

Off-Road Exploration Drill Rig

Geomachine's GM200GL is the right choice for exploration drilling at sites with difficult access. The rig's specially designed boom makes it the best tool both for ore sampling from rock surface as well as diamond coring in several hundred meters deep.

GM200GL

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 Geomachine

Goes where the others don't

What makes GM200GL so superior is its versatility, off-road capability and usability. The rig performs flawlessly in varying soil and difficult terrain conditions and reaches the places that no other rig can. Rig is designed to make the explorer's work easier, safer and more productive.

Versatility

GM200GL's exploration boom has a dual drill table, allowing quick and easy switch between drilling methods. The correct rotation unit configuration is selected based on used equipment and the target drilling depths. Chuck's maximum diameter of 77,5 mm enables drilling with various equipment. With an extension boom also wireline equipment can be used.

Safety and comfort

Rig has a working platform and rod magazine which enable easy operations in different boom angles. Advanced safety features make working fluent and safe.

Emission-free

When a drilling rig is equipped with a hybrid unit, its power source can be changed from diesel engine to electric motor and majority of rig's operations can be completed without emissions.





Double Drill Table Features

	Left	Right
Rotation unit	V500 / V700	V900
Rotation speed	V500: 0-90 rpm, V700: 0-70 / 0-35 rpm	0-1900 / 0-600 rpm
Max Torque	V500: 2800 Nm, V700: 3250 / 6200 Nm	240 / 740 Nm
Equipment	Soosan SQ35 hammer V700 option Doofor 550	Hydraulic chuck, max diameter 77,5 mm
Options	Different adapters and water hose connections based on used equipment	Epiroc U4, SPT/DSPT Unit, CPTu equipment, Field vane test equipment, GM V800 T56

Exploration Boom Specs

BOOM PERFORMANCE	
Feed type	Direct cylinder feed
Feed length	3500 mm
Lifting capacity	14 ton
Feedforce	9 ton
Movement speed	0,2 m/s down, 0,15 m/s up
Mast vertical displacement	1500 mm
Mast Tilting	10 degrees front and side ways
Rod locks	Hydraulic opener, roll lifter
Min. Hydraulic Oil flow	200 l/min
Min. Hydraulic pressure	200 bar
Weight (depends on configuration)	2000 kg
BOOM OPTIONS	
Mast winch	Electrical, 363 kg
Light rod opener	●
Galge	●
Roll lifter	●
Wireline winch	●
Boom extension	●

Carriage Specs

MAIN DIMENSIONS

Weight	ca. 10 ton
Length	610 cm
Width	240 cm
Height	265 cm
Ground clearance	480 mm

POWER PACK AND HYDRAULICS

Engine type	Cummins
Engine power	140 kW
Fuel tank	200 litres
Hydraulic pumps	2 pcs (load sensitive)
Hydraulic tank	280 litres

TRACKS

Tracks	400 mm rubber belts with steel profiles
Driving motors	2 pcs
Wheels	8 pcs (2 track pairs)
Tensioning	Hydraulic
Travelling speed	0-6 km/h

STANDARD EQUIPMENT

Compressor	5,0 m3 / 7 Bar
Waterpump	90 Bar / 60-142 L/min
Winch	Hydraulic (8160/13600 kg)
Motor heater	Electric 220 V & Eberspächer
Rod magazine	Hydraulic
Warning and working lights	Led
Manual flushing valve with flow and pressure meter	●
Tool cabinets	All with locks
Bulldozer blade, Vise, Hitch, Fire extinguisher	●
Electricity outlets	2X24 V

OPTIONS TO CARRIAGE

Hybrid readiness	●
Hybrid	400 V
Extra battery pack	121 kWh
Generator	220 V
Hydraulic grinder	Dynaset
Spray rinse system	●
Hydraulic outlet	●
Fuel pump	●
Electric valve for flushing air and water	●
Additional rod magazine on bulldozer blade	●
Additional box for inner rods (1m)	●
Hydraulic waterhose reel	●
Heated waterpump cabin	●
Working Platforms with safety cage	●
Rubber tracks	400 mm wide



Intelligence that makes difference

In exploration drilling, information is the product.

Geomachine's GMTracker data-logger informs the explorer of the machine and site characteristics and stores the drilling data in the GMCloud service for later analysis.

In addition to being a data storage, the GMCloud is also helpful in work planning. It allows the necessary sampling coordinates to be transferred directly to the drill rig, making it easy to navigate the machine to the desired site.

Drilling methods, automation and IOT

INVESTIGATION METHODS

Core sampling in rock	Equipment with OD smaller than 77 mm
Casing drilling	Through demanding ground
Sampling (SU, NI, NE)	Sampling in deep soil layers
Percussion drilling (PO)	Demanding applications
Groundwater standpipe (VP)	Demanding ground formations
DTH Drilling (DTH)	With DTH equipment
Static (dynamic) penetration test; SPT and DSPT (HP)	With attachment

CONTROL SYSTEM AND DATA MANAGEMENT

Control system	IQAN
Remote operation	Scanreco
Automation	Automated drilling programs, Mast automatic erection
Safety mode	Secure operation mode for rod handling
Datalogging	GM Tracker with needed sensing as standard, support for EURO code methods
Cloud service	Integrated inspection data, fleet maintenance and workflow management





Contact us!

We would be more than happy to provide you with more information on our products, services, and innovations. Our complete contact information can be found at www.geomachine.fi.

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Geomachine is part of the Tampereen Konepajat Oy Group