

METADRILL

Efficient Drilling. Precise Results.



MULTI -PURPOSE GEO TECHNICAL & EXPLORATOIN RIGS

CORING | ROTARY | CONTINUOUS FLIGHT AUGER | SPT

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METALLURGY & DRILLING FZE-UAE

METALLURGY AND DRILLING FZE

Metallurgy and Drilling FZE was founded in 2019, dedicated to deliver the best line of drill and test rigs. More than five years of designing and testing were conducted before the brand name METADRILL saw the light. Our facility is equipped with the right technology to manufacture a multitude of quality products specifically designed for the geotechnical & mineral exploration industries. METADRILL is located at Sharjah airport international free zone, SAIF ZONE, Sharjah, U.A.E. We have accomplished so much over the years with great success stories thanks to our engineering division having the right knowledge to conquer every obstacle. Besides, manufacturing of rigs, METADRILL have been able to provide technical solutions and trainings to our clients which improved drilling productivity and safety.

MADE IN UAE

METADRILL's engineering division takes care of the rig design, modeling and design validation using latest 3D analysis softwares. All the rigs are manufactured in our facility at SAIF Zone, Sharjah, UAE. We have developed the right knowledge to understand customer applications and requirements and we make sure that our partners are delivering the best quality for optimum reliability.

VISION

Become a leader in the Geotechnical & Mineral Exploration Industries. We aim to develop and implement the latest technology to add value to our clients and achieve maximum levels of drilling safety and sustainability.

MISSION

We are confident that by understanding client's needs we can provide high quality equipment and accessories for geotechnical & mineral exploration industries with creative approach, within budget & with best market lead time. We always plan to gain customer satisfaction and to be a trusted & preferred partner for their most challenging projects. Our aftersales team is always ready to assist 24/7 and give technical solutions for better productivity and higher efficiencies.

Why METADRILL

Because there is no business without customers, we respect our core values and we believe that sustaining a healthy corporate culture where trust, respect, communication and integrity are keys to success.

You can rely on us! We commit and always accept our responsibility for our actions. Our people are highly trained to handle most complex projects with a mindset to maximize customer values.

METADRILL invested in aftersales division to support you around the globe to keep you up and running. METADRILL supplies many drilling tools to the geotechnical drilling industry and rotary drilling. We have carefully chosen our partners because performance, reliability and overall tool life are the key factors that show METADRILL rigs real capacities and result a precise quality sampling and a lower overall drilling costs per meter.

PRODUCT RANGE



METADRILL

Drilling Rigs

Application	:	Surface Exploration
Drill rod size	:	PO/ HQ / NQ
Maximum depth	:	PQ-400 m; HQ-600 m; NQ-1000 m
Prime mover	:	256 hp
Rotary head	:	Torque: 825 - 5172 Nm
Speed	:	110 - 1200 rpm
Rod handling	:	3 m rod handling
Pull up force	:	12000 kgf
Pull down force	:	8000 kgf
Water pump	:	Displacement of 165 lpm with 50 bar pressure
SPT	:	Automatic SPT Hammer (Optional)

Metadrill MD1000N Exploration Rig



Application	:	Surface Exploration
Drill rod size	:	PO/ HQ / NQ
Maximum depth	:	PQ-250 m; HQ-400 m; NQ-600 m
Prime mover	:	143 hp
Rotary head	:	Torque: 309 - 4000 Nm
Speed	:	86 - 1200 rpm
Rod handling	:	3 m rod handling
Pull up force	:	7000 kgf
Pull down force	:	3500 kgf
Water pump	:	Displacement of 165 lpm with 50 bar pressure
SPT	:	Automatic SPT Hammer

Metadrill MD600N Geotechnical Rig

Application	:	Surface Exploration
Drill rod size	:	PO/ HQ / NQ
Maximum depth	:	NQ-150 m; HQ-100 m; PQ-80 m
Prime mover	:	120 hp
Rotary head	:	Torque: 531 - 2787 Nm
Speed	:	125 - 798 rpm
Rod handling	:	1.5 m rod handling
Pull up force	:	5000 kgf
Pull down force	:	2500 kgf
Water pump	:	Displacement of 80 lpm with 30 bar pressure
SPT	:	Automatic SPT Hammer

Metadrill MD150N Geotechnical Rig

Application	:	Surface Exploration
Drill rod size	:	PO/ HQ / NQ
Maximum depth	:	PQ-30 m; HQ-45 m; NQ-75 m
Prime mover	:	84 hp
Rotary head	:	Torque: 2000 Nm
Speed	:	0 - 100 rpm
Rod handling	:	1.5 m rod handling
Pull up force	:	2500 kgf
Pull down force	:	1500 kgf
Water pump	:	Displacement of 80 lpm with 30 bar pressure
SPT	:	Automatic SPT Hammer

Metadrill MD75N Geotechnical Rig

DRILLING TOOLS & ACCESSORIES

Geotechnical Bits

Geotechnical drilling is a method of investigating subsurface physical properties of soils to provide data for engineering design prior to construction of buildings, dams, roadways and other infrastructure sites.

METADRILL provides the right knowledge to correctly choose the type of bit to be used for higher success and higher drilling productivity. We offer a wide range of geotechnical drilling bits and choosing the correct bit depends on many variables like ground hardness, ground variability, type of drill rig and many other factors.

All our manufactured bits conform to accepted drilling industry standards and accommodate various types of geology:

- Impregnated diamond type for hard rock formations
- Surface set diamond type for medium-hard conditions
- Polycrystalline diamond type for soft-medium conditions (TSP & PCD).
- Tungsten carbide type for very soft conditions.



DTH-Down the Hole

A down-the-hole drill, usually called DTH, is basically a jackhammer screwed on the bottom of a drill string. The fast hammer action breaks hard rock into small cuttings and dust that are evacuated by a fluid (air, water or drilling mud).

It relies on three elements for drilling holes: bit loading (weight), rotation and air. These active elements combine to be efficient at crushing rock.

We have a wide range of Down-the-hole drilling hammers and bits size varreying from 2 ½ Inch to 18 Inch drilling, special sizes will be available against request.



TOP HAMMER

With DTH drills, the hammer is placed down-the-hole at the bit level but in top hammer drilling, the activity is concentrated at the top of the drill string, above the hole, as a hammer transmits cyclical shock waves to the drill bit by applying a percussive force on the drill rods or tubes. Our Top Hammer drill rods are manufactured from alloy, high-strength, and 100% recycled steel, and you find them in hexagonal and round configurations. Developed and designed to give you straighter holes with less deviation and longer service life, we focus on increasing your overall performance.



Rotary Drilling

Rotary drilling is used to form a deep observation borehole or for obtaining representative samples of rock.

When it comes to rotary drilling bits, we give you the highest performance, reliability and availability. Your first in choice for drilling. We offer top-of-the-line tricone drill bits. Our product line promises the highest performance, reliability, and availability. This effectively results in a lower drilling cost. Our bits are designed to increase bit life even further where the application presents restrictions to drilling.



Drill Rods

Either you are performing conventional or Wireline drilling, METADRILL can offer you all your drilling accessories. METADRILL offers conventional AWJ, BWJ, and NWJ drill rod. This taper threaded rod is the workhorse of the Geotechnical and Environmental industries. The exceptional durability of METADRILL WJ rod can be attributed to the high strength alloy steel and the superb plasma arc welding process. The combination of the best materials and the industry's strongest weld means unequaled reliability in the field.

METADRILL is your experienced supplier of wireline coring tools and casings. We supply a standard range of wireline drill rod with great following advantages

1. Increased thread life
2. Reduced thread damage
3. Greater drilling depth
4. Manufactured from high carbon steel
5. Improved tensile strength
6. Heat-treated for added durability and life



PARTS & EQUIPMENT'S



MUD PUMPS

We supply both progressing cavity pumps and Triplex piston mud Pumps as per the drilling application and drilling depth required.

Triplex Piston Mud Pumps

For drilling companies with the need to pump slurries with bentonite, concrete, and other thick mud, METADRILL triplex, high pressure piston mud pumps are the ideal choice for long life and minimal maintenance.

Maximum fluid Pressure 50Bar



Progressive cavity screw mud pumps

The screw pumps is an ideal mud pump to transport drilling fluid to the centrifuge. Due to its unique advantages of high viscosity fluid transport, it is widely used in mining industries.

Maximum fluid Pressure 18 Bar



FOOT CLAMPS & BREAKOUT ASSEMBLIES

With a maximum of 8.8" ID for casings and min 2.5" ID for drill rods METADRILL offers a great breakout assembly with a set of 2 rod holder assemblies. The breakout assembly is a perfect way to maximise productivity and reduce manpower efforts while performing rod handling/removing operations.

AUTOMATIC SPT HAMMER

The SPT Hammer is an effective tool to collect Standard Penetration Test (SPT) blow counts with almost any drill rig. The SPT Hammer is designed as a non-permanent fixture to the rig structure (or permanent if required), and is suspended from your wireline as per the manual SPT Hammer.

Automatic Standard Penetration Test Unit is available with 63.5 Kg Drop Hammer Falling Height 760 mm & 1-30 blows/min. Incorporates a separate single acting cylinder to lift the Hammer

KEY FEATURES

- Complete hydraulic function with fully concealed moving parts.
- Considerable safety advantages and hands free operation.
- Regular consistent results.
- Flexibility of non-permanent fixture maintained.
- Interchangeable "thread stubs" allow suitability to all pipe variations.
- Extremely robust design for long service life.

OUR SERVICES

Technical Solutions – Health & Safety

We provide complete training for operations & drilling producers, to improve the productivity by educating the driller for the selection of accurate drilling string with respect to the applications.

We offer technical solutions to maximise drilling productivity by educating the driller to control drilling speeds, increase penetration and control weight on bit to preserve bit life.

METADRILL is committed to safe drilling and can offer on-site and offsite trainings to ensure that there will be no mis use for drilling rig equipment and operators are complying 100% to safety standards to prevent accidents from occurring.

Rig Audit, Modification & Refurbishment Works

Metadrill offers site visits, client audits at work place and provides rig modification works such as upgrading mud pumps, winches, rotation heads as per customer requirement after studying rig capabilities. Our technicians are skilled and can take care of refurbishment, repair works, machining service, fabrication, painting, equipment strip down, overhaul, assembly and testing.



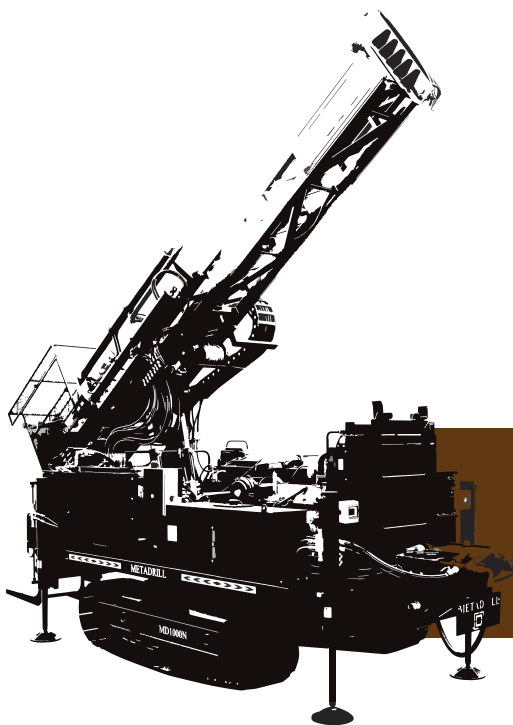
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RIG GLOBAL PRESENCE



India
Kuwait
Saudi Arabia
Mozambique
★ REPRESENTATIVE



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