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# FACT SHEET

**Atlas Copco  
CS-1500**

**GEOTECHNICAL  
AND EXPLORATION  
DRILLING RIG**

**GEOMECH AFRICA  
LEVEL 1 - B-BBEE**

[www.geogroup.co.za](http://www.geogroup.co.za)



## About Atlas Copco CS-1500

The Atlas Copco CS-1500 is a trailer-mounted rotary core drill rig used in exploration drilling. The CS-1500 has the capability to drill holes deeper and faster in various geotechnical investigation sectors.

Exploration Drilling is used in the mineral mining sector to probe the contents of known ore deposits or to explore sites for potential geological/commercial value. Exploration drilling allows geologists to extract and examine sample core profiles at the surface with reduced environmental impact and lower costs.



*The GeoGroup CS-1500 is trailer-mounted for easy transport compatibility.*

## Standard Equipment

- Dump mast
- Derrick in 2 sections
- Four Hydraulic Jacks 610 mm (24 in) stroke
- Fuel tank 190ℓ (50 gal)
- Hydraulic P-size holding clamp
- Control panel hydraulic slide
- Hydraulic rod centralizer
- Fuel filter & water separator
- Mud pump hydraulic driven  
Type: FMCW1122BCD  
Max flow: 37 gpm (140 lpm)  
Max pressure: 700 psi (4.9 mpa)
- Single large diameter main hoist sheave  
mast lighting kit

# ATLAS COPCO CS-1500

## Technical Specifications

DEPTH CAPACITY CORING (WIREFINE OR CONVENTIONAL)	B Wireline - 1,370 m (4,500 ft) N Wireline - 1,070 m (3,500 ft) H Wireline - 730 m (2,400 ft) P Wireline - 400 m (1,300 ft) <i>Depth ratings are based on vertical and dry hole</i>	SECONDARY PUMP	2,5000 psi - 8 gpm (17.2 mpa - 30 lpm)	
		AUXILIARY PUMP	2,500 psi - 8 gpm (17.2 mpa - 30 lpm)	
		HYDRAULIC OIL COOLING	Air	
<b>MAIN HOIST</b>				
SINGE LINE CAPACITY	Bare drum 5,443 kg / 12,000 lbd	<b>DRILLHEAD AND SPINDLE SPEEDS</b>		
LINE SPEED	Bare drum 40 m/min (132 ft/min)	POWER	Hydraulic motor - variable speed / reversible	
CABLE SIZE	33,5 m x 14,3 mm (110 ft x 9/16 in)	FINAL DRIVE	4 in HV chain drive in oil bath- 2.5 ration	
<b>WIREFINE</b>				
CAPACITY	1,830 m of 4,76 mm (6,000 ft of 3/16 inch) 975 m of 6,35 mm (3,200 ft of 1/4 in)	SPINDLE	117 mm (4 5/8 in)	
LINE PULL BARE DRUM	1,134 kg (2,500 lb)	<b>SPINDLE SPEEDS</b>		
LINE PULL FULL DRUM	318 kg (700 lb)	GEAR RATIO	SPEED (RPM)	TORQUE, NM (FT LB)
LINE SPEED: BARE DRUM FULL DRUM	119 m/min (390 ft/min) 457 m/min (1,500 ft/min)	1st 6.63:1	130 - 196	4,382 - 3,007 (3,232 - 2,218)
<b>MAST AND FEED SYSTEM</b>				
FEED TRAVEL	3,5 m (11,5 ft)	2nd 3.17:1	270 - 410	2,095 - 3, 007 (1,545 - 1,060)
FEED SPEEDS	Fast and slow with variable control	3rd 1.72:1	500 - 756	1,138 - 780 (839 - 575)
THRUST	5,895 kg (13,000 lb)	4th 1.00:1	857 - 1,300	662 - 454 (488 - 335)
PULL	9,525 kg (21,000 lb)	RANGE SELECTION	Manual control from operator's station	
DRILLING ANGLE	45 degrees	HINGED HEAD	Swing away	
ROD PULL LENGTH	6,09 m (20 ft)	<b>CHUCK ASSEMBLY</b>		
<b>HYDRAULIC SYSTEM</b>				
PRIMARY PUMP	3,500 psi-43 gpm (24.1 mpa - 162 lpm)	TYPE	Hydraulic open, spring closed	
<b>WEIGHT</b>				
		MAXIMUM INSIDE DIAMETER	117 mm (4 5/8 in)	
		HOLDING CAPACITY	18,143 kg (40,000 lb)	
		RIG WEIGHT	6,350 kg (40,000 lb)	



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## The GeoGroup

GeoGroup comprises of a group of companies, each a leader in its own field, providing a range of services to the geotechnical, civil, mining and energy industries.

### CONTACTS

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## About Geomech Africa

Geomech Africa (Pty) Ltd is an industry leader in the geotechnical investigations in Southern Africa. Certified as a **Level 1 B-BBEE** contributor. Providing drilling and testing services to the minerals exploration market, as well as geotechnical and civil industries in and around Southern Africa and Africa.

Geomechanics has long-term policies of developing operational/maintenance staff and upgrading equipment, to ensure that geotechnical investigations conducted for our clients are accurate, timely, cost effective and easily interpreted.

GeoGroup Head Office



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