



## *SOLID DRILLING SOLUTIONS*

**DRILL RIG  
C1000**

**TECHNICAL  
OVERVIEW**





## DRILL RIG C1000



- **MOBILITY** - The C1500 Underground Drilling Rig is equipped with a 360-degree drilling mast. Options are available for skid or crawler travel. Also, as an addition to the crawler, it is possible to equip it with a stand-alone diesel engine.
- **RELIABILITY** - Ease of operation and maintenance maximizes plant convenience and efficiency
- **SAFETY** - The C1500 Underground Drilling Rig is designed for long-term operations, taking into account the prevention of possible safety risks.



## DRILL RIG C1500



**CONTROL PANEL** - FUNCTIONAL PANEL DESIGN, PROVIDES EASY OPERATION.

**HYDRAULIC DESIGN** - LOAD-SENSITIVE HYDRAULIC SYSTEM SUPPORTS ENERGY SAVING.

**MAST** - 360° DRILLING CAPABILITY IN ANY PART OF THE MINE WORKINGS.

**SYNCHRONIZATION** - THE PIPE HOLDER AND ROTATOR WORK SYNCHRONOUSLY THANKS TO THE VALVE BLOCK DESIGN. THIS FEATURE ENSURES FAST AND SAFE DRILLING.



**ROTATION UNIT** - THE FUNCTIONAL DESIGN OF THE ROTATOR ALLOWS WORKING WITH DIAMETERS FROM B TO N

**CATERPILLAR BASE** - WITH OPTION TO DRIVE INDEPENDENT DIESEL ENGINE TO POWER THE TRACK YOU GET MORE FREEDOM OF MOVEMENT IN UNDERGROUND CONDITIONS.





# TECHNICAL INFORMATION C1500

## DRILLING RECOMMENDATIONS

BRO/BO	2900M
NRO/NO	2000M
NROV-WALL™	2300M
HRO/HO	1350M
HROV-WALL™	1500M
PHD/PO	800M
PHDV-WALL™	900M

THE VALUES GIVEN IN THESE TABLES ARE CALCULATED BASED ON THE PULLING FORCE OF THE MAIN WINCH IN WELLS WITH FLUSHING FLUID AND A ROCK STRENGTH OF 5 MPa. THE ACTUAL DRILLING RESULTS DEPEND ON THE DOWNHOLE TOOL USED, ITS CONDITION, THE EQUIPMENT USED, THE FLUID LEVEL IN THE WELL AND THE DRILLING TECHNIQUES.

DISEL ENGINE	CUMMINS, FORD, VOLVO, DEUTZ
POWER (AT 1800RPM)	153-194kW (203 hp.)

## RATED TORQUE AND SPEED

1ST GEAR	122-199 RPM	5322-3254 Nm
2ND GEAR	245-410 RPM	2648-1620 Nm
3RD GEAR	439-714 RPM	1486-908 Nm
4TH GEAR	769-1250 RPM	849-519 Nm

ACCORDING TO THE INFORMATION GIVEN, THE SPEED AND TORQUE AT THE OUTPUT OF THE HEAD IS ADJUSTED STEPLESSLY IN EACH GEAR RANGE. THE ACTUAL SPEED IS DETERMINED BY THE ENGINE SPEED AND THE VOLUME SETTING OF THE HYDRAULIC MOTOR.

## ГИДРАВЛИЧЕСКАЯ СИСТЕМА

**MAIN PUMP** VARIABLE DISPLACEMENT AXIAL PISTON PUMP WITH LOAD SENSING, PRESSURE COMPENSATION AND LOW PRESSURE IDLE.

MAX. FUEL CONSUMPTION 190l/m

MAX. PRESSURE (FACTORY SETTING) 28MPa

**SERVICE PUMP** VARIABLE DISPLACEMENT AXIAL PISTON PUMP WITH LOAD SENSING, PRESSURE COMPENSATION AND LOW PRESSURE IDLE.

MAX. CONSUMPTION 65l/m

MAX. PRESSURE 20MPa

**AUXILIARY PUMP** VARIABLE DISPLACEMENT AXIAL PISTON PUMP WITH LOAD SENSING, PRESSURE COMPENSATION AND LOW PRESSURE IDLE.

MAX. CONSUMPTION 90l/m

MAX. PRESSURE 18MPa

TANK CAPACITY 400l

## DRILLING MAST AND FEED SYSTEM

FEED WAY 3,35m

FEED FORCE (MAX.) 213.7Kn

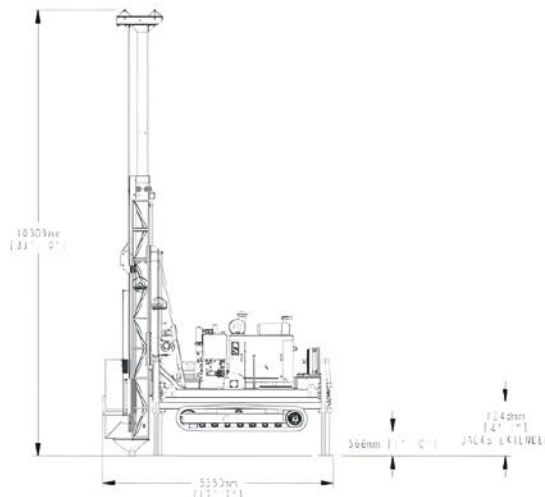
FEED POINT (MAX.) 108,4Kn

DRILL ROD LENGHT 3m or 6m

DRILLING ANGLE 45° FROM HORIZONTAL TO 90° VERTICAL DOWNWARD

LOWERING THE MAST (QUICK FEED) 2,34m

TELESCOPIC MAST RELATED







# TECHNICAL INFORMATION C1500

## ROTAYION UNIT MODULE ROD HOLDER

ROTATION ENGINE REXROTH

### TRANSMISSION NUMBERS

1ST GEAR 6.27:1

2ND GEAR 3.12:1

3RD GEAR 1.75:1

4TH GEAR 1.00:1

FINAL GEAR ROLLER CHAIN DRIVE

NUMBER OF GEARS 02:01

HEAD OPENING LATERAL DISPLACEMENT METHOD - HYDRAULIC DRIVE

HYDRAULIC CLAMPING CHUCK PQ HYDRAULIC SPRING-OPERATED OPENING. AXIAL LOAD CAPACITY 18,143kr

NUMBER OF GEARS 1-2,5

DRILL HEAD HYDRAV. OPENING BY SPRINGS. 224,000N AXIAL LOAD CAPACITY

OIL FILTRATION FOR DRILL HEAD LUBRICATION SUCTION OIL FILTER FILTERS OUT PARTICLES AS SMALL AS 25micron

### MAIN WINCH

FREIGHT WINCH SINGLE-SPEED ENGINE.

HOOK LOAD (ONE-PIECE ROPE)

EMPTY DRUM 35m/sec

MAIN WINCH ROPE 15mm or 18mm

MIN. BREAKING POWER 226.0 kN

NOTE: DO NOT USE MULTI-COMPONENT ROPES ON THE MAIN WINCH, USE SINGLE-COMPONENT ROPES ONLY

## ROTAYION UNIT MODULE ROD HOLDER

TYPE HYDRAV. OPENING, CLOSING WITH GAS SPRINGS

MAX. INNER DIAMETER 210mm (8,3in)

LOAD CAPACITY 13,000kg (28,660lb)

ROPE PULLING FORCE EMPTY DRUM 12 kN

ROPE PULLING FORCE FULL DRUM 2.2 kN

ROPE SPEED EMPTY DRUM 123m/cek

ROPE SPEED FULL DRUM 321m/cek

DRUM 4.8mm (3/16") STAMPED 1890M

NOTE: THE ROPE LENGTH IS SPECIFIED WHEN ORDERING

ADDITIONAL EQUIPMENT AND AUXILIARY EQUIPMENT SKID FRAME, WHEELED FRAME, REMOTE CONTROL PANEL, HYDRAULIC GENERATOR, DRILLING MUD MIXER,

### DIMENSIONS AND WEIGHT

CRAWLER WEIGHT 12 000kg

OVERALL WIDTH 2350MM

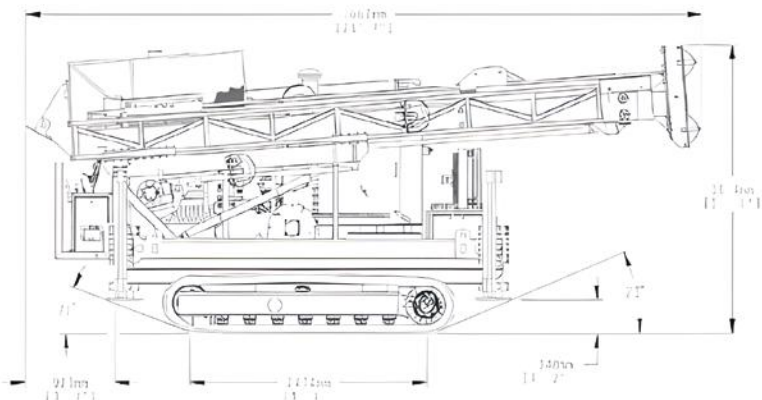
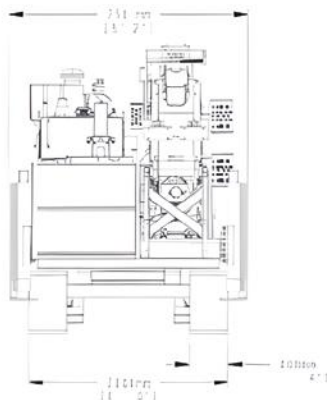
OVERALL LENGTH 6950MM

GENERAL EIGHT 2550MM

TANK CAPACITY 400L

BATTERY 24V

MAX. SPEED 2.4km/h







*SDS*







# SDS

## SOLID DRILLING SOLUTIONS

### OUR BRANCHES

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