



CENTRAL MINE EQUIPMENT COMPANY

The Company



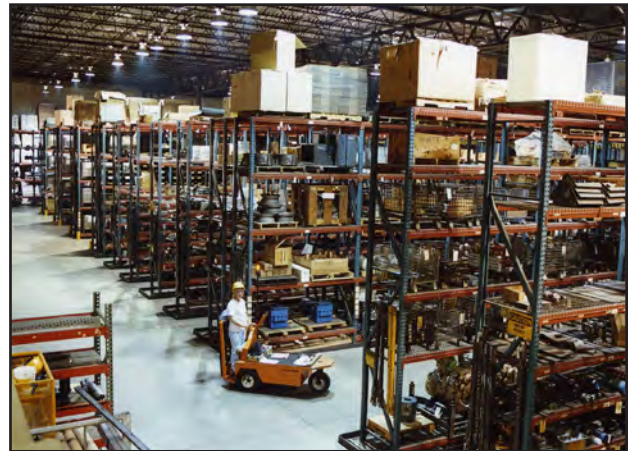
Central Mine Equipment Company was founded in St Louis, Missouri in 1928. Our initial product line included augers, bits and related accessories for the coal mining industry. In 1962, we introduced our first drill rig.

Today, we design and manufacture a complete line of drilling equipment for the geotechnical, environmental, mineral exploration, and construction industries. We also build a complete line of hollow-stem and continuous flight augers, auger accessories, sampling systems and all-terrain and rough-terrain carriers.

In addition to our line of quality-manufactured products, CME is a leading provider of tools, equipment, and supplies for core and rotary drilling, soil sampling, and ground water monitoring.

The key to our success has been product durability and service after the sale. Central Mine Equipment Company holds patents covering everything from auger connections and sampling systems to drill rig safety features, including an emergency spindle brake that can stop rotation in less than a revolution. This system is standard on all CME drill rigs.

In order to best serve the needs of our customers, all manufacturing, warehouse and office operations are consolidated at our 210,000 square foot facility located in St. Louis, Missouri.



Drill Rigs

Truck, Trailer, and Skid Mounted Drills



CME-45B

The CME-45B is an economical, efficient drill that can be mounted on a truck, trailer or ATV carrier. Available optional equipment includes in-out and sideways slide bases, automatic SPT hammer, direct push hammer, hydraulic rod holder and breakout wrench, cathead, water tank, a variety of hydraulic hoists, water pumps, and much more.

The CME-45B will drill holes up to 13 inches (33 cm) in diameter using conventional or hollow-stem augers. And with its fixed vertical feed frame, the CME-45B is ideal for pavement coring procedures.

CME-45C

This is one of our most versatile drill rigs. It can be mounted on a truck, trailer, skid, ATV or the CME-300 tracked carrier. A skid/trailer configuration is also available. This application gives you two options. You can use the drill as a conventional trailer mounted unit, or you can easily remove the drill from the trailer and skid it up or down steep slopes, or through narrow openings.

The CME-45C has the same drilling capabilities as the CME-45B, but with its permanently coupled drive line and folding upright frame, it can also be equipped for angle drilling.



CME-55

The CME-55 has been the standard of its class for over 60 years. It can be mounted on a truck, trailer, ATV, or the CME-300 tracked carrier.

With 28,275 pounds (12,825 kg) of retract force and up to 10,160 foot pounds (13,775 Nm) of rotary torque, the CME-55 is capable of drilling holes up to 14.75 inches (32.5 cm) in diameter using conventional or hollow-stem augers.

Two low-clearance models are also available. The CME-55LC and CME-55LCX allow you to drill under service station canopies or other overhead obstructions.

The CME-55LCX has a higher horsepower engine that offers 11,910 foot pounds (16.147 Nm) of rotary torque standard.



CME-75

The CME-75 has earned a reputation second to none for outstanding performance and reliability. Typically mounted on a tandem axle truck, it's the next step up in power and capability. Fast retract rates mean quick cycle times when adding augers or tripping out of the hole. The hydraulic chuck option allows for ten foot runs without breaking the tool string.

The dependable mechanical rotary drive is available with up to 13,225 foot pounds (17,930 Nm) of torque for auger drilling holes up to 18.5 inches (47 cm) in diameter.



CME-85

This rig has big power. And it was built to handle that power. There are no compromises. Everything is heavy-duty. The right angle drive, the rotary box, the frame, every component was specifically designed to take the forces this drill can produce, and then some.

Like all CME drills, the CME-85 is designed with many features for easy operation. A patented hydraulic kelly bar lift system, for instance, makes coupling and uncoupling the kelly bar to the right angle drive virtually effortless.

The transmission has six forward gears so there's a rotation speed and torque combination for just about any situation, from large diameter auger drilling to deep rotary jobs. With 22,950 foot pounds (31,116 Nm) of torque, the CME-85 can handle hole sizes up to 18.5 inches (47 cm) in diameter using hollow-stem augers.

Truck, Trailer and Skid Mounted Drill Specifications

	<i>CME-45B</i>	<i>CME-45C</i>	<i>CME-55</i>	<i>CME-55LC</i>	<i>CME-55LCX</i>	<i>CME-75</i>	<i>CME-85</i>
Standard Rotary Torque (max)	3,530 ft lbs (4,786 Nm)	3,530 ft lbs (4,786 Nm)	7,770 ft lbs (10,535 Nm)	7,770 ft lbs (10,535 Nm)	11,910 ft lbs (16,147 Nm)	10,445 ft lbs (14,161 Nm)	22,950 ft lbs (31,116 Nm)
Standard Rotary Speed (max)	760 rpm	760 rpm	800 rpm	800 rpm	566 rpm	745 rpm	489 rpm
High Torque Rotary Torque (max)	4,875 ft lbs (6,609 Nm)	4,875 ft lbs (6,609 Nm)	10,160 ft lbs (13,775 Nm)	10,160 ft lbs (13,775 Nm)	N/A	13,225 ft lbs (17,930 Nm)	N/A
High Torque Rotary Speed (max)	550 rpm	550 rpm	664 rpm	664 rpm	N/A	589 rpm	N/A
High Speed Rotary Torque (max)	N/A	N/A	N/A	N/A	N/A	8,355 ft lbs (11,327 Nm)	18,080 ft lbs (24,513 Nm)
High Speed Rotary Speed (max)	N/A	N/A	N/A	N/A	N/A	933 rpm	620 rpm
Retract Force	19,600 lbs (8,890 kg)	19,600 lbs (8,890 kg)	28,275 lbs (12,825 kg)	27,615 lbs (12,526 kg)	27,615 lbs (12,526 kg)	30,000 lbs (13,608 kg)	48,105 lbs (21,820 kg)
Pulldown Force	13,650 lbs (6,192 kg)	13,650 lbs (6,192 kg)	18,650 lbs (8,459 kg)	19,750 lbs (8,958 kg)	19,750 lbs (8,958 kg)	20,000 lbs (9,072 kg)	28,225 lbs (12,803 kg)
Mounting Applications	Truck, Trailer, ATV	Skid, Truck, Trailer, Skid on Trailer, ATV	Truck, Trailer, ATV	Truck, Trailer, ATV	Truck, Trailer, ATV	Truck, Trailer, ATV	Truck

Rubber-tired ATV Drills



CME-550X

The CME-550X offers all of the features of the CME-55 drill in an off-road configuration. Large, high flotation tires provide the traction to confidently get you to that difficult to access off-road site. And ground speeds up to 16 mph will get you to the next one quickly.

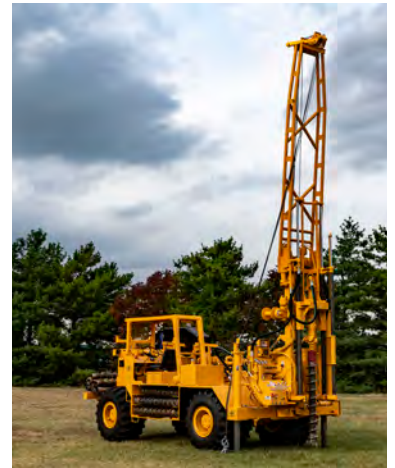
Since the carrier was designed as an integral part of the overall rig, we were able to mount the drill on the carrier frame, in between the tires. That puts the center of gravity as low as possible. No-spin differentials give you true 4-wheel pulling power. And planetary axles put gear reduction at the wheels. That means less stress on all drive-train components.

With 28,275 pounds (12,825 kg) of retract force and up to 10,970 foot pounds (14,873 Nm) of rotary torque, the CME-550X is capable of drilling holes up to 14.75 inches (37.5 cm) in diameter using hollow-stem augers.

CME-750X

The CME-750X is the culmination of over 40 years of experience in ATV drill technology. It's been designed and refined from the ground up to provide the best combination of mobility and drilling performance you can get with a rubber-tired all-terrain drill rig.

Mobility means a rugged off-road carrier with ground speeds up to 14 mph. And outstanding drilling performance is provided by the dependable mechanical rotary drive, with up to 13,170 foot pounds (17,856 Nm) of torque for auger drilling holes up to 18.5 inches (47 cm) in diameter.



RUBBER-TIRED ATV MOUNTED DRILLS			TRACK- MOUNTED DRILLS				
	CME-550X	CME-750X	CME-45C	CME-55	CME-55LC	CME-55LCX	CME-850X CME-850XR
Standard							
Rotary Torque (max)	8,775 ft lbs (11,897 Nm)	10,455 ft lbs (14,175 Nm)	3,530 ft lbs (4,786 Nm)	7,770 ft lbs (10,535 Nm)	7,770 ft lbs (10,535 Nm)	11,910 ft lbs (16,147 Nm)	14,465 ft lbs (19,612 Nm)
Rotary Speed (max)	768 rpm	694 rpm	760 rpm	800 rpm	800 rpm	566 rpm	663 rpm
High Torque							
Rotary Torque (max)	10,970 ft lbs (14,873 Nm)	13,170 ft lbs (17,856 Nm)	4,875 ft lbs (6,609 Nm)	10,160 ft lbs (13,775 Nm)	10,160 ft lbs (13,775 Nm)	N/A	N/A
Rotary Speed (max)	615 rpm	550 rpm	550 rpm	664 rpm	664 rpm	N/A	N/A
High Speed							
Rotary Torque (max)	7,485 lbs (10,148 Nm)	8,070 lbs (10,941 Nm)	N/A	N/A	N/A	N/A	11,570 ft lbs (15,686 Nm)
Rotary Speed (max)	900 rpm	898 rpm	N/A	N/A	N/A	N/A	829 rpm
Retract Force	28,275 lbs (12,825 kg)	30,000 lbs (13,609 kg)	19,600 lbs (8,890 kg)	28,275 lbs (12,825 kg)	27,615 lbs (12,525 kg)	27,615 lbs (12,525 kg)	28,275 lbs (12,825 kg)
Pulldown Force	18,650 lbs (8,459 kg)	20,000 lbs (9,072 kg)	13,650 lbs (6,192 kg)	18,650 lbs (8,459 kg)	19,750 lbs (8,958 kg)	19,750 lbs (8,958 kg)	18,650 lbs (8,459 kg)

Performance ratings are based on engineering specifications, calculations and accepted industry standards. Capacities may vary according to drilling conditions. CME reserves the right to amend these specifications at any time, without notice.

Track Mounted Drills



CME-850X

The CME-850X can get you to locations that are inaccessible to any other type drill rig. The 33 inch wide tracks spread the surface contact area of this all-terrain track drill over more than 9,669 square inches. Ground bearing pressure is only 2.9 psi. That's less than the average man's footstep. The CME-850X can go places you can't even walk. The high flotation allows you to negotiate soft mud, deep snow or sand. And the walking beam suspension easily climbs over rocks and fallen logs. This rig has a very low center of gravity which provides the stability you need in off-road conditions. Angle drilling capability is standard.

With 28,275 pounds (12,825 kg) of retract force and nearly 15,000 foot pounds (20,337 Nm) of rotary torque, the CME-850X is capable of drilling holes up to 14.75 inches (37.5 cm) in diameter using hollow-stem augers.

CME-850XR

The CME-850XR is a rough-terrain drill, featuring full rubber tracks that won't damage most pavement. It has the same drilling performance specifications as the CME-850X and is available with all the same options.

Like all CME ATV rigs, the CME-850X and CME-850XR, utilize a single engine to power both drill and carrier. This means better weight distribution and lower operating costs.



CME-55 on CME-300 Carrier

CME-300 Tracked Carrier

The CME-45C, CME-55 and low clearance CME-55LC and CME-55LCX are available mounted on the remote controlled CME-300 tracked carrier. This machine can climb hills, traverse mud, sand, rocks and snow...all while your operator's feet are planted firmly on the ground.

The rubber tracks will not damage most pavement, so you can also use this rig anywhere you might use a truck mounted drill.

Since the CME-300 tracked carrier is designed specifically for carrying drill rigs, there are no compromises. It has the best center of gravity for both driving and drilling. And you won't find a more rugged carrier in its class.

Drills mounted on the CME-300 carrier are available with all the features you need to get the job done as efficiently as possible. You can equip them with in/out and sideways slide bases, angle drilling, automatic SPT hammer, auger racks, tool boxes and more.



Low Clearance CME-55LCX on CME-300 Carrier



CME-45C on CME-300 Carrier

Efficient Control Panel

Control commonality - A key to operator productivity

Do your drillers find themselves working with a CME-45C one day and a CME-75 the next? No problem. Almost all of our drills have essentially the same control panel layout. That means your operators can work with maximum efficiency, no matter which rig they are using. There's no hesitancy or confusion on where to find the right control when using retract, feed, hoists, etc.

Drilling and set-up controls are logically arranged for maximum efficiency. The most frequently used controls, such as the feed, hydraulic hoists and sliding base levers, are staggered for easier identification and operation.



Optional Features*



Automatic SPT hammer

The CME 140-pound (63.5 kg) automatic hammer gives you extremely consistent and accurate Standard Penetration Test results, meeting all ASTM-D-1586 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 (76.2 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. Several hammers are available, including 110 pound, 170 pound, 300 pound and 340 pound.

Direct Push Hammer

When job specifications demand, you can easily convert your auger rig to a direct push sampling machine. Simply hoist the hammer from its convenient storage rack, mount it on the feed system, connect the two quick-disconnect hydraulic hoses and you're ready to go to work.



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. For efficient operation, the breakout wrench is mounted at the pivot point of the rod holder arm. This gives you a direct, in-line pull to help prevent rod bending when loosening connections.

Several sizes and configurations are available. Rod holder jaws are specific to rod diameter for maximum grip without damaging tool joints.

* Not all optional features are available on all models

More Optional Features*

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.

The angle drilling system will also allow you to drill vertically with the rig positioned on an uphill slope. That can eliminate the time-consuming job of leveling an area for the rig.

And, since the kelly drive is directly connected to the right angle drive box, you can raise or lower the mast with the drive-train already connected and ready to go. The angle drilling drive-line is standard on CME-45C, CME-550X, CME-850X and CME-850XR drills and available as an option on most other models.



Auger storage racks

Several deck options are available, including hydraulically operated racks that slide in and out for easy access to augers.



Water tank / tool box combinations

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

Stainless steel tanks are also available.



Quick mast disconnect

This feature allows you to quickly disconnect the drill 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 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 positive 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 configurations. Or, for larger diameter holes, a 3 1/2 inch O.D. fluted kelly and hydraulic chuck assembly is available.



* Not all optional features are available on all models

CME All-terrain carrier



The CME-800X all-terrain tracked carrier has proven itself in some of the roughest environments imaginable. It is designed to accept just about any piece of equipment normally mounted on a truck, such as digger derricks, man lifts, brush hogs, tree trimmers, or wild-land fire fighting apparatus. The CME-800X has a payload capacity of up to 16,000 pounds (7,258 kg). Ground bearing pressure of a fully loaded vehicle is less than 3.4 psi. That's less than the average man's footstep. It can negotiate soft mud, deep snow or sand. And the walking beam suspension easily climbs over rocks and fallen logs.

A rough-terrain model, the CME-800XR, is also available that features full rubber tracks that won't damage most pavement.



Drilling tools, equipment and supplies

We've got all the tooling and drilling supplies you'll need to get the job done. One toll free phone call can put you in touch with our experienced in-house sales department. It's not only easier than calling multiple sources, it also simplifies billing and accountability. And you'll always get competitive pricing and the highest quality items.





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



CENTRAL MINE EQUIPMENT COMPANY
4215 Rider Trail North, Earth City (St. Louis), Missouri, 63045 USA
Phone: 314-291-7700 ♦ 1-800-325-8827 ♦ FAX: 314-291-4880
E-mail: info@cmeco.com Website: www.cmeco.com

Performance ratings are based on engineering specifications, calculations and accepted industry standards. Capacities may vary according to drilling conditions.
 CME reserves the right to amend these specifications at any time, without notice.

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