max. (121 kW) @ 2500 rpm; and 139 hp continuous (104 kW) @ 2500 rpm
Transmission	5 forward speeds, 1 reverse
Clutch	Hydraulic clutch with operator presence control switch, Patent # 4,976,321
Final drive	Planetary reduction, 4" (10 cm) hex chuck
Auger torque	170,000 ft-lb peak (230,500 Nm) in first gear
Hydraulic winch parameters	60,000 lb Single Line (270 kN) max @ 2500 psi (175 bar) with infinitely adjustable pull speed, 300' (91.44 m) of cable, 3/4" (19 mm) cable diameter, electronic/hydraulic engage/disengage actuation.
Hydraulic parameters	3000 psi (205 bar) max. system, pressure comp. pump with load sense, 25 gpm (95 L/min) @ 2500 rpm, hydraulic tank capacity 30 gallons (114 L), oil level sight gauge, temperature and cleanout ports. Hydraulic oil cooler 30,000 Btu/hr.
Hydraulic filtration	1. Suction strainer – 100 mesh 2. Intake return filter – 12-micron replaceable element 3. 10-micron spin-on return filter
Fuel tank	44 gal (167 L) capacity with sight gauge
Seat	Centrally mounted, fully adjustable with armrests, safety restraint belt, and operator presence switch, operator control console with joystick and switch functionality
Machine	64" (163 cm) W x 20'2" (6.1 m) L x 99" (251 cm) H
Carriage	7500 lb (2948 kg)
Frame	9500 lb (3856 kg)
Total Weight	17,000 lb (7711 kg)
Centerline	32.5" (83 cm)

Features



- A centrally mounted, fully adjustable seat provides the operator with a clear view of the boring process and easy access to the control console, which offers joystick and switch functionality.
- A powerful 32.5-ton hydraulic winch pulls the machine forward and offers an innovative adjustable winch pulling speed feature.
- Winch pulling speed can be set with the touch of a dial and adjusted to a variety of infinite speeds eliminating the need to feather the speed of the winch throughout the bore, helping enhance productivity and reduce operator fatigue.
- Three hydraulic chain vises hold the steel casing firmly in place to the cradle boring machine. Chains running over the casing attach to one of three hydraulic cylinders, which tighten the casing to the unit. The system monitors the cylinder pressure to ensure even pressure is maintained throughout the bore.
- The transmission offers five forward and one reverse speeds.
- An OPC hydraulic clutch reduces spinback and risk of machine rollover.
- A proven pipeline installation technology with modern enhancements.
- The cradle machine design allows for faster setup and smaller pit design. Eliminates need for a structured and on-grade pit.

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