# **FORWARD UN6**

**Core Drilling Rigs** 

Hole diameter: A,B,N and H

# FORWARD



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# Make your drilling more efficient

The machines in the rugged FORWARD UN6 (Pilot Hydraulic Control) utilize well-proven technology. It can perform above or below ground in a wide range of core drilling applications. The FORWARD UN6 rig are adaptable and can be tailored to fit the unique needs of your operation.

FORWARD UN6 core rig are equipped with a skid-mounted chassis as standard for easy transport. A compact design enables the rigs to manoeuvre within cramped quarters causing minimal disturbance to surrounding operations. FORWARD machines are ideal for both underground exploration and surface applications. A modular design means that rigs can be configured with various interchangeable feed lengths and rotation units. Future reconfiguration is easily carried out with minimal fuss.



The Bosch Rexroth hydraulic oil pumps and motors, be driven by ABB electric motor. Supply the power to the rig.



The unique combined turntable and positioning arm fitted to the FORWARD UN6 core rig enables easy, fast and accurate set up.





### Main benefits

Compact yet flexible, featuring a modular design that can be tailored to fit your specific needs.

**Built for productivity,** FORWARD UN6 rig is safe and easy to operate so you get the best outcome.

**Trusted for reliability,** a FORWARD UN6 rig can be relied on to retrieve superior core samples, time-after-time

# The efficiency of drilling in exploration

Powerful and compact, the FORWARD UN6 features a versatile modular design. It can be fitted with various alternatives and options to best suit your particular requirements regarding rock type, hole diameter and hole depth. FORWARD machines drill straight upwards, downwards or horizontally, enabling you to get the job done easily.



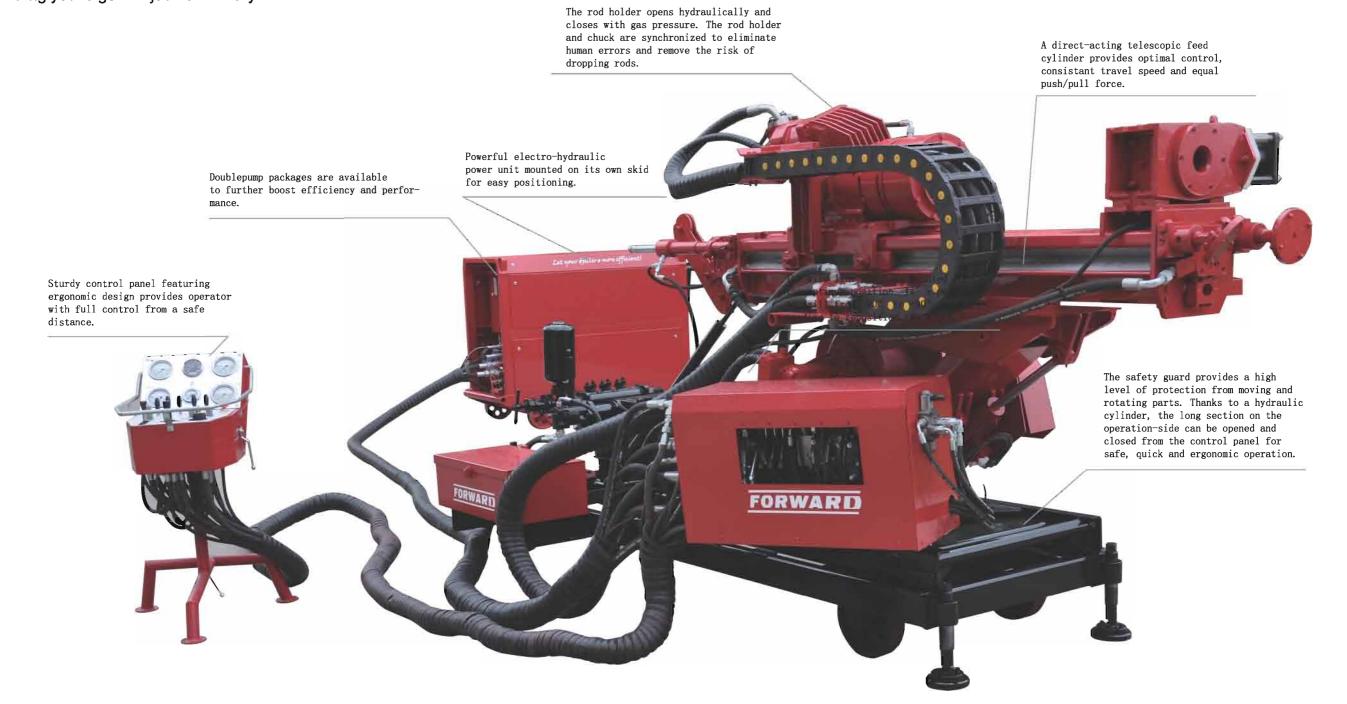
**Excellent positioning capabilities** make the rigs quick and safe to set up.



**Drilling time is maximized** by the electrical power units and cleverly designed hose arrangements which feature a hose ladder to reduce wear.



The pilot hydraulic control system provides the operator with full control. The operator station works at a reduced hydraulic pressure (max 80 bar) which means it's safer for the operator and lighter in weight.



# Features that make a real difference

FORWARD UN6 core drilling rigs are available with a wide choice of options which







#### + Feed frame with equal pull and push force

The feed frame is the backbone of the drill rig. This robust system uses a direct feed cylinder coupled to a chainless feed. The system reduces maintenance costs and provides a pull and push force which is equal. FORWARD UN6 rig has increased capacity for up-hole drilling without the need for modifying anything on the feed. The feed frame is also fitted with wear strips which increase service life and reduce repair costs.

#### + Rod holder closes using gas pressure

The gas spring rod holder opens with hydraulic pressure and closes with gas pressure. The gas cartridge lasts for up to a million cycles providing a low total cost of ownership. To enhance safety, the rod holder and chuck are synchronized to eliminate human errors and remove the risk of dropping rods. Jaws with TC inserts are available to increase the holding force when drilling medium to deep holes.

## + A rotation unit of your choice

The rotation unit constitutes the muscles of the rig, and certain applications require more strength. Depending on rock conditions and your desired hole dimensions, there is a rotation unit to suit the job. Each unit is designed with oversized bearings to increase durability. The gear case is sealed completely to handle drilling from +90° to -90° angles. A hydraulic chuck with quick-change jaws provides both superior rod grip and quick, easy rod changes.



# A comprehensive service offering

Even the best equipment needs to be serviced regularly to make sure it sustains peak performance. The FORWARD service solution offers peace of mind, maximizing availability and performance throughout the lifetime of your equipment. We focus on safety, productivity and reliability.

By combining genuine parts and the FORWARD service from our certified technicians, we safeguard your productivity – wherever

## **FORWARD UN6 Technology Data**

Basic Data		
	Stand	High-Power
Max.Depth AQ rod	960 mts	1 445 mts
BQ rod	750 mts	1 065 mts
NQ rod	570 mts	715 mts
HQ rod	268 mm	335 mts
Feeding System	T.	T.
	Stand	Extra
Feeding stroke	850 mm	1800 mm
Feeding force	65 KN	65 KN
Pull back force	65 KN	65 KN
Moving speed	1 m/s	1 m/s
Rotation System		
Rod size	A – H	
The inner diameter of spindle	98 mm	
Max.Speed	1,400 RPM	
Max. Torque	1,634 Nm	
Hold force	118 KN	
Tiola force	TTO NIV	
Foot Clamp		
Rod Diameter	89mm	
Max. Diameter	102 mm	
Hold force	90 KN	
Power Unit	FEW L	001/
Power	55 Kw electric motor	90 Kw electric motor
Main Hydraulic pump Flow	150 L/min	150 L/min
Main Hydraulic pump Pressure	300 bar	300 bar
Assistant Hydraulic pump Flow	67.5 L/min	67.5 L/min
Assistant Hydraulic pump Pressure	230 bar	230 bar
Wireline Winch		
Capacity	1000 mts, 5 mm cable	
Lifting force	4 – 10 KN	
Lifting Speed	1.7 – 4.2 m/s	
Modules		
Flush Pump	AMC 140 / BW160 (Option)	
Capacity	1000 psi 200 LPM / 1,450 psi 160 LPM	
Hydraulic Control System		
Control	By hydraulic pilot control	
	By hand	

# **FORWARD UN6**

The FORWARD UN6 is a powerful and flexible machine. It's available with various feed lengths, standard and deep hole feed cylinders.

The rig can be configured to serve a large variety of drilling applications.

The FORWARD UN6 is fitted with a synchronized rod holder and chuck.

This greatly reduces the risk of dropping rods due to human error.

