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HDD RIG



ZT-16

Main Technical Parameters	
Max Torque	4500 N.m
Max Pulling Force	160KN
Max Thrusting Force	160KN
Pulling Speed	0-60M/min
Engine	97kw/2200Rpm
Max Mud Pump Displacement	180L/min
Max Mud Pump Pressure	8Mpa
Walking Speed	1.5-2.5km/h
Entry Angle	8-20°
Weight	7500kg
Dimension(mm)	4200×2000×2300
Rod Size	Φ60x 2000mm
Reamer Size	Φ200-500mm

Scan for operation video.



ZT-32KF

Main Technical Parameters	
Max Torque	12000N.m
Max Pulling Force	320 KN
Max Thrusting Force	320 KN
Pulling Speed	0-50M/min
Engine	153kw/2200Rpm
Max Mud Pump Displacement	250/320L/min
Max Mud Pump Pressure	8Mpa
Walking Speed	2-4km/h
Entry Angle	8-20 °
Weight	8500kg
Dimension(mm)	6200×2280×2500
Rod Size	Φ73x3000mm
Reamer Size	Φ200-800mm

Scan for operation video.



ZT-42

Main Technical Parameters	
Max Torque	18500 N.m
Rotation Speed	0-165rpm
Max Pulling Force	420/840 KN
Max Thrusting Force	420/840 KN
Pulling Speed	0-50M/min
Engine	179kw/2200Rpm
Max Mud Pump Displacement	450L/min
Max Mud Pump Pressure	8Mpa
Walking Speed	2.3km/h
Entry Angle	8 -20°
Weight	14000kg
Dimension(mm)	6980x2280x2500
Rod Size	Φ83x3000mm
Reamer Size	Φ200-900mm

Scan for operation video.



ZT-45/90CDF

Customized Supreme Version

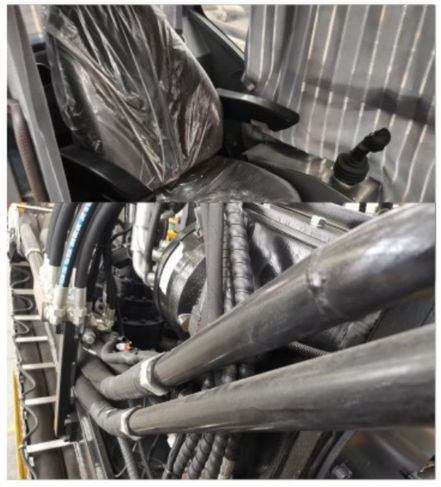
Main Technical Parameters	
Max Torque	25000N.m
Rotation Speed	0-170rpm
Max Pulling Force	450KN-900KN
Max Thrusting Force	450KN-900KN
Pulling Speed	0-22M/min
Engine	194kw/2200Rpm
Max Mud Pump Displacement	600L/min
Max Mud Pump Pressure	10Mpa
Walking Speed	2.5-3.25km/h
Entry Angle	13-20°
Weight	16300kg
Dimension(mm)	8930x2300x2520
Rod Size	Φ89x4570mm
Reamer Size	Φ200-1000mm

Scan for operation video.

HDD RIG









ZT-55/110CDF

Main Technical Parameters	
Max Torque	28000N·m
Rotation Speed	0-170Rpm
Max Pulling Force	550/1100KN
Max Thrusting Force	550/1100KN
Pulling Speed	0-50M/min
Engine	194kw/2200Rpm
Max Mud Pump Displacement	650L/min
Max Mud Pump Pressure	10Mpa
Walking Speed	2.5-3.25km/h
Entry Angle	8 -20°
Weight	16000kg
Dimension(mm)	7350x2230x2350
Rod Size	Φ89x3000mm
Reamer Size	Φ300-1000mm

Scan for operation video.



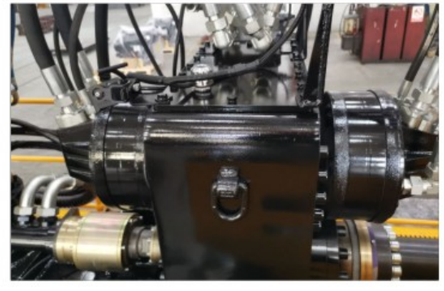
ZT-75/150

Main Technical Parameters	
Max Torque	34000N.m
Rotation Speed	0-140Rpm
Max Pulling Force	750KN-1500KN
Max Thrusting Force	750KN-1500KN
Pulling Speed	0-50M/min
Engine	221KW/2200Rpm
Max Mud Pump Displacement	850L/min
Max Mud Pump Pressure	10MPa
Walking Speed	2-3km/h
Entry Angle	8-20°
Weight	18860kg
Dimension(mm)	9900x2550x2670
Rod Size	Φ102x4500mm
Reamer Size	Φ300-1000mm

Scan for operation video.









HDD RIG



ZT-100/150A

Main Technical Parameters	
Max Torque	45000 N.m
Rotation Speed	0-125Rpm
Max Pulling Force	1000/1500KN
Max Thrusting Force	1000/1500KN
Pulling Speed	50M/min
Engine	264kw/2100Rpm
Max Mud Pump Displacement	950L/min
Max Mud Pump Pressure	10Mpa
Walking Speed	3km/h
Entry Angle	10-18°
Weight	27900kg
Dimension(mm)	10500/12170x2690x3000
Rod Size	Φ114/127x4500/6000mm
Reamer Size	Φ300-1200mm

Scan for operation video.



ZT-525

Main Technical Parameters	
Max Torque	160000 N.m
Rotation Speed	0-110Rpm
Max Pulling Force	5250KN
Max Thrusting Force	5250KN
Pulling Speed	0-25M/min
Engine	336kw/2100Rpm*2
Max Mud Pump Displacement	3000L/min
Max Mud Pump Pressure	15Mpa
Walking Speed	1.5km/h
Entry Angle	8°- 15°
Weight	58000kg
Dimension(mm)	19500X3200x3500
Rod Size	Φ168x9600mm
Reamer Size	Φ500-2000mm

Scan for operation video.



ZT-36AT

Main Technical Parameters	
External Torque	15000N.m
Inner Torque	2700N.m
External Rotation Speed	0-190Rpm
Inner Rotation Speed	0-195Rpm
Max Pulling Force	360KN
Max Thrusting Force	360KN
Pulling Speed	0-20M/min
Cummins Engine	179kw/2200Rpm
Max Mud Pump Displacement	400L/min
Max Mud Pump Pressure	10Mpa
Walking Speed	2-4km/h
Entry Angle	8-20°
Weight	14500kg
Dimension(mm)	8350x2280x2500
Inner Rod Size	Φ50x3000mm
External Rod Size	Φ89x3000mm
Reamer Size	Φ200-900mm

Scan for operation video.



ZT-75/150AT

Main Technical Parameters	
External Torque	35000N.m
Inner Torque	4700N.m
External Rotation Speed	0-170Rpm
Inner Rotation Speed	0-180Rpm
Max Pulling Force	750-1500KN
Max Thrusting Force	750-1500KN
Pulling Speed	0-50M/min
Cummins Engine	264kw/2100Rpm
Max Mud Pump Displacement	800L/min
Max Mud Pump Pressure	10Mpa
Walking Speed	2.5km/h
Entry Angle	12-22°
Weight	24500kg
Dimension(mm)	10500x2500x2700
Inner Rod Size	Φ60x4000mm
External Rod Size	Φ102x4000mm
Reamer Size	Φ300-1000mm

Scan for operation video.

HDD RIG



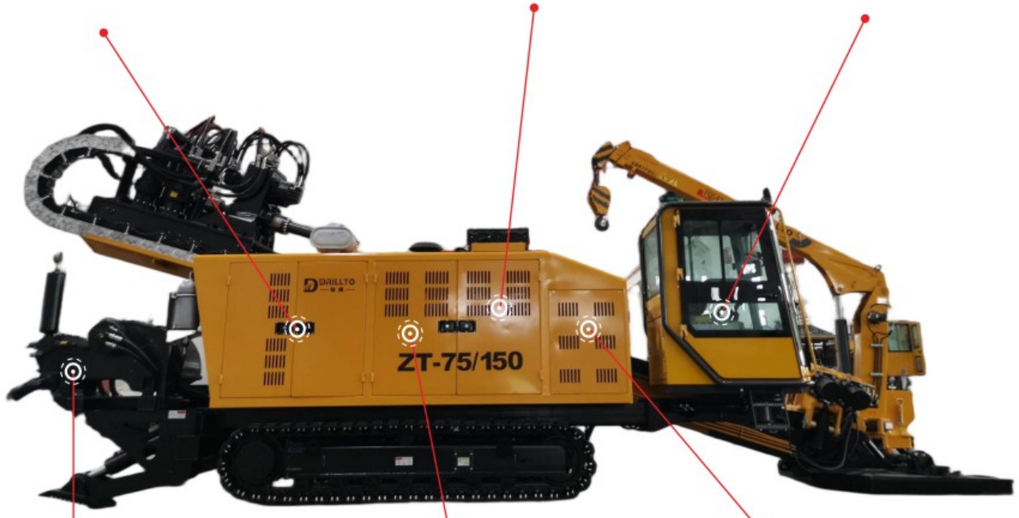
Powered by a Dongfeng Cummins diesel engine, it has strong power, reliable performance, low noise, and low fuel consumption.



The main rotating pump adopts a Danfoss hydraulic pump and a closed-loop system, featuring high precision and strong stability.



The operation is user-friendly. The German Jessman multi-functional joystick can be operated with both hands without leaving the joystick.



The mud displacement is accurately adjusted to any value within the range according to the construction needs, which has a significant effect on saving mud during construction and preventing drill bit balling.

The push-pull and auxiliary systems adopt load-sensitive systems, which have high transmission efficiency, low heat generation, and low oil temperature.

The push-pull belt anti-rebound system effectively prevents damage to hydraulic components caused by excessive rebound force.









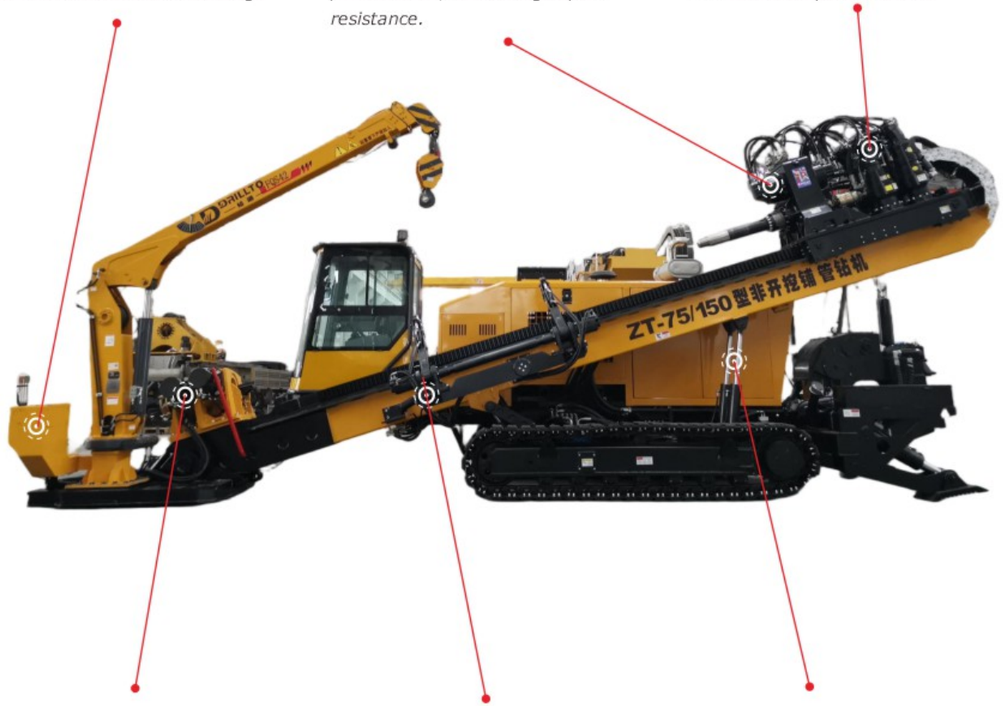
It comes with a onbroad crane, which makes loading and unloading drill pipes convenient and labor-saving.



The rotary motor uses a Poclain motor, featuring low-speed high-torque performance, and strong impact resistance.



The reducer adopts Italy's Dinamic brand, an international brand known for its reliable performance.



Equipped with large diameter clamp oil Cylinder, high wrench breakout torque.

Equipped with a rotating robotic arm, or optionally fitted with a drill pipe box, it offers higher safety and efficiency.

The application of a four-link mechanism enables a wider range of construction angle adjustments, a larger incident angle, and deeper drilling, making it suitable for flexible construction plans.







HDD TOOLINGS

DRILL PIPE



INTRODUCTION

Since 2004, Drillto rod factory was put into use, Drillto has completed its production and marketing from HDD rig to drill pipe and drill tools, providing customers with one-stop shopping experience, strict control of rods raw material, overal heat treatment makes the microstructure uniform, thread surface coating hardness treatment ensure stable quality and durability.







Model	Rig Capacity reference	size	Thread Type	Joint OD (mm)	length (m)	weight (Kg)	Bend Radius (m)	Ft of rod to bend 90 degrees	Max Angle in degrees /rod	Max % slope % rod	Torque Rating (NM)	thickness (mm)
single rod	ZT-21A	Φ60×3000mm	D24	67	3	33	40	62.8	4.3	7.5	8635	6.5
single rod	ZT-32KF	Φ73*3000mm	API NC23	81	3	46	52	81.6	3.3	5.8	15132	8
single rod	ZT-35/55F	Φ76*3000mm	D50	83	3	56	54	84.7	3.2	5.6	18458	9.8
single rod	ZT-42	Φ83*3000mm	D80	92	3	60	55.1	86.5	3.1	5.5	21267	9.19
single rod	ZT-45/90CDF	Φ89*4500mm	D80	92	4.57	96	60	94.1	4.4	7.6	32898	9.8
single rod	ZT-50	Φ89*3000mm	NC31	105	3	72	62	97.3	2.8	4.8	22800	9.8
single rod	ZT-50	Φ89*4500mm	NC31	105	4.5	102	62	97.3	4.2	7.3	22800	9.8
double rod	ZT-36/72AT	Φ50×3000mm	D13	52.5	3	25	37.8	59.3	4.5	8	4150	6.5
		Φ89*3000mm	NC31	103	3	69	62	97.3	2.8	4.8	21500	9.8
double rod	ZT-75/150AT	Φ102*4000mm	NC38	127	4	44.3	72	113.0	3.2	5.6	54080	9.19
		Φ60*4000mm	65/8FH	N/A	4	123	40	62.8	5.7	10	8635	6.5
single rod	ZT-75/150	Φ102*4500mm	NC38	127	4.5	129	73	114.5	3.5	6.2	54080	9.19
single rod	ZT-100A	Φ114×6000mm	NC38	127	6	167	80	125.5	4.3	7.5	54526	9.19
single rod	ZT-180/240	Φ127*6000mm	NC50	168	6	240	89	139.6	3.9	6.8	73686	9.19
single rod	ZT-350	Φ140*9600mm	51/2FH	190	9.6	433	102	160.0	5.4	9.4	100936	10.54
single rod	ZT-525	Φ168*9600mm	51/2FH	216	9.6	530	127	199.3	4.3	7.6	146790	10.54
single rod	ZT-800	Φ194*9600mm	65/8FH	216	9.6	770	148	232.2	3.7	6.5	223455	12
single rod	ZT-1200	Φ219*9600mm	75/8FH	254	9.6	895	174	273.0	3.2	5.5	290949	12

REAMERS

FLUTED REAMER



- ***Efficient Chip Removal***
  Spiral flow-channel design enables rapid discharge of mud and cuttings, preventing blockage.
- ***Smooth Borehole Wall***
  Flow-channel plates trim the borehole wall, creating a smooth surface and reducing collapse risk.
- ***Precise Guidance***
  Guide tubes or flow-channel boxes extend the axial distance, ensuring high alignment with the previous-stage borehole axis.

FLY CUTTER REAMER



- ***Strong Cutting Ability***
  Equipped with tungsten carbide cutting teeth, suitable for multiple formations with high cutting efficiency.
- ***Efficiently fracture***
  The rotary reamer's tungsten carbide cutting teeth efficiently break up hard, dense ground by rotating and cutting, while squeezing the hole wall for increased stability.
- ***Replaceable Nozzles***
  Top-mounted nozzles can be interchanged to adjust spray angles and flow rates for different construction needs.

PIATE-STYLE BARREL REAMER





- ***Large Cutting Edge***
  Characterized by plate-type large cutting edges, enabling high drilling efficiency and staged reaming.
- ***Extrusion Correction***
  Barrel structure compresses and corrects the borehole wall, enhancing stability.
- ***High Buoyancy***
  Greater buoyancy than ordinary reamers reduces sinking and improves reaming performance.

REAMERS

BARREL REAMER



- ***Wall Stabilization & Diameter Preservation***
  Barrel extrusion stabilizes the borehole wall; wear-resistant surfacing maintains diameter and trims the wall.
- ***Reverse Reaming Capability***
  Rear end cover welded with tungsten carbide blades (large taper conical surface) facilitates reverse reaming in case of collapse.
- ***Simple Structure***
  Robust and easy-to-maintain design with minimal components.

ROLLER REAMER



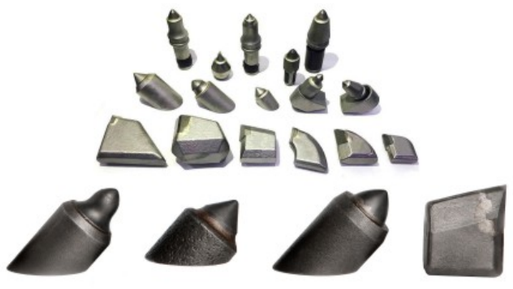
- ***Wide Formation Adaptability***
  Suitable for all rock formations (from soft to hard), offering strong geological adaptability.
- ***High Strength & Wear Resistance***
  Rigid design; inserted tungsten carbide teeth on rollers feature high hardness and extended service life.
- ***Safety Assurance***
  Sealed bearings and other designs reduce failures, enabling easy reverse withdrawal.

COMPACT REAMER



- ***High-efficiency Hole Formation***
  Exerts pressure to displace soil laterally, forming large-diameter holes faster than conventional methods.
- ***Borehole Wall Strengthening***
  Compaction during extrusion enhances wall stability, reducing collapse risk, especially in soft formations.

DRILLING TOOTH



We offer a variety of reamer teeth types, all crafted from high-hardness and wear-resistant materials. With sharp cutting edges, these teeth can efficiently break through rock and soil layers. Tailored to different geological conditions, each type of reamer teeth features unique arrangements and angular designs, which significantly reduce drilling resistance and substantially enhance reaming efficiency. Whether encountering hard rock formations or soft soil layers, our reamer teeth can adapt stably, ensuring that reaming operations are carried out efficiently and rapidly.

BOTTOM HOLE ASSEMBLY

DRILLING BLADE



INTRODUCTION

We offer a wide range of directional drill bits to ensure successful drilling operations across various geological conditions.





BOTTOM HOLE ASSEMBLY

TRICONE BIT



Milled-teeth bits deliver cost efficiency in soft to medium-hard formations with self-sharpening properties that reduce adhesive sticking risks, while tungsten carbide insert (TCI) bits excel in granite/flint formations with 3-5x extended wear life and fracture-resistant designs.
Metal-sealed bearings withstand temperatures >150°C (>302°F) and pressures >25,000 psi, achieving zero mud intrusion (failure rate <0.1%) through nanoscale sealing for sustained high-RPM performance.

Milled teeth tricone bit

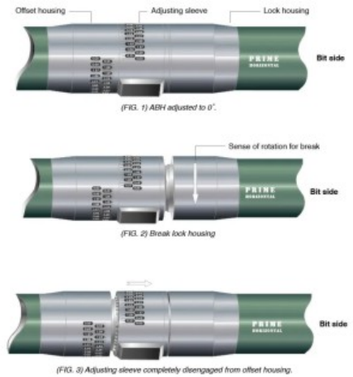
Model	IADC115/ 15 1/2"	IADC217/ 8 1/2"	IADC127/ 9 1/2"	IADC117/ 8 3/4"
IADC	115	217	127	117
Drill Pressure (KN/mm)	0.3-0.75	0.4-1.0	0.35-0.9	0.35-0.9
Drill Speed (r/min)	180-60	100-60	150-70	150-70
Buckle type	7 5/8"API REG	4 1/2"API REG	6 5/8"API REG	6 5/8"API REG
Application	Suitable for very soft formations with low compressive strength and high drillability, such as clay, mudstone, chalk, etc.	For soft to medium strata with low compressive strength such as medium-soft shale, medium-soft limestone, medium-soft sandstone and soft substrates with hard interbedding	Suitable for low compressive strength, high drillability in soft formations such as mudstone, gypsum, saltstone, soft shale, soft limestone	Suitable for very soft formations with low compressive strength and high drillability, e.g. clay, mudstone, chalk etc

Tungsten carbide insert (TCI) tricone bit

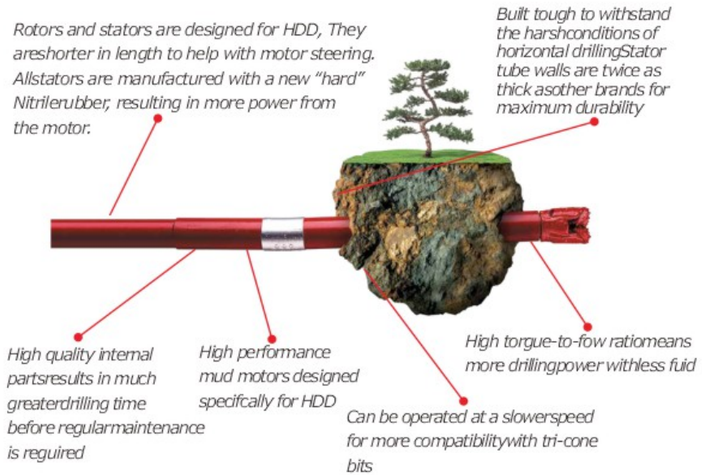
Model	IDAC 437/ 12 1/4"	IADC 517/ 8 1/2"	IDAC 537/ 12 1/4"	IADC 617/ 8 3/4"	IADC 637/ 8 3/4"
IADC	437	517	537	617	637
Drill Pressure (KN/mm)	0.35-0.9	0.35-1.0	0.45-1.0	0.5-1.1	0.5-1.1
Drill Speed (r/min)	240-70	220-60	220-50	180-40	180-40
Buckle type	6 5/8"API REG	6 5/8"API REG	6 5/8"API REG	4 1/2"API REG	4 1/2"API REG
Application	Suitable for very soft formations with low compressive strength and high drillability such as clay, mudstone, chalk, gypsum, salt rock, soft shale, soft limestone, etc.	Suitable for soft formations with low compressive strength such as mudstone, gypsum, saltpeter, soft shale, soft limestone etc.	For soft to medium sub-basements with low compressive strength, such as medium-soft shale, medium-soft limestone, medium-soft sandstone and medium strata with effective hard abrasive interlayers	Hard formations with high compressive strengh,such as sand stone,limestone, dolomite,hard gypsum, marble,etc.	Suitable for hard formations with high compressive strength such as sandstone, limestone, dolomite and hard gypsum, marble.

MUD MOTOR

The mud motor is the core component for power transmission in horizontal directional drilling rigs. Driven by high-pressure drilling fluid, it converts the hydraulic pressure energy into mechanical energy. With a compact structure and high torque, it can stably deliver power under complex geological conditions, precisely control the direction of the drill bit, and significantly improve the drilling efficiency and construction accuracy.



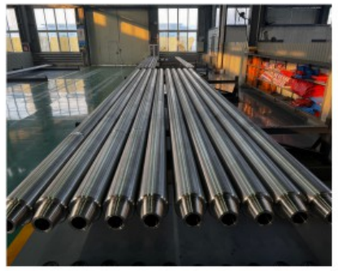
Adjustable Bend Housing（ABH）

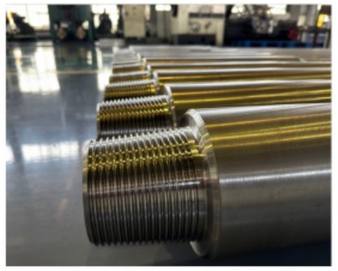


Model	Tool OD		Bit size		Connecting Thread		Flow Rate		Rotory speed
	mm	in	mm	in	up	down	lpm	gpm	RPM
LZ95-4.0	95	3¾	118-149	4⅝ -5⅞	2⅞ REG	2⅞ REG	190-567	50-150	202-606
2LZ120-4.0	120	4¾	149-200	5⅞ -7⅞	3½ REG	3½ REG	568-1136	150-300	225-450
2LZ127-8.0	127	5	149-200	5⅞ -7⅞	3½ REG	3½ REG	378-1136	100-300	185-556
LZ1165-4.0	165	6½	200-251	7⅞ -9⅞	4½ REG	4½ REG	375-1235	100-350	160-563
LZ172-3.0	172	6¾	213-251	8⅜ -9⅞	4½ REG/ 4½ LF	4½ REG	946-1893	250-500	249-498
2LZ178-8.0	178	7	213-251	8⅜ -9⅞	4½ REG/ 4½ IF	4½ REG	946-1893	250-500	192-384
LZ197-7.0	197	7¾	251-311	9⅞ -12¼	6⅝ REG	6⅝ REG	1136-2271	300-600	275-550
4LZ203-6.0	203	8	251-311	9⅞ -12¼	6⅝ REG	6⅝ REG	1136-2650	300-700	94-220
3LZ244-5.0	244	9⅝	311-445	12¼-17½	6⅝ REG (7⅝ REG)	6⅝ REG (7⅝REG)	1893-3785	500-1000	105-210

BOTTOM HOLE ASSEMBLY

NON-MAGNETIC DRILL COLLAR





The non-magnetic drill collar is made of special non-magnetic materials, which can effectively avoid magnetic interference with measurement-while-drilling instruments, ensuring the accuracy and reliability of measurement data during directional drilling. It features high strength and wear resistance, enabling it to operate stably in deep and complex stratum environments and ensuring that the borehole trajectory can be accurately controlled.

PDC BIT







The PDC bit, namely the Polycrystalline Diamond Compact bit, has ultra-hard diamond compacts embedded on its surface. With extremely strong cutting ability, it can quickly break various types of rocks and soil layers. Its unique cutter blade design can reduce drilling resistance, minimize bit wear, and is suitable for a variety of geological conditions, greatly improving the hole formation speed and quality.

OTHER TOOLS

THREE JAW BITS



It can well adapt to not only relatively soft soil layers and sand layers, but also rock layers with medium hardness or even relatively high hardness.

SAVER SUB



Effectively reduces drill string wear, provides equipment protection during operations, extends the service life of drilling tools, and lowers maintenance costs.

DOUBLE PIN / DOUBLE BOX SUB



Provide flexible connection solutions, support quick assembly and disassembly, ensure firm and reliable interfaces, and enhance construction efficiency.

AUXILIARY TOOLS



We offer various types of accessories required for horizontal directional drilling (HDD) operations, including pipe caps, U-clamps, and other auxiliary tools.

BENT SUB



Precisely controls the borehole trajectory direction, facilitating directional drilling operations. Meets angle adjustment needs for horizontal drilling, inclined construction, etc.

WEEPER SUB



Through an integrated technical cycle of "while-drilling grouting → dynamic wellbore stabilization → precision control", the grouting sub mitigates risks of pipe sticking, drill string seizure, and borehole collapse during horizontal directional drilling (HDD) in ultra-long, complex formations. It serves as a critical component for ensuring safety in extended-reach drilling operations.

OTHER TOOLS

ROLLER CRADLE



Introduction

- *The cradle design provides quick disassembly for transit and storage.*
- *Polyurethane-coated rollers ride over weld seams easily eliminates any type of damage of pipe coating.*
- *Designed load capacity insures safe handling of heavy wall pipe.*
- *Springs are used between rollers which allow rollers to align themselves depending on load.*
- *All springs and axles are zinc plated to prevent corrosion.*
- *Replacement urethane cradle rollers available.*

ROLLER STAND



The Roller stand is an essential piece of equipment for anyone working with heavy pipes in an industrial setting. Its ability to provide support, reduce manual labor, and protect pipes from damage make it an invaluable tool that can help to improve efficiency, reduce costs, and ensure the safety of workers. Whether used in small-scale projects or large industrial installations,the Roller Stand is a reliable support system that can help to get the job done right.



GUIDANCE SYSTEM

- Wirless locating guidance

FALCON+ ADVANTAGE

NEW BENEFITS TO FALCON TECHNOLOGY

Increased depth and data range – 180/220 ft (55/67m) combined with more frequencies to get more jobs done.

Quick Scan Pair - With just two clicks, it's now easier to scan, pick and pair your locator to custom frequencies.

Multi-power - Three easily selectable power modes for deeper bores, longer battery life, and faster data rates.



DIGITRAK® F5+ EXCLUSIVE

THE SAME FALCON F5 YOU KNOW, PLUS MORE

Packed with over 1000 frequencies for the lowest, highest, and widest range of bands.

Drill under reinforced concrete confidently with our industry exclusive Sub-k™ Rebar transmitter.

Reduce risk of inadvertent returns with our patented real-time down hole fluid pressure monitoring.

Map your bore while drilling with iGPS and easily generate professional as-built reports with the LWD App.

MOST ADVANCED LOCATOR

Interference is the biggest obstacle in HDD locating. The Falcon F5+ has the broadest range of frequencies of any locator on the market. The ultra-low frequencies of our Sub-k™ Rebar transmitter enable accurate drilling under reinforced concrete, while the higher frequencies combat active interference caused by cell towers, traffic loops, and power lines.

Falcon F5+ gives you the performance and versatility to complete the job safely, accurately, and on time. The one locator for all your jobs.

EASY TO LEARN AND USE

For over 30 years, DigiTrak® has set the industry standard for usability in locating and accessibility of advanced features. With the Falcon+ feature enhancements, DigiTrak® locating is more powerful and easier to use than ever. The result is easier training, faster setup, and more time to complete more jobs.

FALCON F5+ SPECIFICATIONS

Product ID / Model Number	FF5+ / FAR5
Receiving Frequencies	4.5-45 kHz
Receiving Frequencies (Sub-k)	0.33-0.75, 4.5-18 kHz
Accuracy	±5% up to max depth range
Transmitter Depth Range[1,2]	Up to 180ft (55m)
Transmitter Data Range[1,2]	Up to 220ft (67m)

FALCON+ EQUALS FLEXIBILITY

Falcon F5+ automatically scans over 1000 frequencies and chooses the best within each band for your job site. Drill with two bands, and switch between them mid-bore as interference conditions change.

GUIDANCE SYSTEM

Compatible Transmitters.....FT5XLp, FT5Lp, FT5p, FTR5Lp, FTR5p, FTR5s

Compatible Receiver Batteries..... Lithium-Ion FBP and NiMH SBP

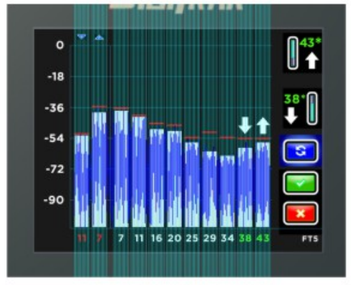
Receiver Battery Life[3]..... Up to 12 hrs

Compatible Remote Displays.....Aurora and FCD

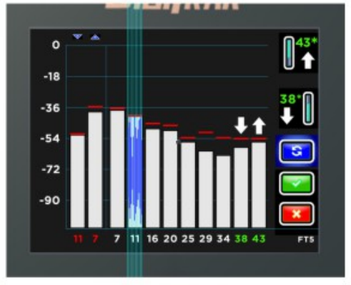
Telemetry Range[4].....Up to 3000ft (914m)

[1] Obtainable with 24'' FT5XLp transmitter in high power and Max Mode.
[2] Range figures based on SAE Standard J2520. Actual ranges and battery life will vary based on interference, transmitter housing, frequency and other factors.
[3] Obtainable with Falcon Battery Pack (FBP).
[4] Obtainable with Aurora remote display and Yagi Antenna.

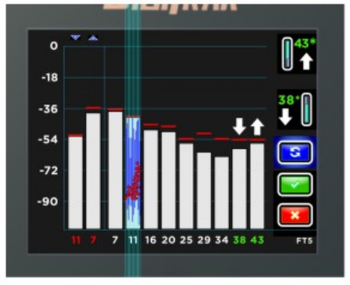
Using 25 frequencies simultaneously allows you to get the job done the first time, while the competition is limited to using only one frequency at a time while drilling.



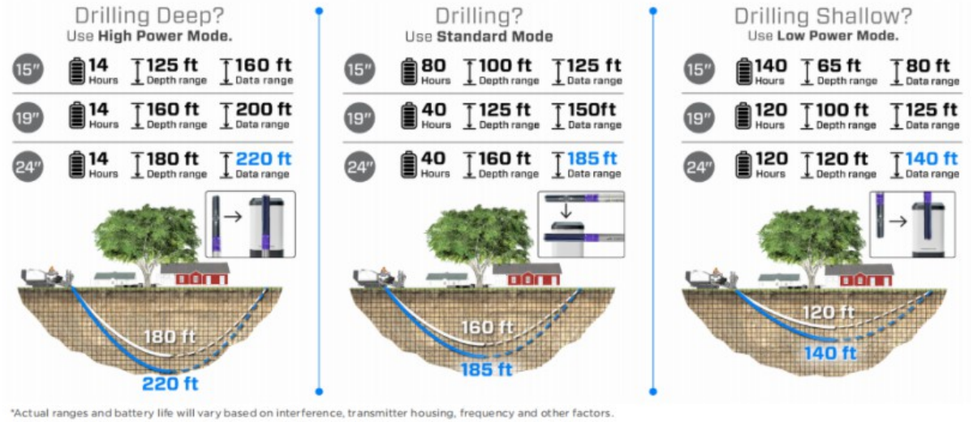
Scans Over 1000+ Frequencies



Up to 150 Frequencies in One Band



25 Best are Picked for Your Job



*Actual ranges and battery life will vary based on interference, transmitter housing, frequency and other factors.

MAG9

PRODUCTS FEATURES

- *Using high-precision, high-interference Faraday shielded three-dimensional antenna structure.*
- *High-performance DSP.*
- *Configuration of the probe is completely upgraded: ECHO70/ECHO90/ECH0110 new structure of the probe.*
- *110 meters of ultra-deep measurement depth, probe life up to 120 hours.*
- *Telemetry display with 7" color touch screen.*
- *Built-in data logging on the telemetry unit.*



Specification:	
System Frequency	*0.32KHZ-41KHZ*
Waterproof Rating	*IP65*
Operating Temperature	*-20℃-60℃*
Radio Communication	*4 channels, 1800m*
Rechargeable Lithium Battery	*12.5V*
Battery Life	*50h*
Dimensions	*71cmx 33cm x 16cm*
Weight	*3.7kg*

WIRELINE MAGNETIC GUIDANCE

GUIDANCE POWER SUPPLY



Independent Survey Verification

The ParaTrack2™ AC Wire Guidance System is a fast and accurate secondary tracking system for Horizontal Directional Drilling (HDD).

ParaTrack2™ delivers trusted accuracy, minimizing risk and maximizing confidence.

Power You Can Count On

The ParaTrack2™ Guidance Power Supply converts AC mains power to a variable current AC waveform driven through a guide wire. This current generates a powerful magnetic field at <10Hz, designed to be resistant to interference from surrounding infrastructure — providing reliable survey verification in any environment.

Flexible Installations for the Toughest Environments

The ParaTrack2™ Guidance System operates on inexpensive and easy-to-handle 10-14 AWG wire. Heavily developed job sites and narrow rights of way are no problem. With flexible guide wire setup requirements, your operators can adapt their P2 guide wire layout to nearly any environment. Guide wires can even be run through installed product conduits, providing cost-effective and accurate end-to-end guidance for parallel installations.

Trusted and Verified

ParaTrack2™ AC Guidance enhances the accuracy of both magnetic and gyroscopic HDD survey tools. As drill lengths grow longer and profiles more complex, it is critical to both survey borehole positions, and verify them. ParaTrack2™ delivers verifiable results, eliminating surprises.

The ParaTrack2™ guidance system is part of the complete line of ParaTrack™ HDD guidance tools, available exclusively from your Inrock or Prime Horizontal dealer. Explore how it all comes together at vectormagnetics.com.

TECHNICAL SPECIFICATIONS



Specifications

Length:	11 in	27.94 cm
Width:	8.4 in	21.34 cm
Height:	5.75 in	14.60 cm
Maximum Depth:	>1,500 ft	450 m
Input Power:	100-240 VAC, 50-60 Hz, 1.6 A	
Output:	0-7 A	
Wire Guage:	10-14 AWG (typical)	
Tracking Accuracy:	+/- 2% distance wire to probe	







WIRELINE MAGNETIC GUIDANCE

Smart™ Magnetic Guidance System



Steering Tool (Probe)

The probe provides accurate survey information via state-of-the-art magnetometer and G-sensor,meanwhile, acts as a receiver for multiple magnetic sources, including AC guide wire and beacon tracking system. It is field proven with high durability, stability and reliability

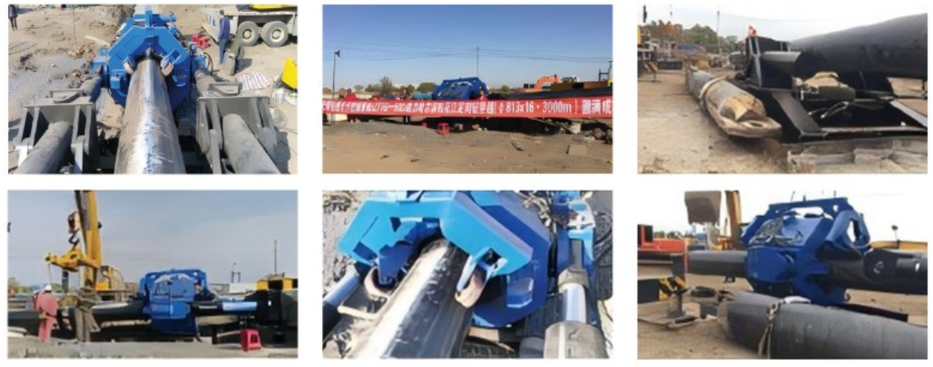
Technical Specification	
Azimuth	*±0.15°*
Inclination	*±0.1°*
Tool Face	*±0.1°*
Magnetic Resolution	*0.1nT (Typical)*
Measured Range	*±9.8x10⁴nT*
Data Update Rate	*31.25 times per sec*
Size	*Φ44.5 x 608mm*
Weight	*3.5 Kg*
Working Temperature	*0-85°C*
Working Voltage	*DC40V*
Communication Distance	*5,000m*



HDD AUXILIARY EQUIPMENT

PIPE PUSHER

Pipe pusher, the main commission is used for laying steel pipe works, at the back of the steel pipe, with four sets of griper holding the steel pipe to push the steel pipe forward into the hole, or from the hole to issue the steel pipe.
ZTTG-500 pipe pusher is of split structure with hydraulic drive. It is mainly divided into three main parts: actuator, operation part and power station.
Equipped with 610, 711, 813, 916, 1016, 1219, 1422 ten kinds of specifications of griper, to meet the different pipeline requirements.
The actuator consists of the head, seat, guide base and thrust cylinder.
For easy transportation, the base is made into a detachable structure.



Diesel engine power	*264Kw*
Rated thrust	*5000kN*
Rated pressure	*25Mpa*
Propulsion cylinder stroke	*3500mm/5000mm*
Maximum propulsion speed	*2.36m/min*
Probing angle	*0°-15°*
Minimum pipe diameter	*24′ (610mm)*
Maximum pipe diameter	*56'(1422mm)*
Hydraulic tank capacity	*1130L*
Fuel tank capacity	*440L*
Power station external dimensions	*4200mm×1500mm×2000mm*
Cradle external dimensions	*4600mm×4100mm×1900mm*
Header external dimensions	*3170mm×3390mm×2770mm*
Power station weight	*5T*
Base weight	*20T*
Header weight	*20T*
Operating temperature	*-20°C-45°C*

HDD AUXILIARY EQUIPMENT

PIPE CRUSHER

S-Series Pipe Crusher is a pipe repair non-excavation equipment developed by Drilling Company, which is used to break the original old pipe and re-support into a pipe of the same diameter, applicable to the old urban areas, without the need to re-planning pipeline, energy-saving and environmentally friendly.

New durability through renewal

Inestimable economy and environmental protection

Replacement with new pipes of the same diameter or larger, such as PVC, PE, steel pipes, cement pipes, etc. is possible.

Suitable for sewage pipes, drainage pipes and pressure pipes for gas and water.

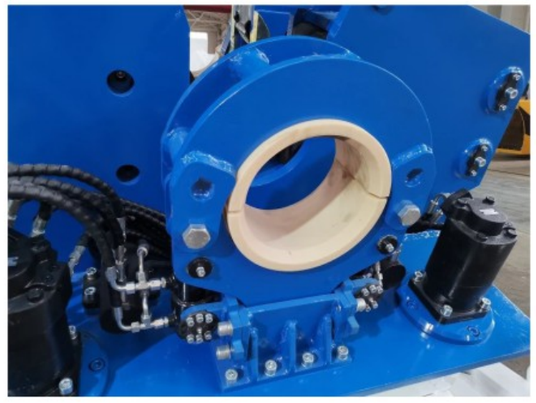
The same set of equipment can be used for many different pipe diameters.

Non-excavation construction, cost saving



Model	*S80A*	*S125A*	*S190A*
Machine Dimension(mm)	*2380*980*830*	*2800*1050*800*	*2800*1200*1000*
Machine Weight(kg)	*2000*	*2600*	*2900*
Thrust (250bar pressure)(kN)	*400*	*700*	*900*
Pulling (250bar pressure)(kN)	*800*	*1250*	*1900*
Maximum Expander Diameter(mm)	*450*	*650*	*800*
Maximum replacement PE pipe diameter(mm)	*90-426*	*150-550*	*250-800*
Engine	*Diesel engine*	*Diesel engine*	*Diesel engine*
Output Power	*75KW, 2200rpm*	*110KW, 2200rpm*	*110KW*
Power Station Weight(kg)	*1500*	*2000*	*1830*
Power Station Dimension(mm)	*2600*100*1550*	*2600*100*1400*	*3000*1500*1400*

BREAK OUT UNIT





Product Introduction

Product Details

Adljustable angle ：0-15°

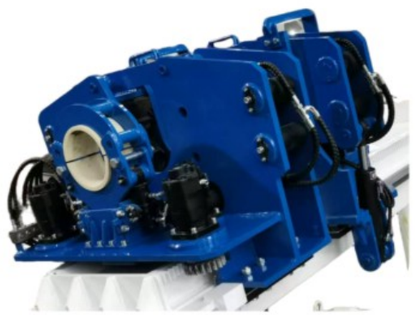
Shackle torgue:150000Nm

Comipatible with drill pipes of φ168-φ194

It can move forward and backward.Drill pipes can be placed on top, ensuring convenient and hassle - free operation.

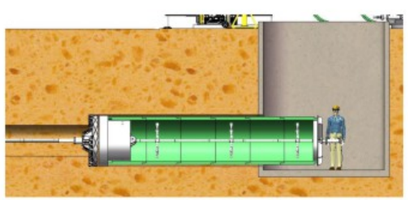
Electric drive, easy to use.





HDD AUXILIARY EQUIPMENT





PIT-LAUNCHED RIG





AUGER BORING MACHINE

Main Technical Parameters	
Max Torque	28000N.m
Rotation Speed	0-102Rpm
Max Pulling Force	800 kN
Max Thrusting Force	800 kN
Engine	194KW/2200RPM
Max Mud Pump Displacement	600L/min
Max Mud Pump Pressure	10Mpa
Entry Angle	0°
Weight	6240kg
Dimension(mm)	2915X2200X2300
Rod Size	Φ114X1000mm
Reamer Size	Φ300-Φ1500

Main Technical Parameters	
Diesel Engine Power	194KW/2200RPM
Max Torque	62000-23000N.m
Spindle speed	67Rpm
0perating pressure	35MPa
Max. Thrust force	3040kN
Stroke unit	700mm
Axial height	1000mm
Max. drill diameter	1450mm
Basic frame(L x W x H)	6100X2200X1600
Power Size(L x W x H)	2760X1800X2100mm
Weight	18000kg

MUD SYSTEM

MUD TANK



Our company delivers a comprehensive range of polyethylene storage tanks engineered for drilling fluid containment and mixing, with capacities spanning 2m³ to 10m³. Equipped with proprietary in-house manufactured fittings, all tanks support custom design modifications during assembly to meet precise client specifications

TRIPLEX PUMP



450L/min-3200L/min 90ton-500ton diesel engine mud pump is driven by a diesel engine. Using cummins diesel engine, with wireless remote control. Easy operation and reliable performance. At present, only our factory has this advanced technology in China. With it, you could operate your mud pump just with a screen.

MUD SYSTEM

BENTONITE JET-MIXING SYSTEM



The Bentonite Jet-Mixing System is an efficient and reliable specialized equipment used to rapidly and uniformly mix powdered bentonite with water or other liquids, preparing bentonite slurry (mud) at the desired concentration. This system is particularly suitable for engineering applications requiring large-scale, continuous, or rapid slurry preparation. It is especially critical in Horizontal Directional Drilling (HDD) constru

1. Mud Hopper

Model	Pressure	Inlet	Outlet	Weight	Dimensions (mm)
GNSLS45A	0.25~0.4 Mpa	DN150	DN150	174 kg	1100×680×949
GNSLS35A	0.25~0.4 Mpa	DN150	DN150	174 kg	1100×680×949
GNSLM25A	0.25~0.4 Mpa	DN100	DN100	113 kg	850×570×851
GNSLM20A	0.25~0.4 Mpa	DN100	DN100	113 kg	850×570×851

2. Jet Mud Mixer

Model	Capacity	pressure	Motor Power	Inlet	Outlet	EX Standard	Weight	Dimensions (mm)
GNSLH-750B	320 m³/h	0.25~0.4 Mpa	75 kW	DN200	DN150	EX d IIB t4	1785 kg	2200×1840×1150
GNSLH-550B	272 m³/h	0.25~0.4 Mpa	55 kW	DN200	DN150	EX d IIB t4	1675 kg	2200×1840×1100
GNSLH-450B	200 m³/h	0.25~0.4 Mpa	45 kW	DN150	DN150	EX d IIB t4	1475 kg	2200×1840×1135
GNSLH-370B	150 m³/h	0.25~0.4 Mpa	37 kW	DN150	DN150	EX d IIB t4	-	-
GNSLH-300B	120 m³/h	0.25~0.4 Mpa	30 kW	DN125	DN150	EX d IIB t4 IECEx/A-TEX	1460 kg	2200×1840×1135
GNSLH-220B	90 m³/h	0.25~0.4 Mpa	22 kW	DN125	DN100	IECEx/A-TEX	1380 kg	2200×1840×1100
GNSLH-185B	65 m³/h	0.25~0.4 Mpa	18.5 kW	DN100	DN100	-	1167 kg	1850×1540×1000
GNSLH-150B	55 m³/h	0.25~0.4 Mpa	15 kW	DN100	DN100	-	1147 kg	1850×1540×1030
GNSLH-110B	45 m³/h		11 kW	DN100	DN100	-	970 kg	1850×1540×1030

TRENCHLESS MUD RECYCLING SYSTEM

The Trenchless Mud Recycling System is specifically designed for the treatment of trenchless drilling mud and piling mud. Our standardized mud recycling systems are divided into two main series:





K Series

An economy-grade mud recycling unit characterized by its compact structure, easy mobility, high processing efficiency, and low cost. It is commonly used for mud recycling with small trenchless drilling rigs and piling rigs. The K Series unit is primarily used for mud purification and recycling. It does not include mud storage or mixing functions, requiring additional mud tanks and mixing equipment.

G Series

A high-end mud recycling system. The G Series integrates mud purification and recycling, mud storage, and mud mixing functions into a single system. It features multi-stage purification processing, capable of meeting the demands of high-end and large-scale drilling rigs.

- *GNMS-200K the processing capacity is200GPM, 50m³/h*
- *GNMS-500K the processing capacity is500GPM, 120m³/h*
- *GNMS-1000K the processing capacity is1000GPM, 240m³/h*
- *The remaining products with higher processing capacities will need to be custom-made."*

Model	Treatment Capacity	Total Screen Area	Purification Stages	Total Volume	Total Power	Total Weight	Inland Transportation Dimensions (mm)
GNMS - 200G	50 m³/h (200 GPM)	2.2 ㎡	2 stages	5 m³	25 Kw	5.5 t	L4000×W2285×H2632
GNMS - 350G	80 m³/h (350 GPM)	4.35 ㎡	2 stages	9.5 m³	54 Kw	9.5 t	L6000×W2350×H3310
GNMS - 500B	120 m³/h (500 GPM)	4.35 ㎡	2 stages	9.5 m³	84 Kw	10 t	L6000×W2350×H3310
GNMS - 500G	120 m³/h (500 GPM)	5.2 ㎡	3 stages	15.5 m³	125 Kw	16.5 t	L10000×W2418×H3442
GNMS - 500GL	120 m³/h (500 GPM)	5.2 ㎡	3 stages	24.5 m³	134 Kw	18.5 t	L12192×W2582×H3442
GNMS - 1000G	240 m³/h (1000 GPM)	7.8 ㎡	3 stages	30.4 m³	184 Kw	20 t	L12192×W2600×H3300
GNMS - 1000GL	240 m³/h (1000 GPM)	10.4 ㎡	3 stages	33m³ / 15m³	132Kw / 63Kw	20 t / 7 t	L12192×W2600×H3468 L6058×W2600×H3300

MUD SYSTEM

SUBMERSIBLE SLURRY PUMP

Our company provides vertical single-stage single-suction cantilever slurry pumps constructed with wear-resistant alloy, capable of transferring high-concentration particulate media. Standard immersion depths are 1.3m/1.5m (customizable). The absence of bearings and shaft seals between the impeller and pump body ensures maintenance-free operation and high-temperature resistance. These slurry pumps are ideal for:Feeding centrifuges, Supplying shale shakers from mud pits in drilling fluid systems, Serving as feed pumps for desanders and desilters.



Model	Flow (m³/h)	Head (m)	Motor Power (KW)	Motor Speed(RPM)	Out Size
GN50YZ20-18J	20m³/h	18m	3kW	1450RPM(50Hz)	DN50
				1750RPM(60Hz)	
GN50YZ40-10J	40m³/h	10m	5.5kW	1450RPM (50Hz)	DN50
				1750RPM (60Hz)	
GN80YZ80-20J	80m³/h	20m	11kW	1450RPM(50Hz)	DN80
				1750RPM (60Hz)	
GN100YZ100-30AJ	90m³/h	20m	18.5kW	1450RPM(50Hz)	DN100
				1750RPM (60Hz)	
GN100YZ100-30ZJ	120m³/h	31m	30kW	1450RPM(50Hz)	DN100
				1750RPM (60Hz)	
GN100YZ160-38J	160m³/h	38m	37kW	1450RPM(50Hz)	DN100
				1750RPM (60Hz)	
GN150YZ250-40AJ	200m³/h	30m	45kW	1450RPM(50Hz)	DN150
				1750RPM (60Hz)	
The above parameters are for reference only					

