



SOLID DRILLING SOLUTIONS

DRILL RIG
C1000

TECHNICAL
OVERVIEW





DRILL RIG C1000



- **MOBILITY** - The C1000 Drilling Rig is equipped with a mast with the possibility of unloading. 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 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.

DIESEL 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° FROM HORIZONTAL TO 90° 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

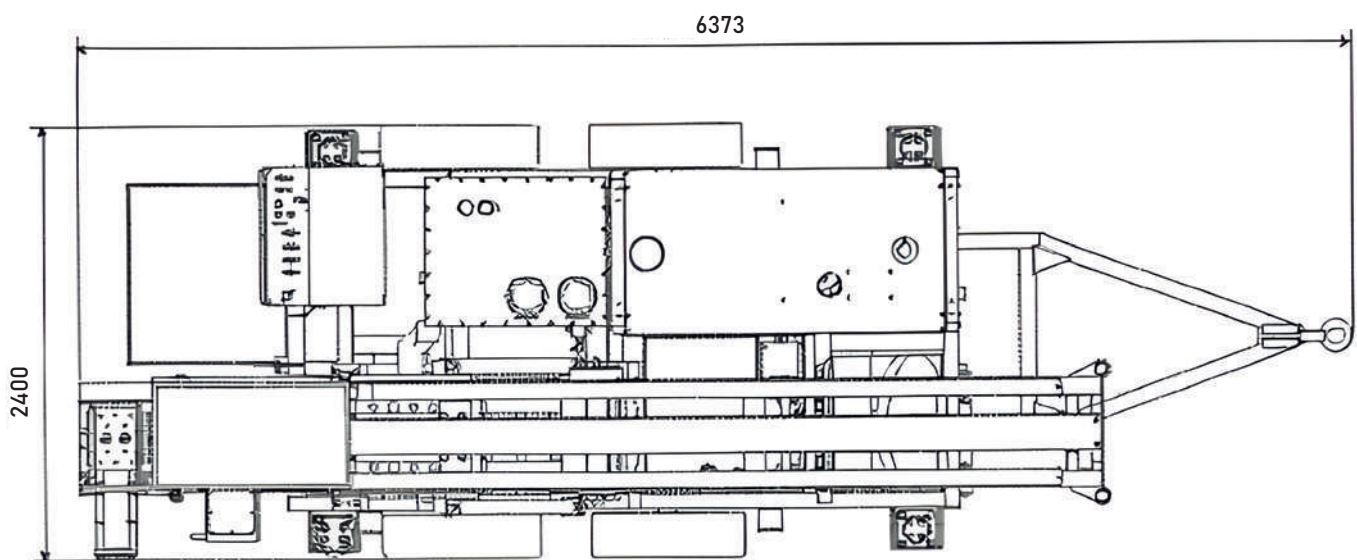
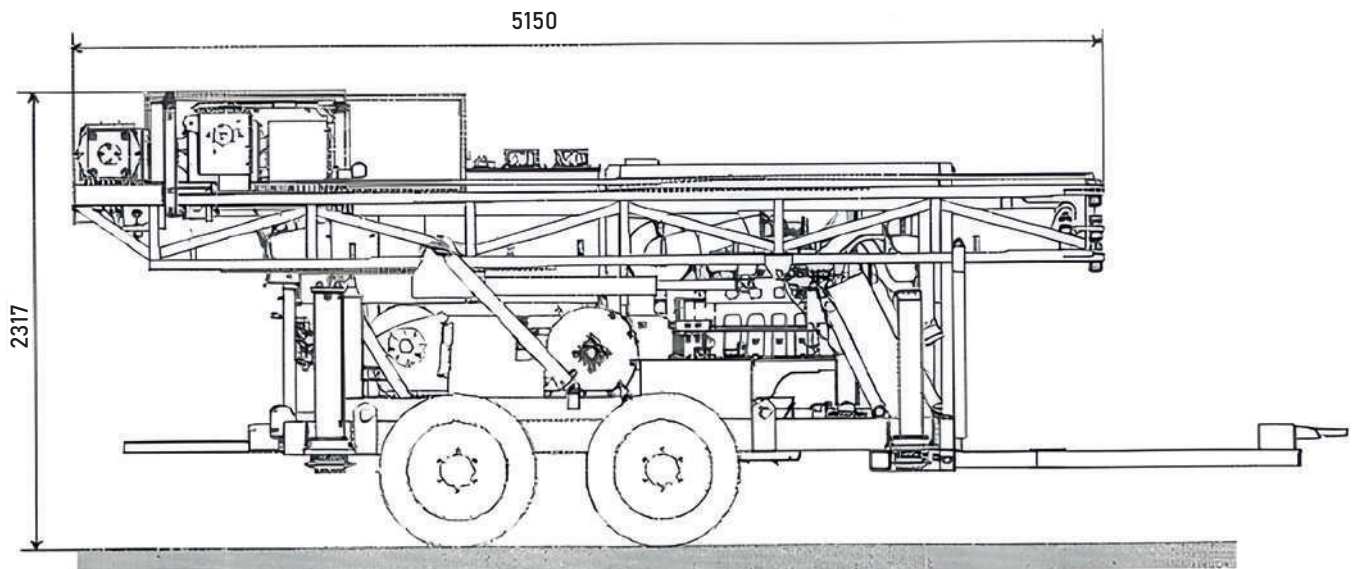
TYPE	HYDR. OPENING, CLOSING WITH GAS SPRINGS
MAX. INNER DIAMETER	210mm (8,3in)
LOAD CAPACITY	13,000kg (28,660lb)
ROPE PULLING FORCE	EMPTY DRUM 11.9 kN
ROPE PULLING FORCE	FULL DRUM 3.0 kN
ROPE SPEED	EMPTY DRUM 114m/sec
ROPE SPEED	FULL DRUM 453m/sec
DRUM 4.8mm (3/16") STAMPED	1830m

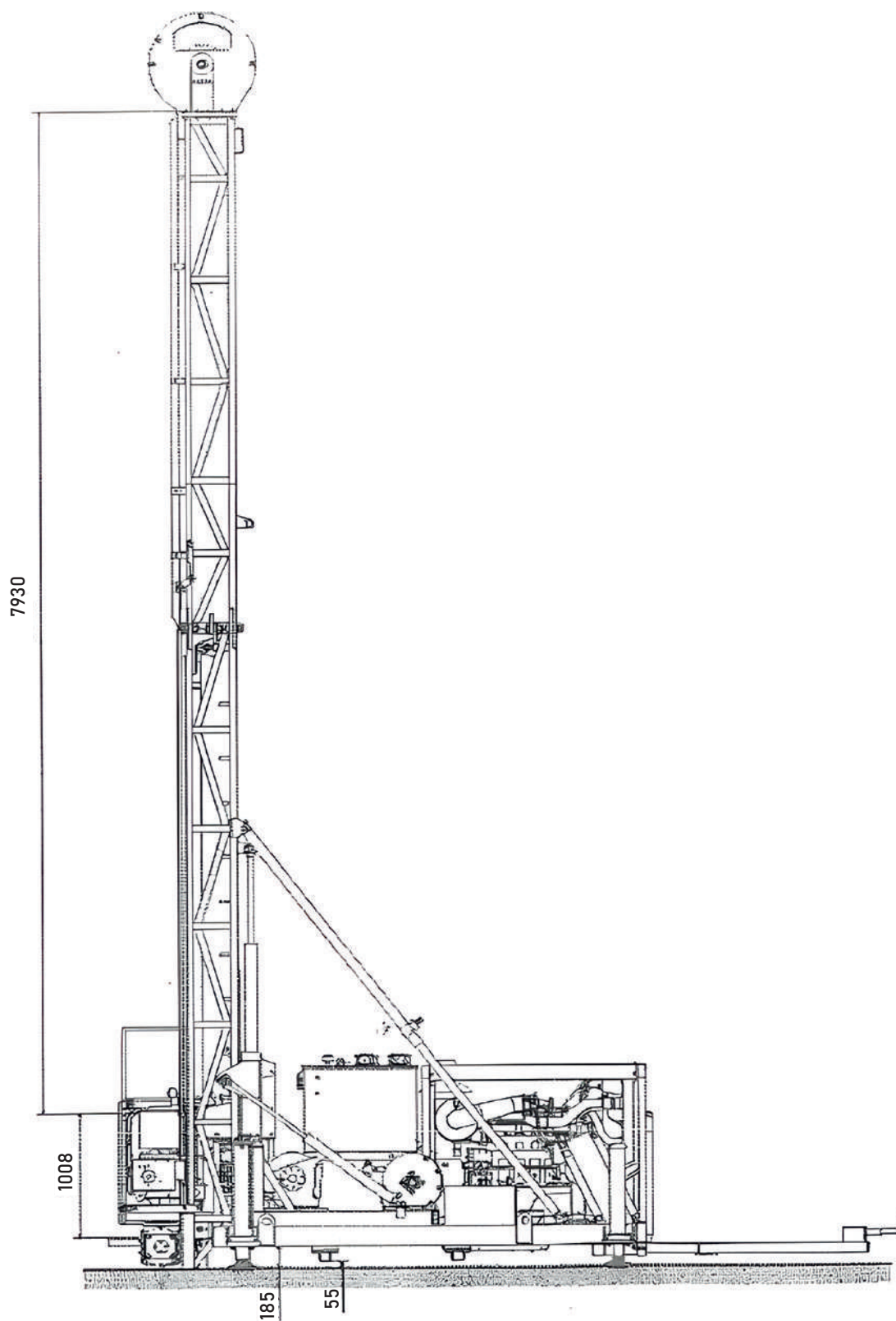
NOTE: THE ROPE LENGTH IS SPECIFIED WHEN ORDERING

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 MÜHENDİSLİK İMALAT İTH.
İHR. SAN. VE TİC. LTD. ŞTİ.
GOLDEN TOWER, MEHMET AKİF 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