

# REVERSE CIRCULATION SYSTEMS



Vancouver | Calgary | Montreal | USA

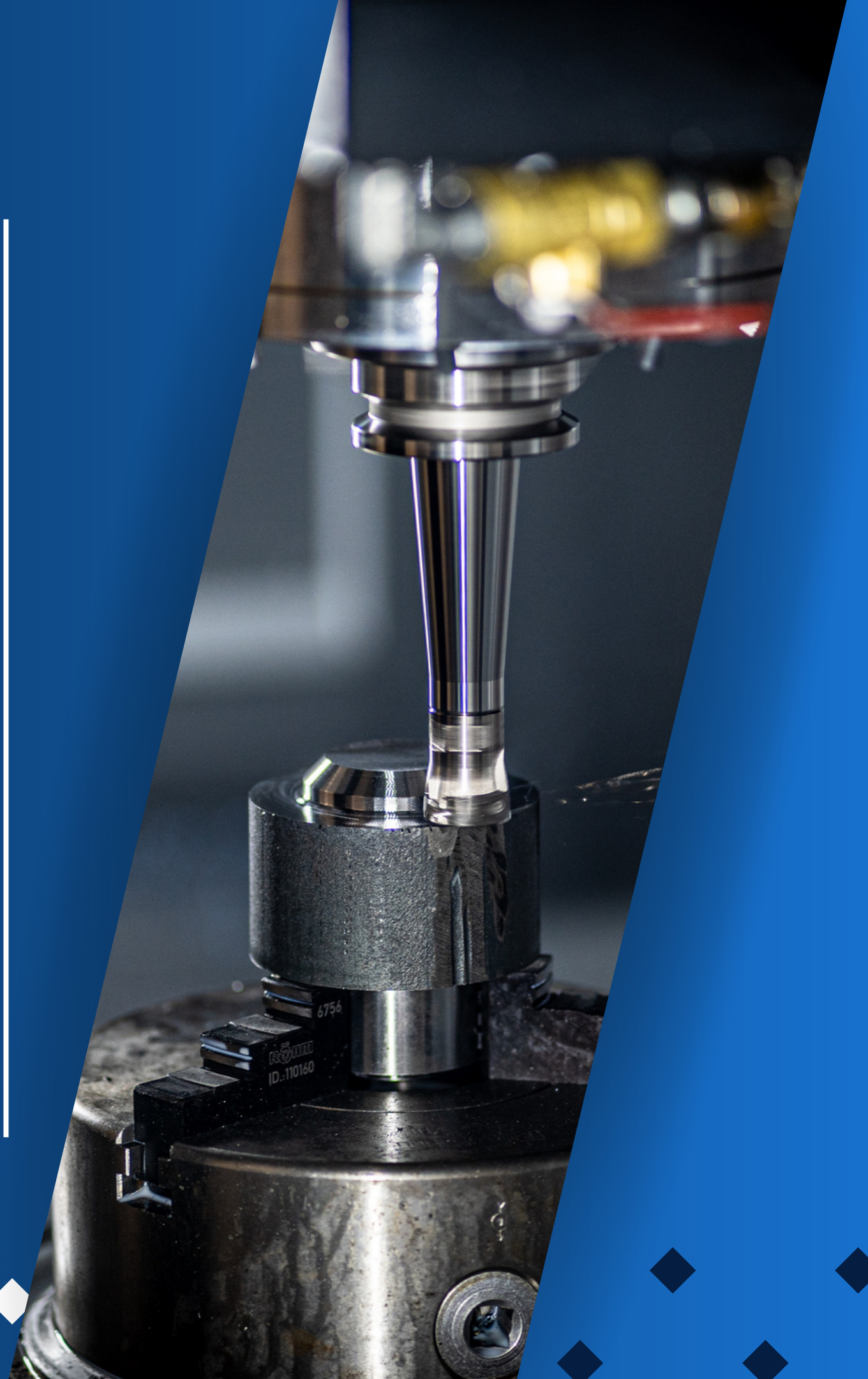




# ABOUT US

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Welcome to Pinnacle Drilling Products! With over 85 years of industry leadership, we're dedicated to exceeding your expectations. As your trusted drilling partner, we offer personalized solutions tailored to your needs, backed by our legacy of excellence. Our experienced team provides exceptional service, from engineering consulting to custom manufacturing, ensuring your satisfaction every step of the way. Join us and experience the Pinnacle difference in drilling excellence!





# PINNACLE DRILLING INFRASTRUCTURE

- The largest specialized supplier of drilling products in Canada
- 60+ employees between Calgary (head office), Vancouver, Montreal, USA
- 25,000 sqft production and service facility (Calgary)
- 40,000 sqft warehouse space (Calgary, Vancouver, Montreal)
- Exclusive Robit North American deal offering their full lineup and priority production
- Pinnacle/ML Air is the sole national dealer, providing diverse products and in-house consultation, engineering, design, and manufacturing services.



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# RC Conversion Kit





# KELLY RC CONVERSION KIT

PDP kelly Rc conversion kits are engineered to swiftly transform your conventional rotary drill into a Down-the-Hole drill within minutes. This enables you to broaden the scope of your operation to encompass a wider range of drilling applications and significantly enhance productivity, particularly in demanding rock drilling conditions.

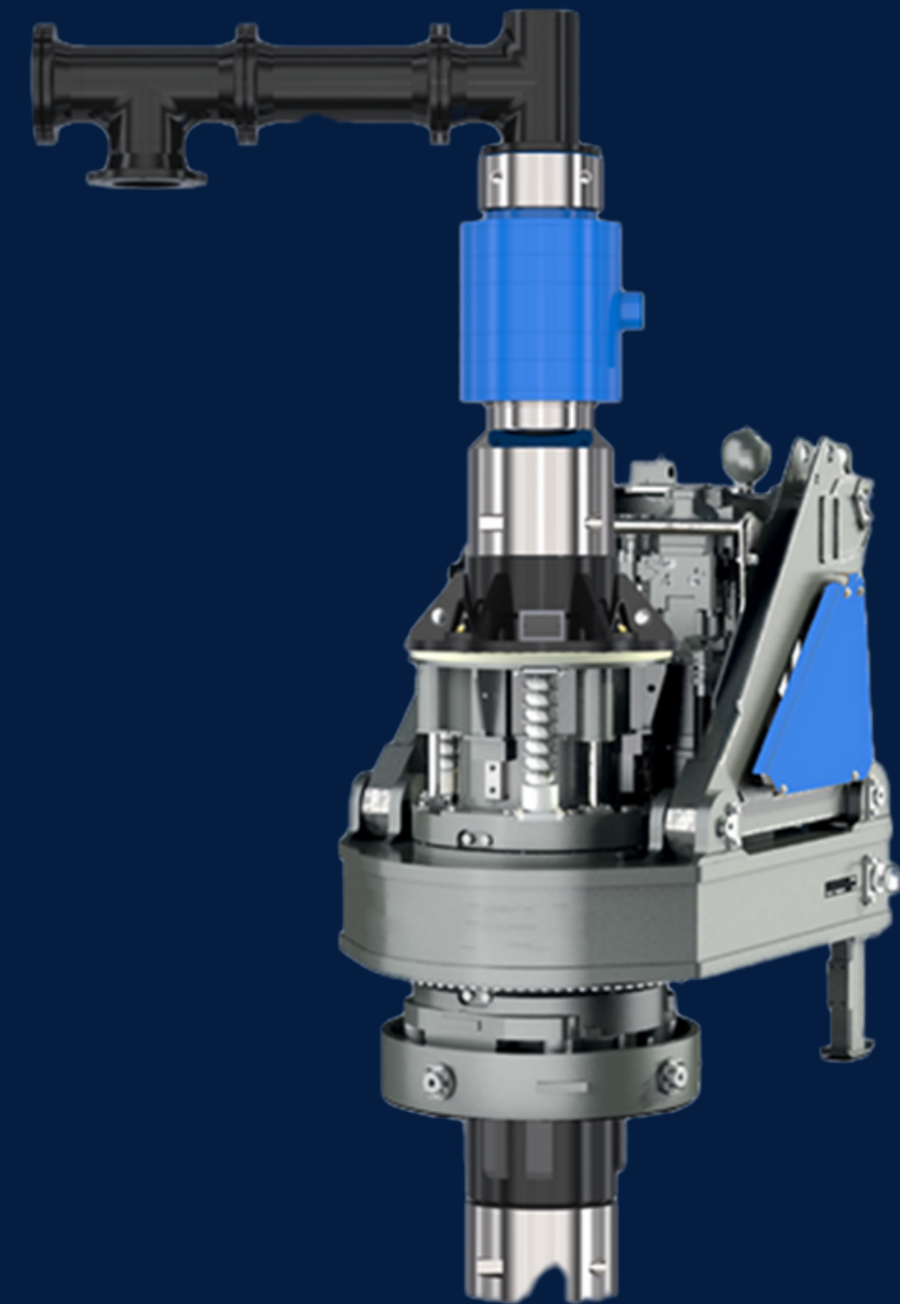
◆ QUICK & EASY INSTALLATION

◆ MORE DRILLING APPLICATIONS

◆ INCREASE EQUIPMENT UTILIZATION

◆ ENHANCED DRILLING PRODUCTION

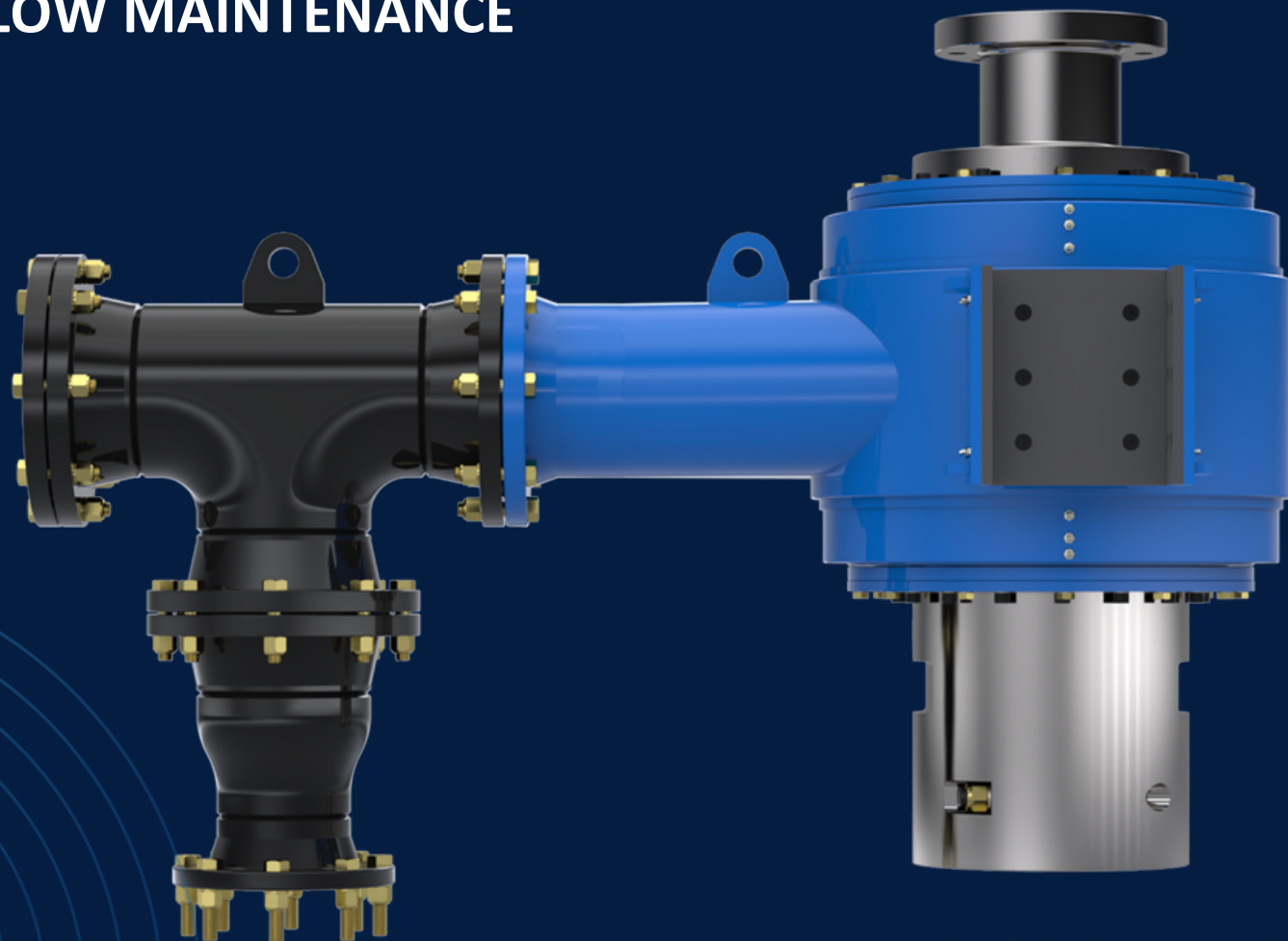
Optimize your investment in a matter of minutes!





# KEY FEATURES

- ◆ HIGHER PERFORMANCE & DURABILITY
- ◆ ADAPTABLE WITH WIDE RANGE OF CONNECTION TYPES
- ◆ LOW MAINTENANCE



# RC DISCHARGE SWIVEL

## SWITCH FROM CONVENTIONAL DRILLING TO RC DRILLING

Our highly efficient undermount RC discharge swivel enables seamless conversion from conventional drilling to RC drilling, resulting in significantly increased drilling efficiency. At PDP we prioritize precision engineering and manufacturing using only high quality materials to ensure superior efficiency and durability in our swivels.

Choose from our wide selection of modular swivels, each adaptable to meet various requirements, providing flexibility and optimal performance for your drilling operations.



# IN THE FIELD;



LB 30 drilling 16" piles with casing advancement system for combi wall



LB 20 successfully drilled a 43" conductor well down 377' in hard rock Albania. Used a casing advancement system to install casing.



Installation on BAT320 mounted on Liebherr lead with 300Ton crane for project in North West Territories (CAD) drilling single pass in permafrost



# ROTARY HEADS





# ROTARY HEADS

For those looking for reliability  
and performance

The MPP 100K and 50K RC/RAB Rotary Heads are high-torque rotation units designed to handle both Reverse Circulation (RC) and Rotary Air Blast (RAB) drilling configurations. These rotary heads are equipped with heavy-duty planetary gearbox and bent-axis piston motor drives, along with a robust main gearbox, spindle, and swivel assembly.

When paired with PDP's line of portable hydraulic power units, cyclones, and air manifolds, the MPP 100K and 50K Rotary Heads offer an ideal solution for large-diameter and piling drilling projects, delivering exceptional performance and reliability.





## MPP 50K TOP DRIVE

### Specifications

- Rotation speed (in parallel): 0–14 RPM
- Rotation speed (in series): 0–29 RPM
- Maximum continuous torque: 55,000 ft-lbs
- Maximum intermittent torque: 62,500 ft-lbs
- Maximum pullback force: 200,000 lbs.
- Discharge diameter in quill: 6" unrestricted
- Discharge connection: 6" #300 ANSI flange
- Air connection: 3" #300 ANSI flange
- Maximum hydraulic pressure: 3000 PSI
- Maximum hydraulic flow: 85 GPM
- Dimensions: 34.75" L x 35.25" W x 56" HT
- Weight: 5640 lbs

## MPP 100K TOP DRIVE

### Specifications

- Rotation speed: 0–10 RPM
- Maximum continuous torque: 100,000 ft-lbs
- Maximum intermittent torque: 127,000 ft-lbs
- Maximum pullback force: 325,000 lbs
- Discharge diameter in quill: 8" unrestricted
- Discharge connection: 8" #300 ANSI flange
- Air connection: 4" #300 ANSI flange
- Maximum hydraulic pressure: 4000 PSI
- Maximum hydraulic flow: 105 GPM
- Dimensions: 39.75" L x 36.5" W x 52" HT
- Weight (RC configuration): 8270 lbs.
- Accessories (optional): Mounting stand, hydraulic hoses, spreader bar, guide blocks, hex drive, sockets, front/side discharge adapters



# PDP 6010HD

For those looking for reliability and performance in a compact package.

With its compact size and 45,000 ft/lbs of torque, the PDP 6010HD offers the perfect package for mid size drilling range.

Could be set up for either conventional or RC drilling mode.

## Specifications

Working pressure: 250 BAR

Output torque: 3100 - 6200 Kgm

Max flow: 253 - 430 L/min

Max speed: 33 - 28 RPM

Max axial load: 30 Ton

Weight: 1100 Kg

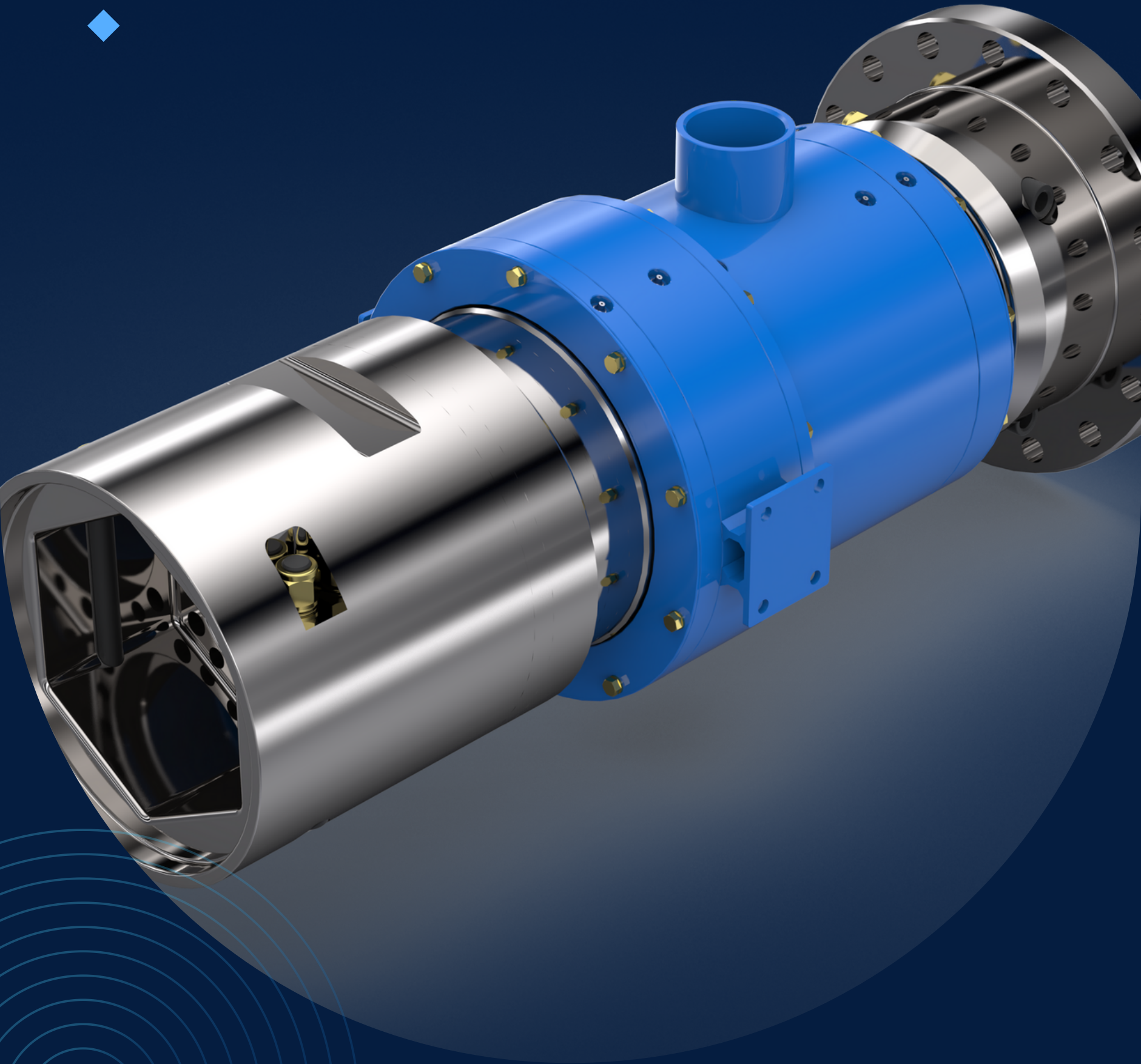




# RC SWIVELS







Top inlet, bottom inlet or bearing swivels for any RC drilling rig. Our swivels are manufactured to precision and will improve performance and reduce downtime on your job site.

- ◆ **WE OFFER A WIDE SELECTION OF SWIVERLS**
- ◆ **ADAPT TO ALL DRILL RIGS AND PIPE SIZES**
- ◆ **LONG LASTING**



# RC SHROUD SYSTEM







## Making Reverse Circulation Drilling even more Efficient!

RC shrouds meticulously designed to efficiently capture drilling debris and greatly improve air velocity for their evacuation, thereby significantly enhancing overall drilling performance and resulting in substantial cost savings.

- ◆ **CUSTOMIZED TO PERFECTLY FIT YOUR DRILLING APPLICATION**
- ◆ **PROVIDES HOLE STABILIZATION**
- ◆ **QUICK AND EASY TO INSTALL OR REMOVE WITH OUR HEX JOINTS**
- ◆ **MAXIMUM CONTROL ON DEBRIS EVACUATION.**

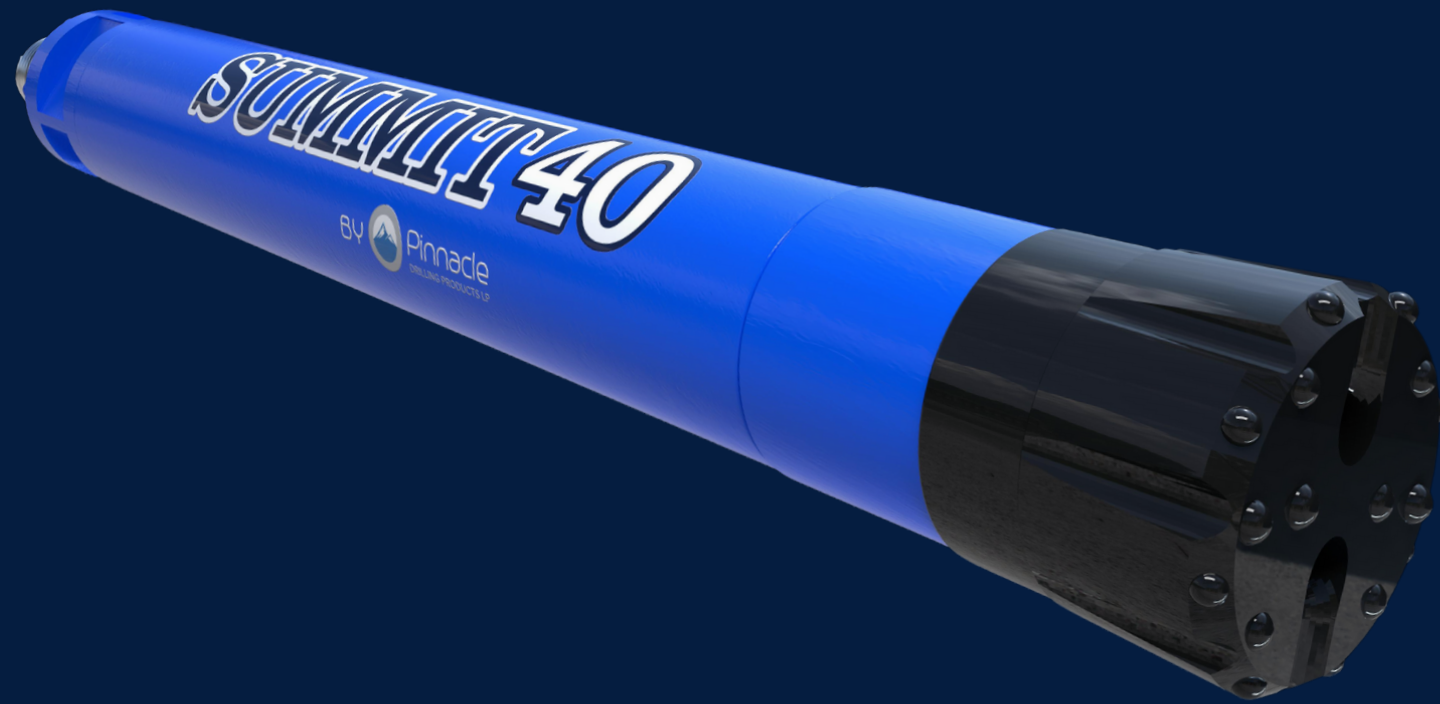


# DTH HAMMERS





# SUMMIT SERIES



The Summit Series Hammers are meticulously designed and engineered to provide unmatched performance, reliability, and durability, even in the most challenging ground conditions. They are optimized to deliver the best cost per meter ratio, ensuring efficiency and cost-effectiveness for drilling operations. Available in a comprehensive range of sizes, from 2 to 34 inches, they cater to various drilling needs with precision and excellence.



# Specifications

	Length (less bit) (Inches)	Weight (Less bit) lbs/kg	External diameter (Inches)	Bit shank	Hole range (Inches)
Summit 10	27.95	22.0 / 10.0	2.13	BR1	2.52 - 2.99
Summit 20	34.84	31.97 / 14.5	2.44	BR2	2.75 - 3.54
Summit 35 IR3.5	36.61	50.71 / 25	3.23	DHD 3.5	3.54 - 4.33
Summit 40	37.75	86 / 39	3.9	COP44 / DHD340	4.375 - 5.375
Summit 40 IR340	37.8	86 / 39	3.9	COP44 / IR340	4.33 - 5.31
Summit 40 M40 Mission	37.2	88 / 40	3.9	M40	4.375 - 5.5
Summit 40 SD4 Mission	34.75	90 / 40.5	3.9	SD4	4 - 5.5
Summit 50 IR350	44.49	168.65 / 76.5	4.92	COP54 / IR350R	5 - 6.125
Summit 50 QL50	42.32	158.73 / 72	4.92	QL50	5.125 - 6.125
Summit 50 Stabilized	41.875	158.73 / 72	5.51	COP54 / QL50	5.75 - 6.125
Summit 60 IR360	42.13	220.46 / 100	5.59	COP64 / IR360	6 - 8.625
Summit M60 Mission	41.93	198.42 / 90	5.75	M60	6 - 8.625
Summit 60 QL60	44.1	209.44 / 95	5.75	QL60	6 - 8.625
Summit 60 SD6 Mission	46.65	220.46 / 100	5.59	SD6	6 - 8.625
Summit 80 IR380	54.72	414.47 / 188	7.09	IR380	7.68 - 10.625
Summit 80 QL80	53.94	401.24 / 182	7.285	QL80	7.68 - 10.625
Summit 100 SD10 Mission	51.57	639.64 / 290	8.9	SD10	10 - 12.24
Summit 180	78.5	3463 / 1574	16.125	N180	18.125 - 25.625
Summit 240	77.75	5253 / 2388	20.47	N240	24 - 33.5
Summit 350	85.6	14373/6519	31.5	PD800	36 - 46



# AIR SUPPORT



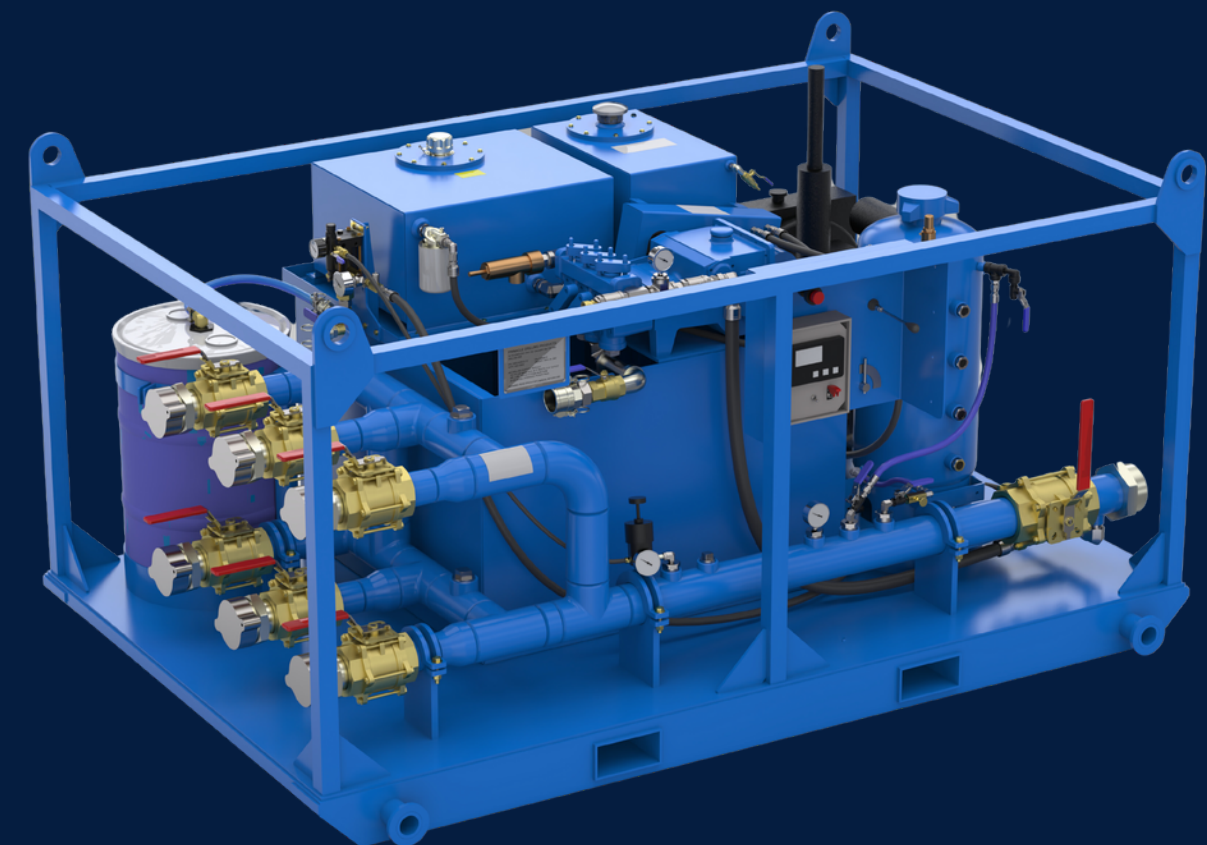
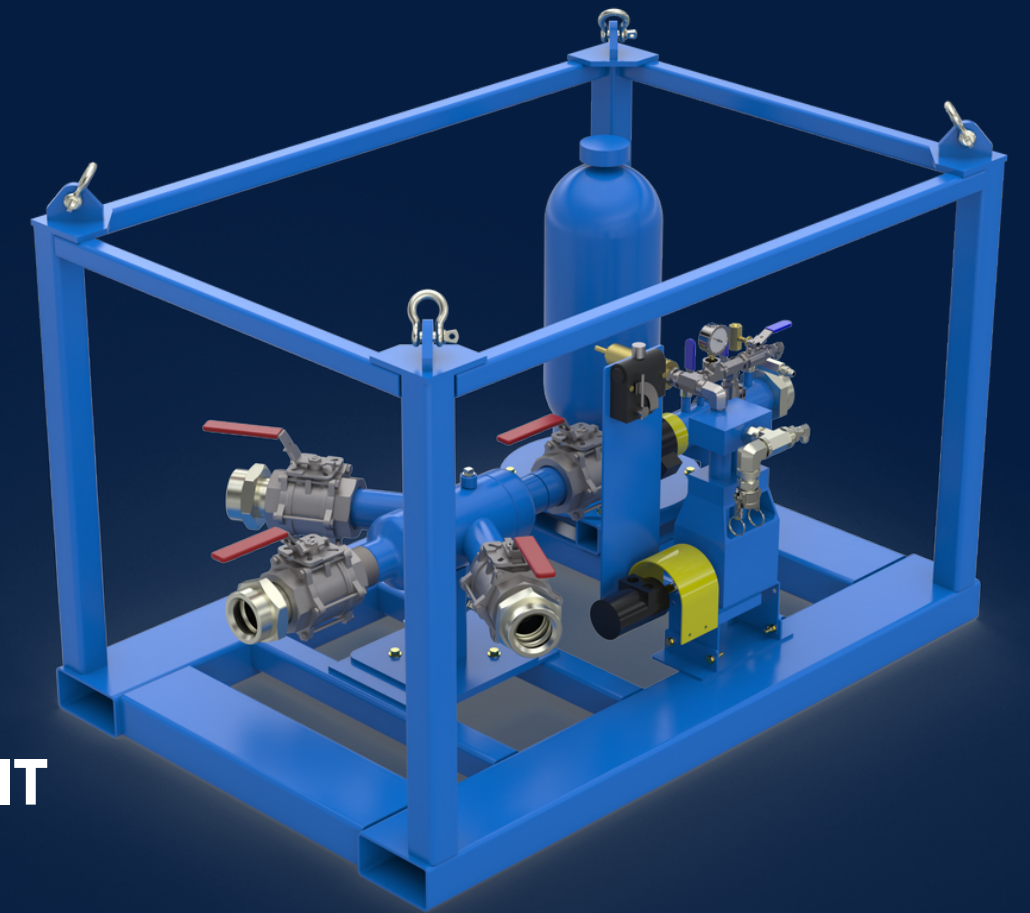


# AIR SUPPORT MODULE

Fully self-contained air support module

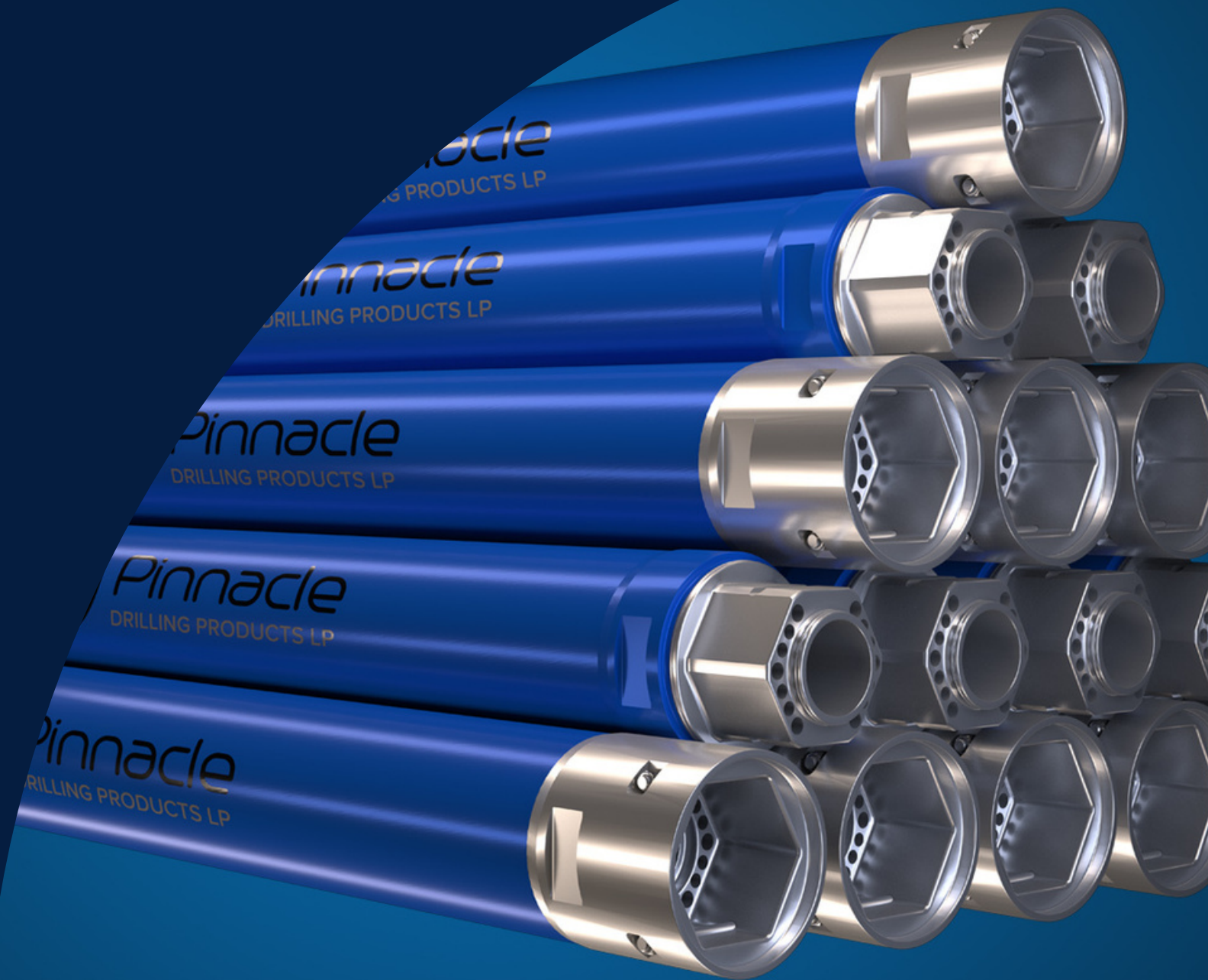
With multiple 3" air inlet and one 4" outlet our new air support module is not only capable of handling large volumes of air required for large diameter drilling, but also allows the operation to be more efficient by having all the required systems on one compact unit. Powered by diesel engine or hydraulic motor, the support module is equipped with a hydraulically driven pump that can be utilized for water injection or drilling additives, an Oil injector for the DTH hammer, water tank, auxiliary outlet for pressure washing gun.

- ◆ ALL IN ONE UNIT
- ◆ UP TO 8 INLETS
- ◆ OPERATING EFFICIENCY



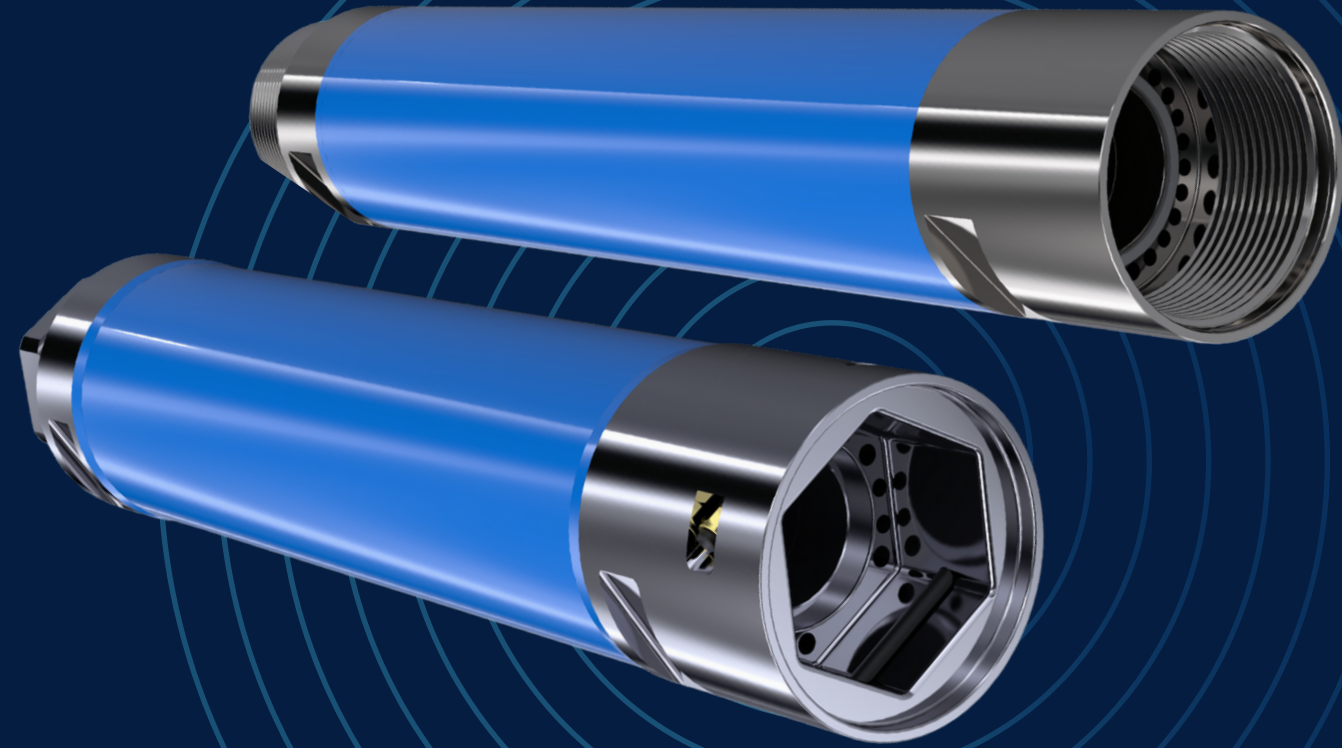


# RC PIPE





# RC PIPE



## Standard specifications

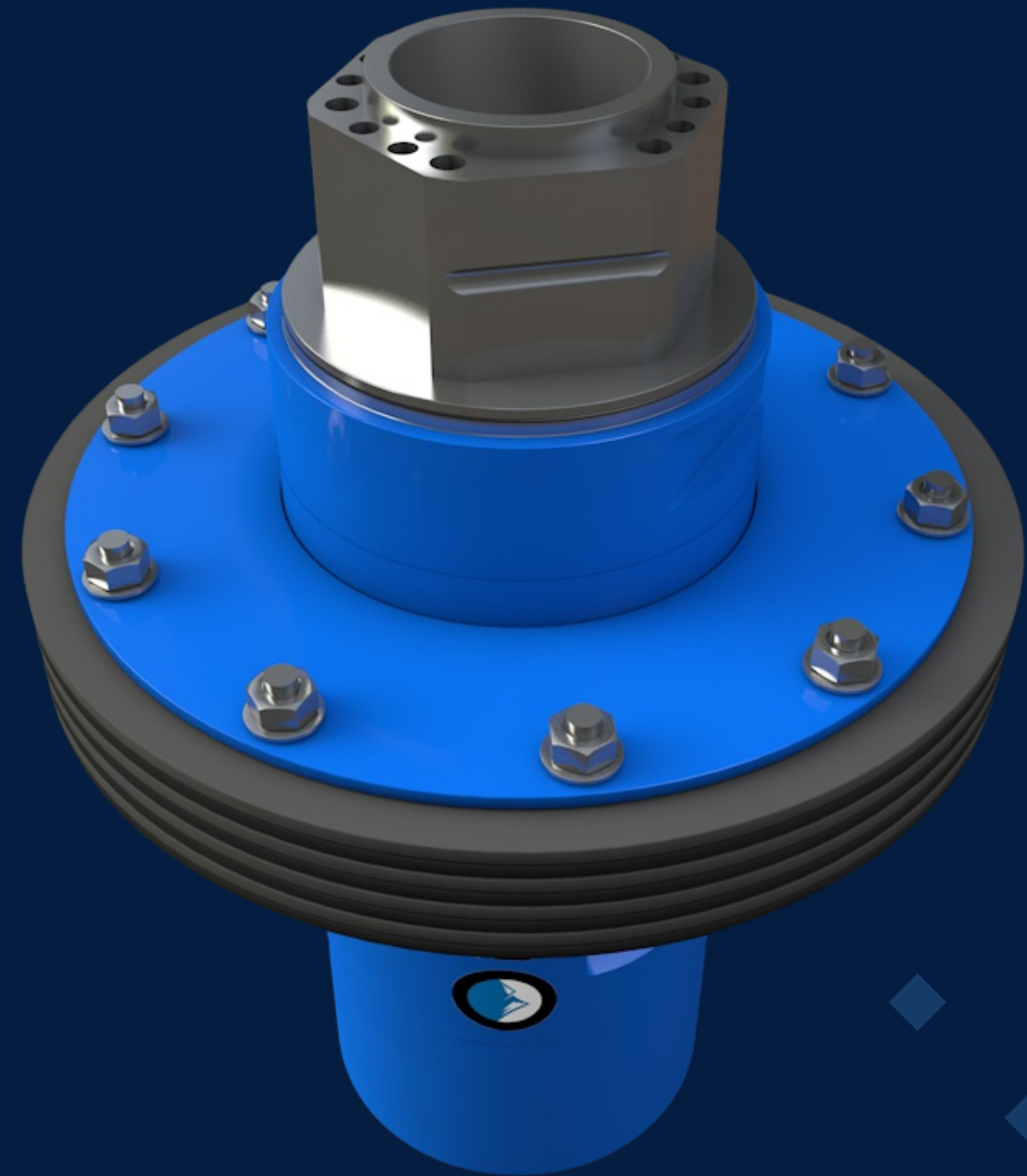
Pinnacle offers the most comprehensive range of RC drill pipes, featuring threaded or Hex joint styles. These dual-wall reverse circulation drill pipes are meticulously designed to enhance both air and exhaust flow. Hex tool joints present an optimal solution to thread binding issues often encountered with standard threaded drill pipes, particularly in large-diameter drilling. Moreover, Hex tool joints offer several additional benefits, including bidirectional rotation capability, reduced tool requirements, rapid and effortless connection, and extended lifespan.

Pipe Diameter (Inches)	Thread Spec's	STD LENGTHS (FT)
5 1/2	MPD	3,5,6,10,15,20
7	MPD	3,5,6,10,15,20
8 5/8	PRC	3,5,10,16,20
10 3/4	HRC	3,5,10,16,20
12 3/4	PRC	3,5,10,20

Pipe Diameter (Inches)	"HEX" Spec's	STD LENGTHS (FT)
7 5/8	HEX 5.4	3,5,6,10,15,20
10 3/4	HEX 7.75	3,5,10,16,20
13 5/8	HEX 9.4	5,10,20,30,40
16	HEX 11.2	5,10,20,30,40
16 HV	HEX 12.5	5,10,20,30,40



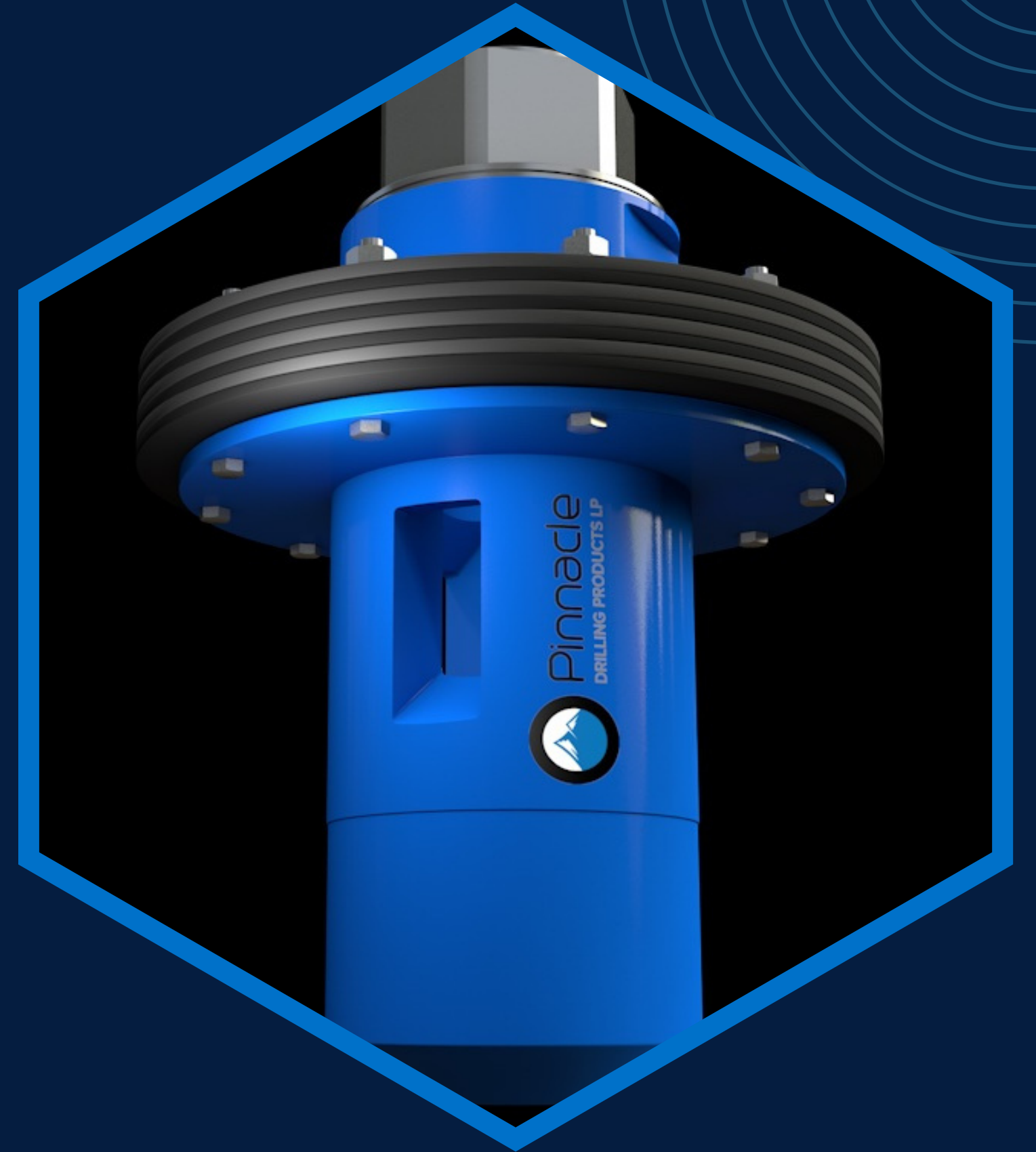
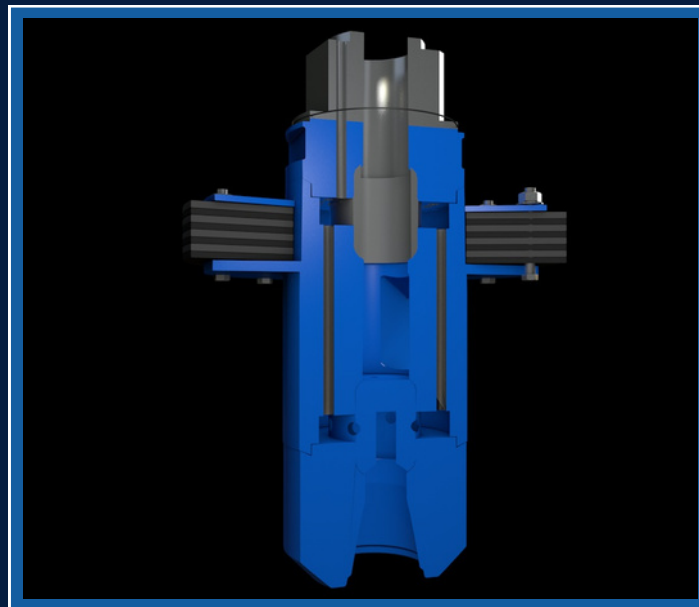
# INTERCHANGE





# INTERCHANGE

PDP's Rotating Interchange is uniquely crafted to offer customers the most robust and efficient product available in the market. Its main core is CNC'd from a single piece of material, eliminating welding and the risk of erosion, thus guaranteeing a clear and smooth path for cuttings to travel. Available in all matching sizes of pipes, the Rotating Interchange comes with customized umbrella dimensions to ensure maximum sealing inside the casing.





# CYCLONES





# Key Features

- ◆ **SAFEST EQUIPMENT FOR DEBRIS REJECTION CONTROL**
- ◆ **SIMPLE DESIGN FOR EASY CLEANING AND MAINTENANCE**
- ◆ **REPLACEABLE WEAR PARTS FOR EXTENDED LIFE**

Initially designed and introduced for samples collection, the Cyclone has quickly become the safest, most efficient and cleanest equipment to collect and dispose of the drilling debris in RC (reverse circulation) drilling method.

Simple design promoting ease of cleaning and low maintenance. PDP offers a comprehensive range of cyclones to meet all applications.





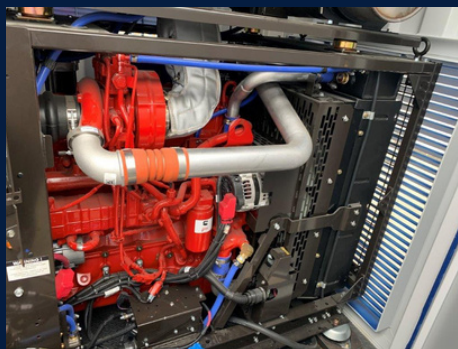
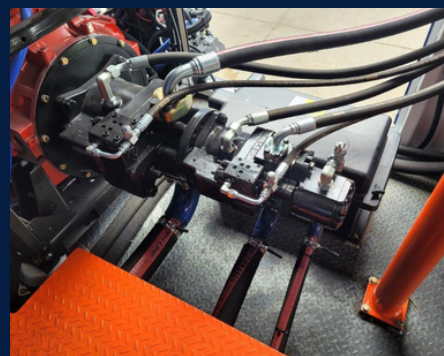
# POWER PACKS





Maximum performance and efficiency at finger tips

Power your MPP50 & 100K rotation heads with PDP fully self-contained, easily transportable power pack. This power pack features an electronically controlled diesel engine combined with a custom-designed load-sensing hydraulic system for maximum system efficiency and performance. The wireless remote control provides the operator with extremely smooth and precise control.



# KEY FEATURES

- ◆ **LOAD SENSING SYSTEMS FOR SMOOTH OPERATION**
- ◆ **REMOTE CONTROL**
- ◆ **CONFIGURED FOR EASY SERVICING**





# AIR COMPRESSORS







# AIR COMPRESSORS

Air is a crucial element in obtaining optimized performance in DTH RC drilling. We offer a diverse selection of air compressors and all the accessories to support your drilling operations.

- Most comprehensive range
- Low and high pressure
- Low and high volume
- Purchase or rental

## Available for Rent

- Atlas Copco 650 cfm
- Atlas Copco 1000 cfm
- Atlas Copco 1300 cfm
- Atlas Copco 1330 cfm
- Doosan 750 cfm



# SERVICE

Selecting the right method and the appropriate tools can be a tedious task. That's why we strive to assist our clients in every steps of the project, from method selection to choosing the right tools and equipment through on site commissioning.

Our expertise has been cultivated in the field over the past few decades, where we have actively engaged with our clients to tackle challenges and navigate through demanding projects.







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