

## Specifications

### Power

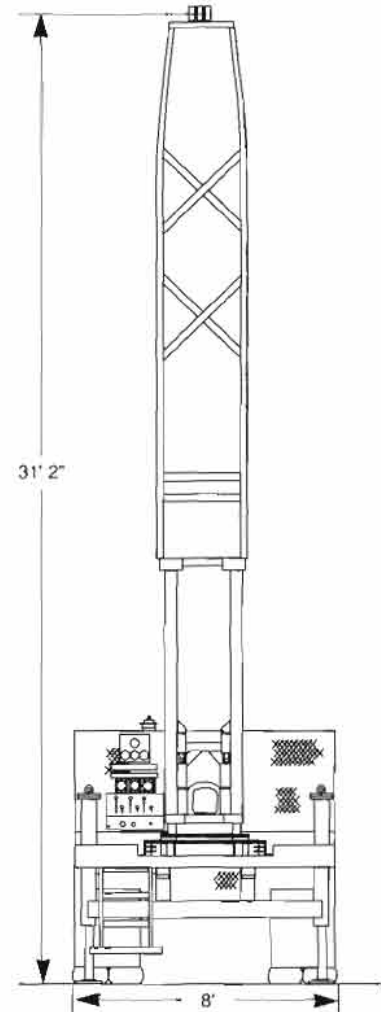
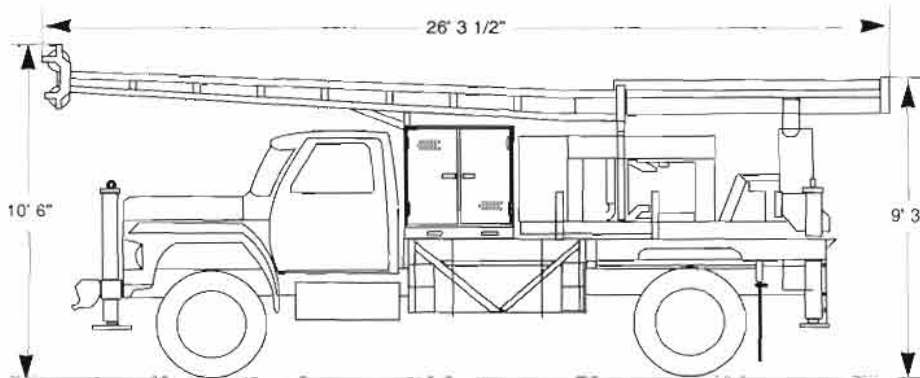
Cummins 4 BT, 239 cubic inch (3.9 L) 4 cylinder turbocharged diesel engine  
(Consult factory for other engine applications)

### Rotary Drive

Clutch, heavy duty ..... 13 inch (33 cm)  
Transmission ..... 4 speed forward, 1 speed reverse  
Rotary torque (standard) ..... 7,800 foot pounds (10,575 Nm) max  
Rotary torque (optional) ..... 9,800 foot pounds (13,287 Nm) max  
Rotary speed (standard) ..... up to 590 rpm max  
Rotary speed (optional) ..... up to 790 rpm max  
Hollow spindle I.D. .... 2 3/4 inch (3 3/4 inch avail.)

### Hydraulic Feed System

Retract force ..... 28,275 pounds (12,826 Kg)  
Pulldown force ..... 18,650 pounds (8,460 Kg)  
Hoist rate (max) ..... 34.8 feet (10.6 m) per minute  
Feed rate (max) ..... 52.8 feet (16.1 m) per minute  
Stroke ..... 72 inch (183 cm)



Typical single rear axle truck configuration with optional deck platform.

Dimensions will vary, depending on truck wheelbase and all-wheel drive or tandem rear axle applications.

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 seventy years.



### CENTRAL MINE EQUIPMENT COMPANY

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# CME-55





Angle drilling option available

# 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-1586-84 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 virtually 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 system\*

The hydraulic rod holder and breakout wrench system makes your job quicker and safer. It eliminates the need for a pipe wrench and cheater bar to break tight connections. It's also perfect for suspending tools in the hole while adding or pulling rods.

The system 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.



### 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.

### 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 (46 cm) 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 18 inch (46 cm) 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.

Since the uprights and optional mast are mounted directly to the drill frame, they move with the drill when the slide bases are used. That means you can drill in any position within a 324 square inch (2,090 sq cm) area without moving the carrier.

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 interfere 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.





### 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 (1.5 m) stroke of the kelly, combined with the 6 foot (1.8 m) stroke of the feed system, gives you a total stroke of 11 feet (3.4 m). You can use 10 foot (3 m) drill rods, which means fewer rod connections and less rod handling.

The kelly has two vertical slots (flutes) and two sets of 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 keys. 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 (6.7 cm) fluted kelly and chuck assembly is available in either manual or hydraulically actuated configurations. Or, if you're drilling larger diameter holes, a 3 1/2 inch (8.9 cm) O.D. fluted kelly and hydraulic chuck assembly is available.



### Plenty of auger storage available

Above deck auger storage areas are provided with the optional drill platform. The CME-55 is also available with several 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 (757 L) or a 500 gallon (1,893 L) water tank. You can also choose either steel or stainless steel construction.

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



### Additional optional equipment

*Drill platform*

*Continuous Sample Tube System\**

*High torque rotary drive*

*Electric throttle*

*Mast, 18 foot (5.5 m), 22 foot (6.7 m) or 26 foot (7.9 m)  
(from base of frame to sheaves)*

*Underside sheave*

*Low clearance sheave*

*Cathead, 8 inch (20.3 cm) diameter*

*8,500 pound (3,856 kg) hydraulic hoist*

*max line speed...72 ft (22 m)/min up - 310 ft (94 m)/min dwn*

*7,000 pound (3,175 kg) hydraulic hoist*

*max line speed...85 ft (26 m)/min up - 340 ft (104 m)/min dwn*

*3,200 pound (1,452 kg) hydraulic hoist*

*max line speed...100 ft (30 m)/min*

*1,800 pound (816 kg) hydraulic hoist*

*max line speed...200 ft (61 m)/min*

*1,200 pound (544 kg) driver hoist*

*max line speed...600 ft (183 m)/min  
1/4 inch (.635 cm) cable capacity...250 ft (76 m)*

*Hydraulic wireline hoist*

*Auger and rod guides for angle drilling*

*Drill rod chuck*

*Spindle adapter*

*Water pumps:*

- Progressive cavity..... 36 gpm/225 psi (136 lpm/1,551 kPa)*
  - Progressive cavity..... 84 gpm/225 psi (318 lpm/1,551 kPa)*
  - Bean.....25 gpm/500 psi ( 95 lpm/3,448 kPa)*
  - Bean..... 35 gpm/500 psi (132 lpm/3,448 kPa)*
  - Gardner Denver 4 1/2x5....148 gpm/197 psi (560 lpm/1,358 kPa)*
- (Other pumps available)*

\*patented by CME

# Evolution of a classic

**W**hen the first CME-55 rolled off the production line back in 1963, it was an immediate success. It had the power, versatility and dependability to handle geotechnical and medium-sized environmental jobs with maximum efficiency.

Although today's CME-55 features many refinements, it's basically the same drill that has been the standard of its class for more than 35 years. The popularity and high resale value of this classic machine bear testimony to its performance record in the field.

**Hydraulic feed and retract system provides 28,275 pounds (12,826 kg) of retract force and 18,650 pounds (8,460 kg) of down pressure.**

The 72 inch (183 cm) stroke, hydraulic vertical drive system has no chains or cables which can stretch. It gives you 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 10 1/4 inch I.D. hollow augers.

**Rugged mechanical rotary drive provides 7,800 foot pounds (10,575 Nm) of torque and rotary speeds up to 590 rpm.**

Other rotation and torque combinations are also available, including a high-torque rotary drive that gives you up to 9,800 foot pounds of torque and a high-speed rotary drive that gives you up to 790 rpm.

The four-speed transmission is connected to the drill engine through a heavy-duty 13 inch (33 cm) clutch. With four forward gears and one reverse, there's a rotation speed and torque combination available for just about any situation.

The mechanical rotary drive also gives you a better feel for drilling conditions down the hole. It allows you to sense the need for changes in feed pressure and rotational torque.



**Control logic - the key to operator productivity**

All 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.

And a lock-out position for the clutch

lever helps prevent accidental engagement.

**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.



**Refinements provide easier operation and maintenance and increased dependability**

We've simplified many systems by finding ways to eliminate complex components. This reduces preventative maintenance cycles and offers rugged dependability.

**Choose the carrier that's right for your application**

The CME-55 can be mounted on a variety of carriers, including two wheel or all-wheel drive, single or tandem axle trucks. It can also be mounted on the CME-55T trailer or on the CME-300 tracked carrier.

*Safety...  
it's a habit you can live*