



Performance and Dependability,

the CME-75 delivers

Ever wonder why you see so many CME-75 drills out there in the field? It's really quite simple. With over 45 years of field experience, the CME-75 has earned a reputation second to none for outstanding performance and dependability.

Hydraulic feed and retract system provides 30,000 pounds of retract force and 20,000 pounds of down pressure.

The twin 72 inch stroke feed cylinders of the hydraulic vertical drive system are in line with the drill spindle providing precise control of force on the drilling tools.

The split, two piece, feed slide bushings are easily



replaced after normal wear intervals. And the standard upright gives you clearance to drill with 12 1/4 inch I.D. hollow augers.

For exceptional drilling efficiency the feed system has two separate controls. One gives you manual control of

feed and retract and features both normal and fast retract positions. Retract rates of up to 95 feet per minute let you add or remove drilling tools quickly.

The other is used exclusively for feed and has a detent engaged position. Pressure controls let you dial in specific feed rate and feed pressure. This system is extremely advantageous in core drilling and other operations that require precise control of feed.

And since the two controls are isolated, you can use the manual control for rapid retract without changing pressure settings for the detent feed control.

Control logic - the key to operator productivity

Drilling and set-up controls are logically arranged on a control panel located at the driller's station. The most frequently used controls, such as the feed, hydraulic hoists and sliding base levers, are staggered for easier identification and operation. A lock-out position for the clutch lever helps prevent accidental engagement.

Rugged mechanical rotary drive provides over

10,400 foot pounds of torque, plus high rotation speed when you need it

You get the torque you need for auger drilling, as well as rotation speeds over 745 rpm for rotary or core drilling applications. Other optional rotation speed and torque combinations are also available, including a high-torque



rotary drive that gives you 13,200 foot pounds of torque.

With five forward gears and one reverse, there's a rotation speed and torque combination available for just about any situation. The transmission is connected to the drill engine through a heavy duty 13 inch clutch.

Patented spindle brake stops rotation in an instant

Our emergency spindle brake can stop rotation in less than a revolution. This system is activated by two conveniently located push button switches as well as by strategically located, multi-directional wobble switches.

Optional Equipment

for even more productivity

Automatic SPT hammer*

Our 140-pound (63.5 kg) automatic hammer gives you extremely consistent and accurate Standard Penetration Test results, meeting all ASTM-D-1586-99 requirements. There are no ropes or cables to impede the free-fall of the weight. A viewing slot allows you to verify the 30 inch (76 cm) fall height.

The hammer swings on a hydraulic cylinder, from the stored position to on-hole position. And the six foot vertical travel also allows you to use the hammer to drive casing or probes. Since raising and lowering is done hydraulically, set-up is quick and almost effortless.

To improve safety, all moving parts are enclosed, including the impact area between weight and anvil.

Other hammers with internationally accepted weight and fall height configurations are available, including a combination 340/140 pound (154/63.5 kg) model.



Hydraulic rod holder and breakout wrench*

The hydraulic rod holder makes your job quicker and safer. It not only pivots from on-hole to off-hole positions, but

also hydraulically telescopes in and out. It is especially compatible with the optional in-out and sideways slide bases.



Slide bases make the job easier and quicker

Slide base options are available for both in-out and sideways movement of the drill on the platform.

An 18 inch in-out movement allows you to quickly move the drill off the borehole and align the sheaves for lifting tools with the cathead or any of the hoists.

An 16 inch sideways movement gives you even more versatility. Aligning augers or rods when making connections is easy. Or, if the bit drifts off at an angle when you start a hole, you can quickly straighten it to a vertical position.

If you've ever tried to line up your rig on an existing borehole, you've probably already recognized another benefit of the slide bases.

Quick mast disconnect

This feature allows you to quickly disconnect the optional mast when working inside buildings, underneath bridges or in other low overhead drilling locations. Since the mast is completely separated from the uprights, it doesn't inter-



fere with other drill functions such as the optional slide bases.

With the mast in a horizontal position, you simply clamp it to its storage rack and extend the drill's in-out slide base. This pulls the sockets on the upright drill frame away from the large tapered pins on the mast.

Angle drilling system for special applications*

This unique system is especially effective for drilling underneath ponds, storage tanks or other structures. When used with our patented Continuous Sample Tube System, you can even take soil samples while drilling angle holes.

And, since the kelly drive is directly connected to the right angle drive box, you can raise or lower the mast with the drivetrain already connected and ready to go.



Fluted kelly and chuck assembly

If your drilling operations include a substantial amount of core or rotary drilling, the CME fluted kelly and chuck assembly can save you a lot of time. The 5 foot stroke of the kelly, combined with the 6 foot stroke of the feed system, gives you

a total stroke of 11 feet. You can use 10 foot drill rods, which means fewer rod connections and less rod handling.

The kelly has two vertical slots and two horizontal slots which are engaged by the chuck to provide rotary torque and thrust. The CME fluted kelly can even be rotated without engaging the thrust plungers. This gives you the option of using the weight of the drill string to provide down pressure on the bit.

The 2 5/8 inch fluted kelly and chuck assembly is available in either manual or hydraulically actuated configu-

rations. Or, for larger diameter holes, a 3 1/2 inch O.D. fluted kelly and hydraulic chuck assembly is available.



Above deck auger storage areas are provided with the optional drill platform. The CME-75 is also available with sev-

eral under body auger rack configurations, including hydraulically operated racks that slide in and out for easy access to augers.



Water tank / tool box combinations

You can choose a 250 gallon or a 500 gallon water

tank. Numerous water tank/tool box configurations are available, including models with rod storage capacity underneath and an expanded metal rack on top.



Additional optional equipment

Drill platform

Continuous Sample Tube System

High torque or high speed rotary drive

CPT controls

Mast, 22 ft. or 26 ft.

(from base of frame to sheaves)

Underside sheave

Low clearance sheave

Cathead, 8 in. diameter

8,500 lb. hydraulic hoist

max line speed...72 ft/min. up - 310 ft./min. dwn

7,000 lb. hydraulic hoist

max line speed...85 ft/min. up - 340 ft/min. dwn

3,200 lb. hydraulic hoist

max line speed...100 ft./min.

1,800 lb. hydraulic hoist

max line speed...200 ft./min.

Hydraulic wireline hoist (1800 lb. pull)

max line speed...200 ft./min.

Auger and rod guides for angle drilling

Probe hammer

Spindle Adapter

Water pumps:

Moyno 3L6	36 gpm/225 psi
Moyno 3L8	84 gpm/225 psi
Bean	25 gpm/500 psi
Bean	3 <mark>5</mark> gpm/500 psi
Gardner Denver 4 1/2x5	1.48 gpm/197 psi
Gardner Denver 5x6	200 gpm/310 psi
(Other numps available)	



Specifications

Power

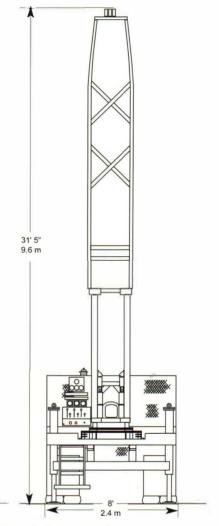
Cummins QSB 4.5L turbo charged Tier-4f diesel engine

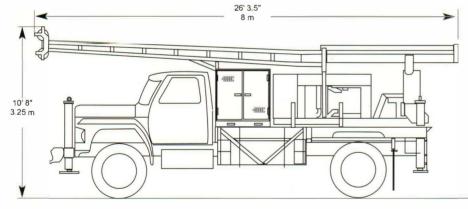
Rotary Drive

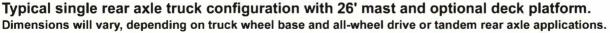
13 in. (33 cm)
5 speed fwd., 1 speed rev.
10,445 ft. lbs. (14,160 Nm)
13,225 ft. lbs. (17,930 Nm)
745 rpm max
930 rpm max
7 cm) {3 3/4 in.(9.5 cm) avail.}

Hydraulic Feed System

Retract force	30,000 lbs. (13,608 Kg)
Pulldown force	20,000 lbs. (9,072 Kg)
Retract rate (max)	95 ft./min. (29 m/min)
Feed rate (max)	52 ft./min. (16 m/min)
Stroke	72 in. (1.8 m)







Central Mine Equipment Company manufactures a complete line of drilling equipment for the environmental, geotechnical and water well drilling industries of the world. We have been a leader in drilling product quality, innovation and service for over ninety years.



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