



*SOLID DRILLING SOLUTIONS*

DRILL RIG  
C1000

TECHNICAL  
OVERVIEW





## DRILL RIG C1000



- **MOBILITY** - The C1000 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 C1000 Underground Drilling Rig is designed for long-term operations, taking into account the prevention of possible safety risks.



## DRILL RIG C1000



**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 C1000

## DRILLING RECOMMENDATIONS

BRO/BO	1540M
NRO/NO	1000M
NROV-WALL™	1200M
HRO/HO	700M
HROV-WALL™	800M
PHD/PO	375M
PHDV-WALL™	475M

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)	153kW (203 hp.)

## RATED TORQUE AND SPEED

1ST GEAR	117-196 RPM	5513-3051 Nm
2ND GEAR	245-410 RPM	2445-1459 Nm
3RD GEAR	451-756 RPM	1326-792 Nm
4TH GEAR	776-1300 RPM	771-460 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.

## HYDRAULIC SYSTEM

**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 243l

## 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<sup>0</sup> FROM HORIZONTAL TO 90<sup>0</sup> VERTICAL DOWNWARD

LOWERING THE MAST (QUICK FEED) 2,34m

TELESCOPIC MAST RELATED





# TECHNICAL INFORMATION C1000

## ROTATION UNIT MODULE

ROTATION ENGINE REXROTH or PARKER

### TRANSMISSION NUMBERS

1ST GEAR 6.63:1

2ND GEAR 3.17:1

3RD GEAR 1.72:1

4TH GEAR 1.00:1

FINAL GEAR GEAR ACTUATOR WITH GEARBOX IN OIL BATH

NUMBER OF GEARS 1-2,5

HEAD OPENING LATERAL DISPLACEMENT METHOD - HYDRAULIC DRIVE

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

NUMBER OF GEARS 1-2,5

DRILL HEAD HYDR. SPRING-OPERATED OPENING. AXIAL LOAD CAPACITY 18,143kg

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

## ROD HOLDER

TYPE HYDR. OPENING, CLOSING WITH GAS SPRINGS

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

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

ROPE PULLING FORCE EMPTY DRUM 11.9 kN

ROPE PULLING FORCE FULL DRUM 3.0 kN

ROPE SPEED EMPTY DRUM 114m/sec

ROPE SPEED FULL DRUM 453m/sec

DRUM 4.8mm (3/16") STAMPED 1830m

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 10 000kg

OVERALL WIDTH 2400mm

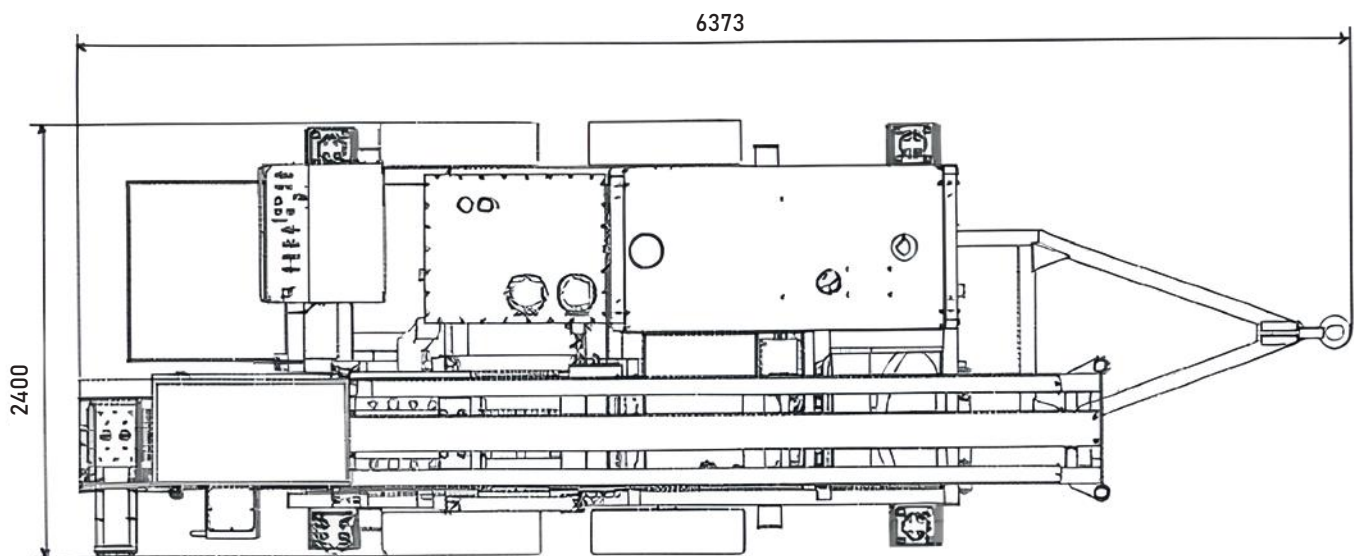
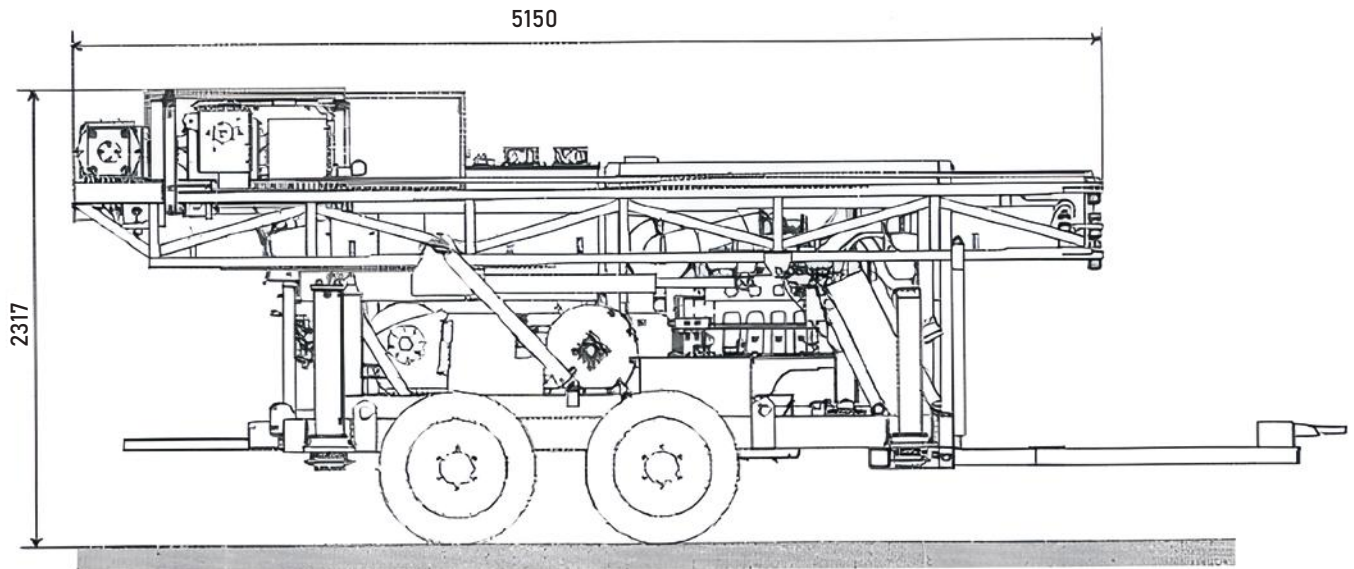
OVERALL LENGTH 6900mm

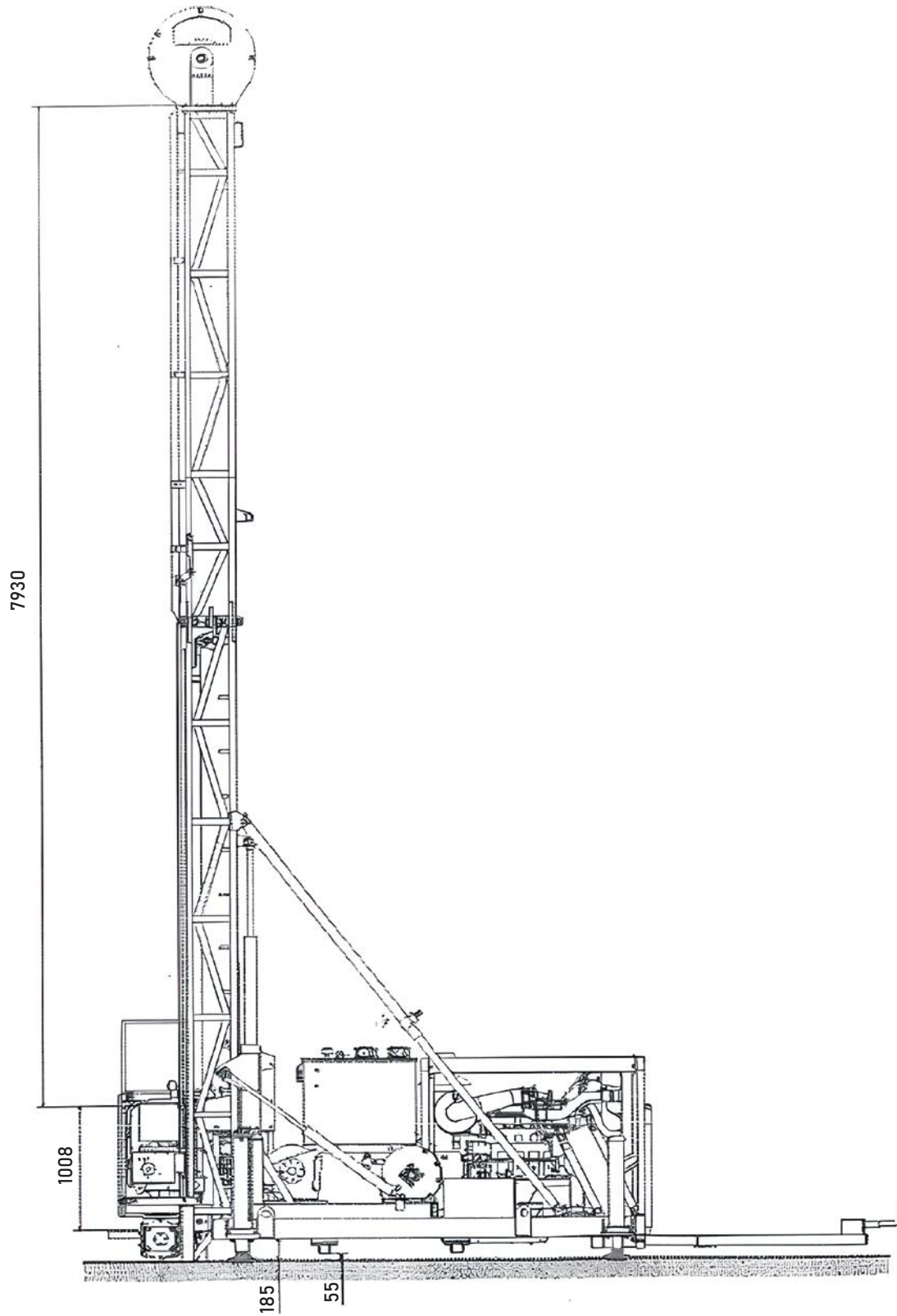
GENERAL EIGHT 2300mm

TANK CAPACITY 243l

BATTERY 24V

MAX. SPEED 2.2 km/h







# SDS

## SOLID DRILLING SOLUTIONS

### OUR BRANCHES

BRANCH IN KAZAKHSTAN  
SOLID DRILLING SOLUTIONS - QAZAQSTAN",  
050059, AL-FARABI AVE. 7 NURLY TAU BUSINESS  
CENTER 5A, OFFICE. 171  
PHONE: +7 727 225 00 04  
EMAIL: INFO@SOLIDDRILLING.KZ

HEAD OFFICE IN TURKEY  
SDS MÜŞAVIRLIK MÜHENDISLIK İMALAT İTH.  
İHR. SAN. VE TİC. LTD. ŞTİ.  
GOLDEN TOWER, MEHMET AKIF ERSOY MAH.  
287. SOK. NO:7 /50 KAT:9 06200  
YENİMAHALLE ANKARA / TURKEY  
PHONE: +90 312 354 83 27  
FAX: +90 312 354 83 27  
E-MAIL: INFO@SOLIDDRILLING.COM

BRANCH OFFICE IN RUSSIA  
SOLID DRILLING SOLUTIONS - RUSSIA", 109428,  
RUSSIA, MOSCOW, UL.  
RYAZANSKY PROSPEKT 8A,  
BLDG. 1, OFFICE 422.  
PHONE: +7 925 800 08 52  
EMAIL: INFO@SOLIDDRILLING.RU

[www.soliddrilling.com](http://www.soliddrilling.com)