

# Setting The Pace

Hydraulic Crawler Drills

ECM-720 | CM-760D | CM-780D



HOLE QUALITY | PENETRATION RATE | ACCESSORY LIFE

*Atlas Copco*

**Atlas Copco**

# Tough Enough To Lead,

## Highest Quality

*Atlas Copco crawler drills are designed and manufactured to the highest quality standards, assuring you the most efficient and reliable drills available anywhere. The Atlas Copco 700 Series crawler DHD and top hammer drills are perfect examples: straight holes and high penetration rates with lower operating, maintenance and parts costs for the lowest cost-per-ton drilled.*



## Speed and Air Capacity

Atlas Copco models CM-760D, CM-780D and ECM-720 crawler drills cover your drilling needs for faster penetration and continuous production in solid rock. These rigs transport easily from site-to-site and arrive ready to get the job done!

Need the speed and capacity of a top hammer drill? Atlas Copco ECM-720 fits the bill. Facing larger hole diameters or deteriorating ground conditions that call for DHD drilling straightness with excellent penetration rates — your best choice is Atlas Copco models CM-760D or CM-780D. Whatever the job, the Atlas Copco 700 Series offers a combination of productivity, reliability and efficiency that can get it done anywhere around the world.



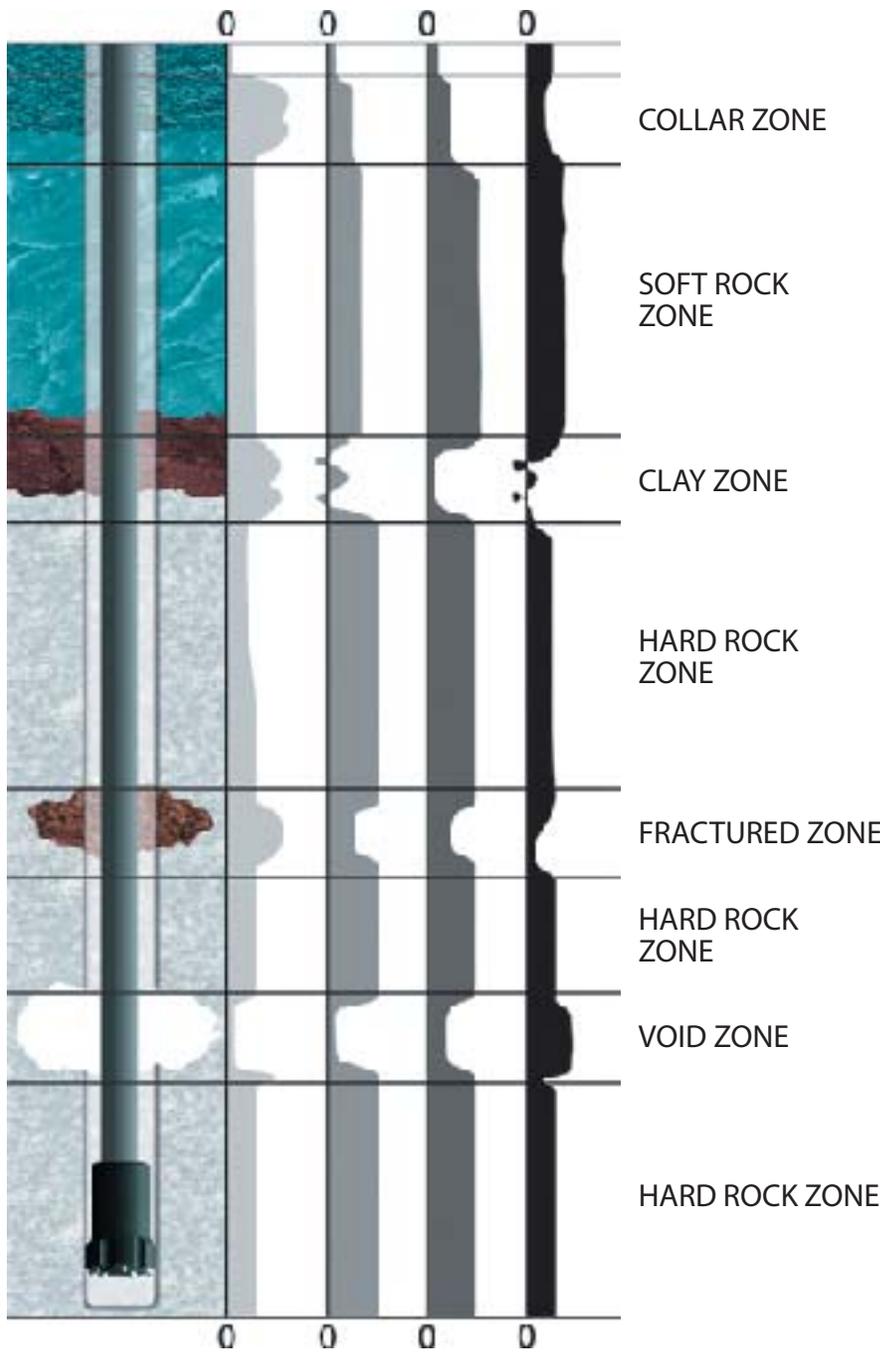
# Rugged Enough To Last

## **Big Job, High Performance**

When faced with difficult jobs that require straight holes and high penetration rates, the Atlas Copco CM-760D and CM-780D can meet the challenge even in poor ground conditions. Depend on best-in-class performance to provide the lowest possible cost with Atlas Copco DHD CM-760D and CM-780D crawler drills.

Wherever you're working, the Atlas Copco 700 Series offers a comprehensive line of drilling equipment that can handle the job demands and your schedule. To complete your drilling requirements, choose from a vast, rugged line of precision-machined and quality-tested Atlas Copco DHD and top hammer accessories for the complete solution to your jobsite needs.





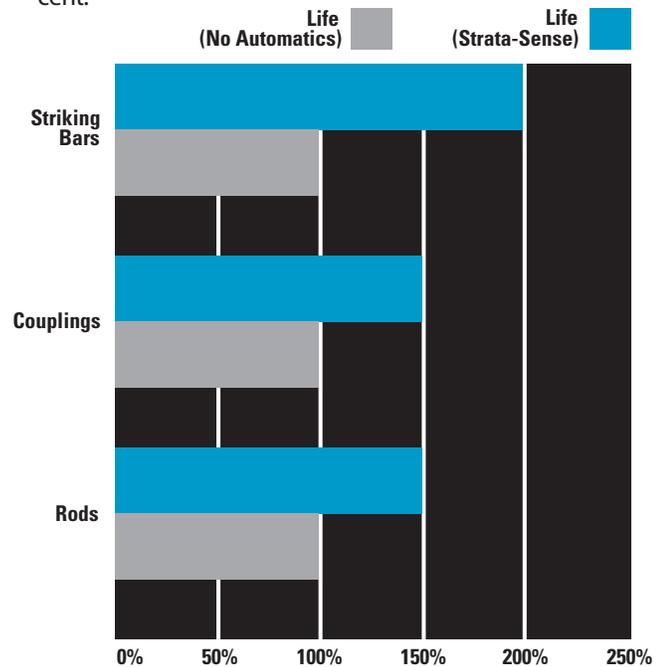
ROTATION PRES-       FEED PRESSURE  
 PERCUSSION PRES-       FEED SPEED

### World-class Drifter Control Technology

Experience powerful drilling with load-sense, progressive-percussion pressure control while the progressive-feed control reduces jamming and senses voids. Automatic reverse percussion, automatic air protection circuit — vital when drilling through clay — and auto-collaring increase productivity.

### Strata-Sense® Drill Automatics

Optimization of drilling speed, hole straightness and trouble avoidance with Strata-Sense® Drill Automatics can increase the life of your drill accessories up to 200 percent.



### High-performance Features

- Function-dedicated pumps provide optimal hydraulic loading
- Thermostatically-controlled fans increase fuel efficiency
- Tier III, electronically-controlled engines
- Start-up features on high-pressure models: unloader valve (reduces engine load that makes cold starts easier) and positive lubrication (reduces premature wear)
- Perimeter access for routine maintenance

### PRO-TECH Advantage

5-year/10,000-hour warranty on all airends when you use genuine Atlas Copco parts, service and fluids.

Atlas Copco is committed to adding **value** to your existing equipment and helping make future purchases a reality.



Take Advantage of the Total Customer Support Experience. Atlas Copco is your number one source for everything from genuine replacement parts and rebuilt hydraulic components to fluids and filtration. You'll find our factory and field equipment specialists to be an invaluable resource well after the sale.

Contact your local Atlas Copco distributor, or visit our Web site for details regarding the support available for your specific equipment.

#### Financing Solutions

Atlas Copco Customer Finance (ACF) wants to make sure you get the most from your investment. Therefore, we offer finance solutions based on our extensive industry and equipment knowledge. The AFC advantage includes competitive interest rates, flexibility, and alternative sourcing designed to build a strong partnership with our customers. For more information, contact your local Atlas Copco Customer Center.

For more information about the 700 Series go to:  
[www.atlascopco.com](http://www.atlascopco.com)

Nothing contained in this brochure is intended to extend any warranty or representation, expressed or implied, regarding the products described herein. Any such warranties or other terms and conditions of sale shall be in accordance with Atlas Copco's standard terms and conditions of sale for such products which are available upon request.

Commitment to innovation is a continuing goal at Atlas Copco. Designs and specifications are subject to change without notice or obligation.

**Atlas Copco**



### Cab Safety, Visibility, Efficiency and Ergonomics

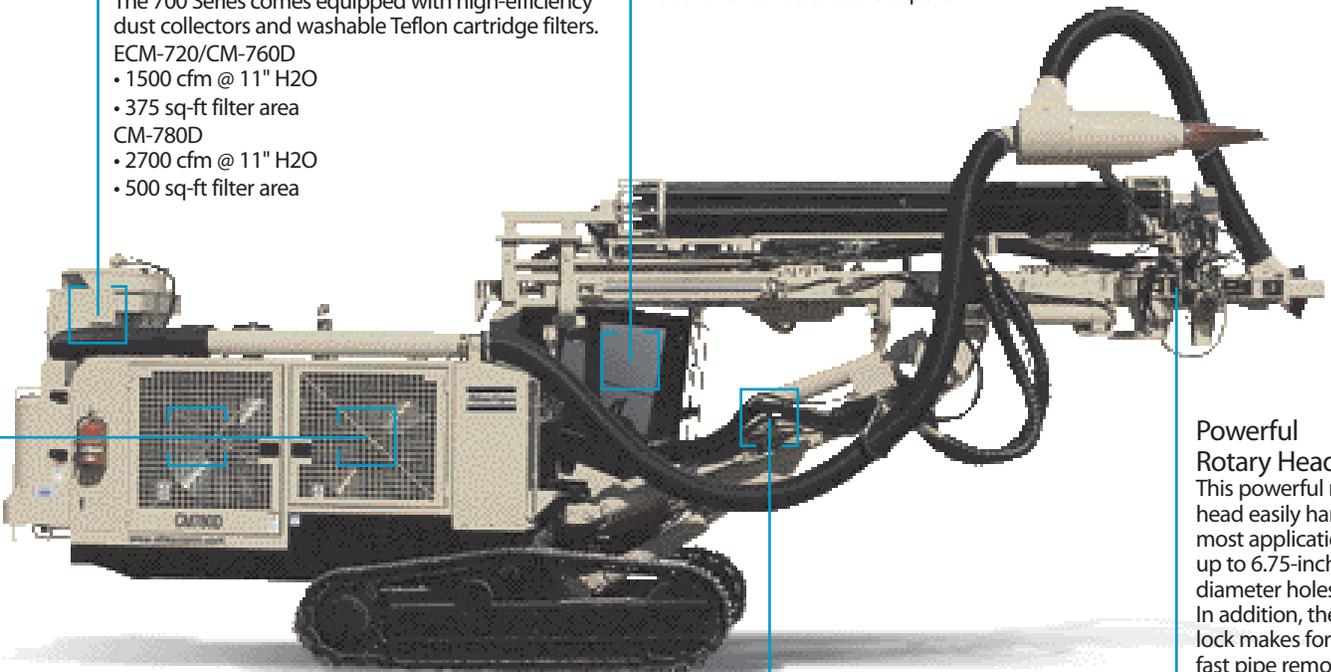
A safe, comfortable cab protects the operator and reduces fatigue, increasing productivity while advanced controls make operations more efficient:

- Shock-mounted, ROPS/FOPS certified cab reduces vibration and noise (maximum 80 dBA) for more operator comfort.
- Tinted, full-front glass and large roof glass give an unobstructed view of the hole and boom during drilling.
- Cab mounted on the main frame, independent of track movement provides operator comfort on uneven terrain.
- Pressurized with external, filtered air with standard heat and AC for optimum operator environment.
- Powerful dust suppression system keeps the air around the drill even cleaner.
- Six-way adjustable, shock-absorbing operator seat provides a relaxed working position.
- Excavator-style joystick for drilling and tramping simplifies operation.
- Full-flow hydraulics boom and guide positioning control is responsive and smooth for quicker set-up between holes.
- Rod changing is simplified with one-lever control.
- Two arm-mounted, hydraulic pilot joystick controls make drilling easy for both the novice and the expert.

### Bigger Dust Collection System

The 700 Series comes equipped with high-efficiency dust collectors and washable Teflon cartridge filters.

- ECM-720/CM-760D
- 1500 cfm @ 11" H2O
  - 375 sq-ft filter area
- CM-780D
- 2700 cfm @ 11" H2O
  - 500 sq-ft filter area



### Powerful Rotary Head

This powerful rotary head easily handles most applications up to 6.75-inch diameter holes. In addition, the rod lock makes for easy, fast pipe removal.

### Variable-speed Fans

- Lower horsepower draw
- Lower fuel consumption
- Lower bystander ambient noise

### Easy Hose Identification

No more time-consuming hose tracking. All hydraulic hoses are tagged on both ends, making identification, maintenance and replacement easy and efficient.





## A Perfect Balance of Productivity and Cost Efficiency

The 700 DTH series drills deliver overall maximum performance with hole straightness, faster penetration rates, long accessory life and increased profitability. The Atlas Copco Drilling Triangle illustrates the balance needed to achieve the lowest overall cost.

### Powerful, Efficient Airend

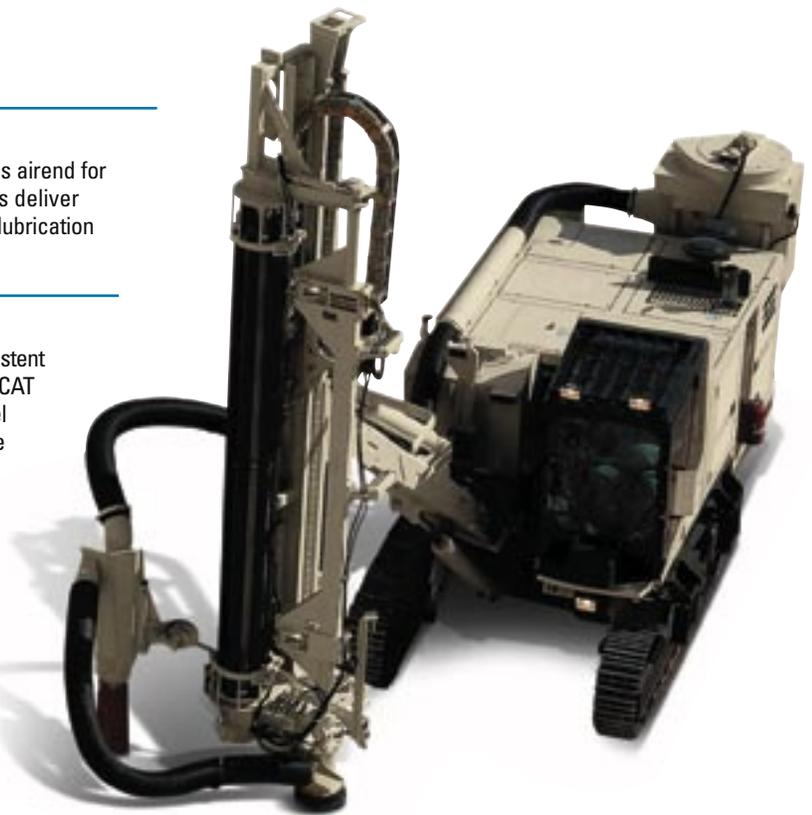
Atlas Copco 700 series DTH drills utilize the high-capacity HR series airend for maximum productivity. The proven and reliable HR series airends deliver 630 cfm–865 cfm @ 350 psi and features no-load start with positive lubrication for efficient, low-cost operation.

### More Torque Means More Work

The simple, direct-drive hydraulic rotary head delivers plenty of consistent torque along with 10,000 lb of feed and pullback force. The rugged, CAT engine delivers the required horsepower and is fed by a 155-gal fuel tank for long working shifts. Servicing 700 series DTH drills is simple with the easy-access enclosure: hinged doors, bolt-on panels and cross-members that can be quickly removed for top and bottom access to power pack. Routine service items are located on the perimeter for ground level service.

### Smooth Operation

The 700 series DTH drills work hard but are a cinch to operate with an easy-to-learn joystick control layout. A single joystick handles the rod changer, and another single joystick controls tramming. Operators particularly like the excellent visibility the 700 series DTH drills provide during both drilling and tramming. The robust undercarriage (with full length rockguards) gets the unit around the toughest site.



### Powerful DTH Technology

The DTH is the perfect choice when drilling deep and large diameter holes. The DTH is also preferred when drilling through extremely broken and fractured rock where flushing requirements are very high — and when noise constraints are present.



### TOTAL DEPTH

The Total Depth series offers performance, reliability and simplicity, making it the best downhole drill available! It delivers superior performance with the lowest upkeep cost and has quickly become the new standard by which all others will be measured.

ENGINE	CM-760D	CM-780D
Type	CAT C-10 Tier II Emission Compliant	CAT C-13 Tier III Emission Compliant
Rated Power	365 hp (272 kW)	445 hp (332 kW)
Operating Speed	1,800 rpm	1,800 rpm
Fuel Capacity	155 gal (587 L)	155 gal (587 L)
Operating Time	8-hour shift without refueling in most applications	
COMPRESSOR		
Type	2-stage HR-2 Rotary Screw	2-stage HR-2.5 Rotary Screw
Volume	630 cfm (17.8 m <sup>3</sup> /min)	865 cfm (24.5 m <sup>3</sup> /min)
Pressure	350 psig (24 bar)	350 psig (24 bar)
Unloader Valve	Reduces engine load at startup; oil pump provides positive lubrication	
BOOM & GUIDE		
Hose Carrier	Double-tier, welded cross member	
Max Boom Swing	45° right / 20° left	
Max Vertical Boom Movement	50° up / 20° down	
Max Guide Swing	90° right / 22° left	
Guide Dump ±	± 90° up / 20° down	
Guide Extension	4' (1,219 mm)	
Pipe Size	4 m available in 3.5" and 4" diameter	
Integral counterbalance valves in boom lift and boom swing cylinders		
HYDRAULIC ROTARY HEAD		
Rod Breaking	Hydraulic rod lock sleeve	
Torque	3,000 ft/lb (4,067 Nm)	4,500 ft/lb (6,101 Nm)
Operating Speed	25-150 rpm	25-70 rpm
GENERAL SPECIFICATIONS		
Gradability	30° (60%)	
Tramming Speed	2.0 mph (3.2 km/hr)	
Ground Clearance	17" (432 mm)	
Track Oscillation	± 10°	
Rod Changer Capacity	6 + 1 (7 + 1 with 3.5" pipe)	
Shipping Dimensions L x W x H	33' 5" x 8' 2" x 12' 4" (1,019 x 249 x 376 cm)	33' 5" x 8' 2" x 12' 4" (1,019 x 49 x 376 cm)
Drilling Depth	90' (27.4 m) [103' (31.4 m) w/ 7 + 1 configuration]	
Operating Weight	49,000 lb (22,230 kg)	
CAB & CONTROLS		
Safety and Comfort	Certified ROPS/FOPS with air conditioning and heat	
Noise Level	80 dBA inside cab	
Controls	Pilot hydraulic drilling and tramming, direct hydraulic positioning	
HYDRAULICS		
Hydraulic System Test Ports for Easy Trouble Shooting		
Hydraulic Centralizer and Sliding Hydraulic Breakout Fork		

**Dust Collection**

- Dust Collector (Washable Dry Filters)
- Pre-skimmer
- Vaposol System — 80 gal Capacity
- Retractable Dust Hood



The 700 Series Drills transport easily from site to site.

