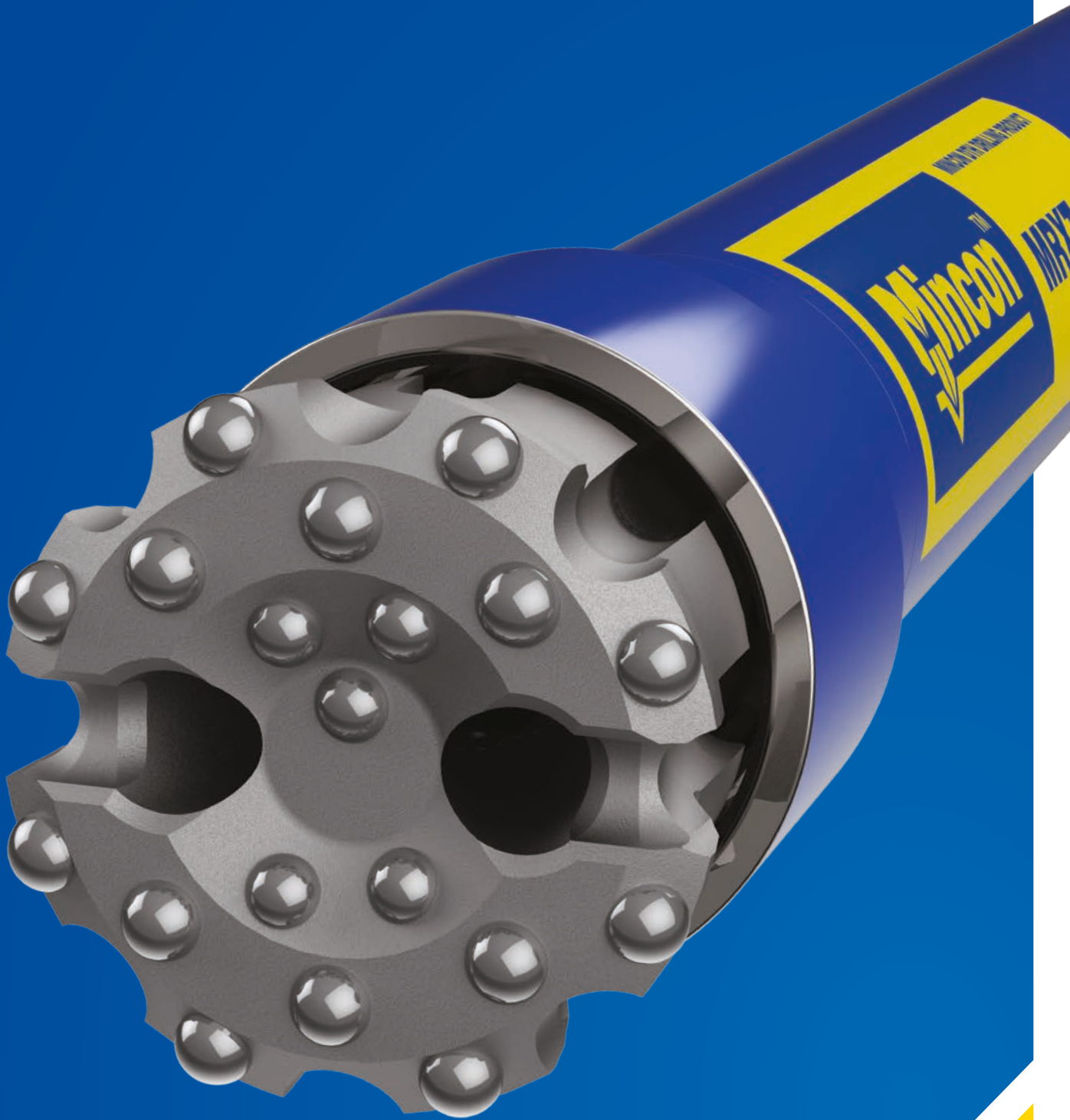


mincon.com



RC Solutions 2025

The Driller's Choice



CONTENTS

Mincon Company Information	4
Complete RC Solutions	6
Next-Generation RC Technology	7
MRXT 82, MRXT 92, MRXT 109 Hammers	8
MRXT 116, MRXT 120, MRXT 132 Hammers	9
Next-Generation Exploration Drill Bits	10
Mincon Drill String Components	11
RC Conversion Kits	12
Drill Rig Conversion Service and Support	14
The Complete Package	15

MINCON, EST. 1977

Mincon has earned its reputation as **The Driller's Choice** thanks to nearly five decades of developing world-class rock drilling solutions for a wide range of applications.



EXPERTS ON SITE

Our rock-drilling expertise doesn't stop at manufacturing. Around the world, our highly qualified teams work closely with customers to tailor their requirements to available drilling platforms and ground conditions, while also accounting for application-specific requirements. Importantly, feedback from every drill site is provided to our design engineers, informing the cycle of continuous improvement.



SOLUTIONS FOR EVERY APPLICATION

Our products can be found on drill sites around the world, in the blasthole, exploration, geotechnical, water-well, and geothermal industries. At each of those projects, drillers have insisted on using Mincon tools for their superior reliability, durability, performance, and efficiency.



ENGINEERED EFFICIENCY

For us, efficiency means drilling faster while using less fuel and maintaining productivity throughout the useful life of a product. We want our customers to get the best performance out of their drilling solution. We achieve this with our own, proven designs; precise manufacturing; and proprietary heat-treat processes, all of which result in components that have tight tolerances, as well as tailored surface and material properties that ensure longer life.

EUROPE AND MIDDLE EAST REGION

All European Countries
Middle East Countries

AMERICAS REGION

North and South America

POINTS OF PRESENCE

With nine global factories, a growing network of Mincon customer service centres, and more than 200 distributors, we have the international presence that our customers need. We manufacture within region to meet local customer demand, while providing service and support to ensure customers achieve optimum productivity from their assets.

ASIA PACIFIC

Australia, New Zealand,
Pacific Islands

AFRICA REGION

African Continent

COMPREHENSIVE PRODUCT RANGE

Our ambition is always to offer customers a comprehensive range of drilling tools that will drill faster and last longer. Individually, Mincon products offer incremental savings. Together, a complete Mincon drill string will deliver tangible savings through higher penetration rates, unparalleled durability, rock-solid reliability, and reduced strain on ancillary components.



COMPLETE RC SOLUTIONS: FROM BIT TO BAG

Your drill site doesn't stand still, and neither does innovation at Mincon. The next-generation Mincon MRXT reverse circulation (RC) hammers use our latest technologies to make exploration drilling even more efficient. Each of these features has been designed and field-tested to ensure that they help deliver high-quality sample and maximum reliability.

Mincon has been designing and manufacturing class-leading reverse-circulation (RC) hammers for three decades. We pride ourselves on producing the highest quality, most innovative RC hammers that help drillers achieve high performance and low running costs without sacrificing consistency in sample quality.

The standout feature of the new MRXT range is our top-loading design, which allows for easier inspection and maintenance of the sample tubes. This not only saves time, but also avoids the need for disassembly of the entire hammer. As a result, the top-loading design enables faster, safer checking and swapping of sample tubes, ensuring efficient and safe drilling practices while reducing downtime and costs.

In addition to the top-loading design, the MRXT series also boasts an upgraded check valve and an optional bleed chuck sleeve feature. When equipped, the bleed chuck sleeve and bleed chuck help maintain positive air pressure at the bit face by holding the outside water head above the chuck sleeve. This maintains a positive air pressure at the bit face, ensuring that collected samples remain dry. Combine, these features make the MRXT series a reliable and efficient choice for exploration drilling.

Along with our MRXT hammers for exploration drilling, Mincon also offers RC drill pipe, subs, and complete conversion kits for exploration and conventional drill rigs. This comprehensive product line is backed up by our global support footprint, ensuring that our exploration drilling customers can rely on expertise that is as reliable as our solutions.



NEXT-GENERATION RC TECHNOLOGY

Multi-thread support

Support for Mincon ARDX, Remet, and Metzke threads. Thread type can easily be changed in the field by swapping the adapter sub.

Check valve upgrade

New check valve and spring design to create a stronger seal-off for the hammer during rod changes.

Keeping it dry

Air-bleed chuck and chuck sleeve to aid retrieval of dry sample in water-logged ground conditions.

[Optional feature]

Bits that mean business

Mincon RTL carbide inserts to provide extreme wear resistance and longer bit life.

Top-load sample tubes

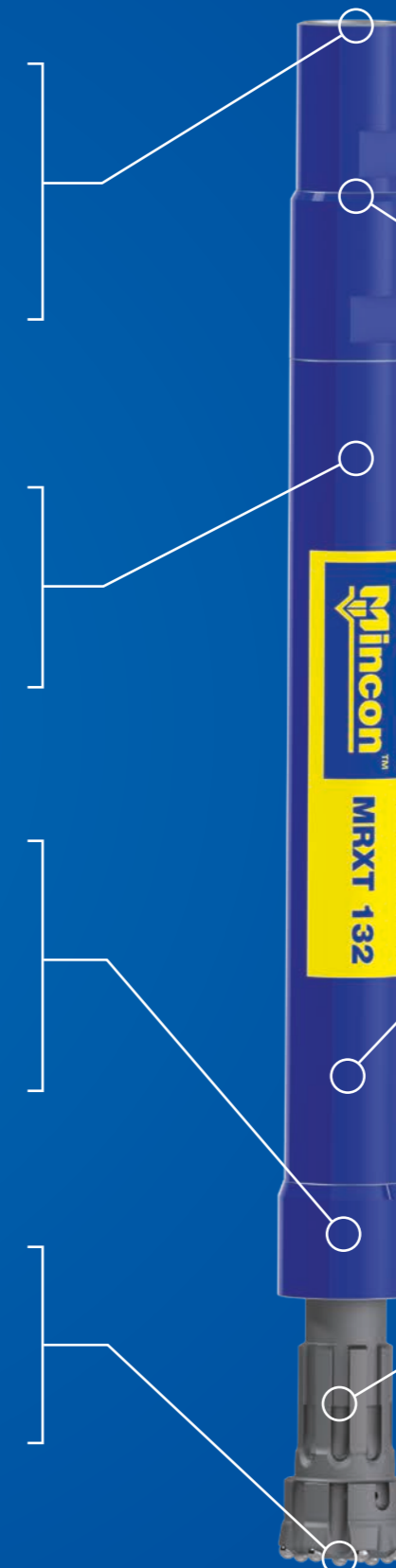
MRXT hammers have an adapter sub that can be removed for easy exchange of sample tubes without disassembly of the hammer.

Optimised internals

Revised design for internal aligner to increase flushing in drilling mode.

Maximum sample recovery

Venturi bits allow for more effective and increased sample recovery, and can also provide a viable replacement for air core drilling. Our high-flow design aids in returning down the hole through wet and swelling conditions.



MRXT HAMMER RANGE



RC HAMMER SPECIFICATIONS

	MRXT 82	MRXT 92	MRXT 109
Hammer OD	82 mm (3.23")	92 mm (3.62")	109 mm (4.3")
Hammer length	1063 mm (41.9")	1146 mm (45.1")	1 268 mm (49.9")
Hammer weight	27.0 kg (59.5 lb)	40.0 kg (88.2 lb)	58.1 kg (128.1lb)
Backhead spanner flat size	70 mm (2.76")	76 mm (3")	94 mm (3.7")
Drill bit shank type	MR82	MR92	MR109
Backhead threads available	73 ARD, 3" Remet	90 ARDA, 3.5" Remet	4" Remet, 4" Metzke
Minimum bit size	86 mm (3.4")	102 mm (4")	115 mm (4.53")
Maximum bit size	102 mm (4")	114 mm (4.5")	127 mm (5")
Maximum drill bit weight	5.4 kg (11.9 lb)	7.5 kg (17 lb)	12.0 kg (26.5 lb)
Piston weight	4.5 kg (9.9 lb)	7.5 kg (17 lb)	12.3 kg (27.05 lb)
Backhead stand-off	0.8 mm (0.03")	0.8 mm (0.03")	0.95 mm (0.037")
Minimum air package	8.5 m3/min @ 13.8 bar (300 cfm @ 200 psi)	25.5 m3/min @ 24.1 bar (900 cfm @ 350 psi)	25.5 m3/min @ 24.1 bar (900 cfm @ 350 psi)

	MRXT 116	MRXT 120	MRXT 132
Hammer OD	116 mm (4.5")	120 mm (4.7")	132 mm (5.2")
Hammer length	1 185 mm (46.6")	1 363 mm (53.6")	1 363 mm (53.6")
Hammer weight	66.0 kg (145.5 lb)	75.2 kg (165.8 lb)	87.4 kg (192.7 lb)
Backhead spanner flat size	94 mm (3.7")	94 mm (3.7")	101 mm (3.98")
Drill bit shank type	MR116	MR120	MR132
Backhead threads available	4" Remet, 4" Metzke, 4.5" Remet, 4.5" Metzke, 115 ARDX	4" Remet, 4" Metzke, 4.5" Remet, 4.5" Metzke, 115 ARDX	4.5" Remet, 4.5" Metzke, 115 ARDX
Minimum bit size	124 mm (4.88")	127 mm (5")	140 mm (5.51")
Maximum bit size	133 mm (5.24")	146 mm (5.75")	146 mm (5.75")
Maximum drill bit weight	13.9 kg (30.6 lb)	17.0 kg (37.5 lb)	19.2 kg (42.3 lb)
Piston weight	14.0 kg (30.89 lb)	15.4 kg (33.86 lb)	18.2 kg (40.19 lb)
Backhead stand-off	0.95 mm (0.037")	0.95 mm (0.037")	1 mm (0.039")
Minimum air package	25.5 m3/min @ 24.1 bar (900 cfm @ 350 psi)	25.5 m3/min @ 24.1 bar (900 cfm @ 350 psi)	25.5 m3/min @ 24.1 bar (900 cfm @ 350 psi)



NEXT-GENERATION EXPLORATION DRILL BITS

Mincon engineers work with technical teams in the field to continuously evolve our reverse circulation solutions in ways that will make exploration drilling faster and more cost-effective, through innovations like venturi flushing in our RC drill bits.

These new drill bits allow for increased airflow during the sample flushing process, resulting in a 40 % plus improvement in sample recovery versus conventional RC drill bit designs. This is especially beneficial in industries where sample quality is of the utmost importance, for both exploration and grade control drilling.

The new venturi RC drill bits are versatile and can be used in both soft ground and hard rock. This presents a huge time saving compared to air core drilling, as there is no need to swap tooling for harder ground. Venturi bits are also not hindered by water in the borehole: consistently high airflow is able to flush out water-logged samples. As a result, there's a much lower risk of silting and other complications that cause expensive downtime.

This is just one example of Mincon's drive for continuous improvement, and our dedication to delivering drilling solutions that deliver class-leading performance, efficiency, and reliability.



RC DRILL BIT SPECIFICATIONS

Shank	MR82	MR92	MR109	MR116	MR120	MR132
Minimum bit size	86 mm (3.4")	102 mm (4")	115 mm (4.5")	124 mm (4.88")	127 mm (5.24")	140 mm (5.5")
Maximum bit size	102 mm (4")	114 mm (4.5")	127 mm (5")	133 mm (5.24")	146 mm (5.74")	146 mm (5.74")
# of carbides	16	16	16	19	19	19
Weight	5.4 kg (11.9 lb)	7.5 kg (17 lb)	12.1 kg (26.6 lb)	13.6 kg (30 lb)	14.5 kg (32 lb)	17.5 kg (38.6 lb)
Venturi flushing enabled?	Yes	Yes	Yes	Yes	Yes	Yes
Face type	Drop Centre	Drop Centre	Drop Centre	Drop Centre	Drop Centre	Drop Centre
Sample holes	20 mm	20 mm	24 mm	24 mm	28 mm	28 mm

MINCON DRILL STRING COMPONENTS



Mincon's comprehensive range of RC drilling products includes all drill string essentials, including saver subs, digout/stabiliser subs, and our world-class drill pipe. All of our drill string products and accessories are precision-engineered to meet the stringent demands of exploration drilling and grade control applications.

Mincon's RC drill pipe stands as a testament to quality and durability, offering robust performance in challenging drilling environments. Engineered to withstand the rigours of exploration drilling, our cold-drawn, seamless friction-welded drill pipe ensures the ultimate in durability and hole straightness.

Mincon's saver subs are meticulously designed to protect your equipment and optimise performance. These subs act as a safeguard for your drill string components, reducing wear and tear while maintaining the integrity of your drilling operations.

Maximise stability and precision in your drilling process with Mincon's digout/stabiliser subs. These components play a crucial role in maintaining alignment and stability during drilling, ensuring smooth operations and accurate ground sampling for your exploration projects.

RC CONVERSION KITS

Unlock the full potential of your drill rigs with Mincon's RC Conversion Kits, meticulously crafted to enhance the efficiency and performance of your drilling operations. Our complete kits contain all the essential components needed to convert existing RC drill rigs or conventional drill rigs to use Mincon's renowned MRXT series of RC hammers.

Mincon's RC conversion kits are specifically designed to support rigs from many manufacturers, helping you get even more from capital equipment you already own. Our dedicated engineering teams collaborate closely with customers to understand their specific requirements, guaranteeing that each conversion kit is tailored to perfection for optimal performance.

Experience maximum performance with Mincon's MRXT hammers, with our RC conversion kits. Every component in these kits is meticulously crafted and manufactured in-house at Mincon's state-of-the-art facilities, ensuring precision engineering and unparalleled quality that customers have come to expect from The Driller's Choice.

Deflector

- Compact design
- Smooth, uninterrupted 90-degree flow path
- Internal expansion zones
- Super alloy wear-resistant design
- Bespoke wear indicator
- High energy absorption
- Extended service life

Sample Hose Reel

- Compact design for in-pit grade control applications
- Improved sample flow
- "Safety First" design
- Precision-engineered components
- Alloy rollers and guides
- Low-maintenance servicing and component replacement

Sample Support Arm

- "Safety First" design
- Superior hydraulic-enabled kinematics
- Robust heavy-duty construction
- Dual joystick control inside and outside the operator cab, remote-control, with manual override
- Load test certified
- Suited for exploration and in-pit grade control applications on various drill-rig types
- Automatic deploy, restore, and leveling options available

RC Hose-Fittings and Connections

- Heavy-duty hose fittings, hose-tails, and knock-on nuts
- Available in 3- and 4-inch sizes for exploration and in-pit grade control applications
- Hardened replaceable wear inserts

Exploration blow-back/blow down (BBBD)

- Sliding hydraulic cylinder actuation
- Faster action and switching
- Improved sample quality
- Separated hydraulic and pneumatic systems to prevent contamination
- Replaceable hardened wear sleeves
- Extended service life
- In-cab joystick or remote control with PLC
- Auto return to neutral/drill position
- High-pressure and high-volume air-package capable
- Bespoke wear indicator ports

Combination Swivel

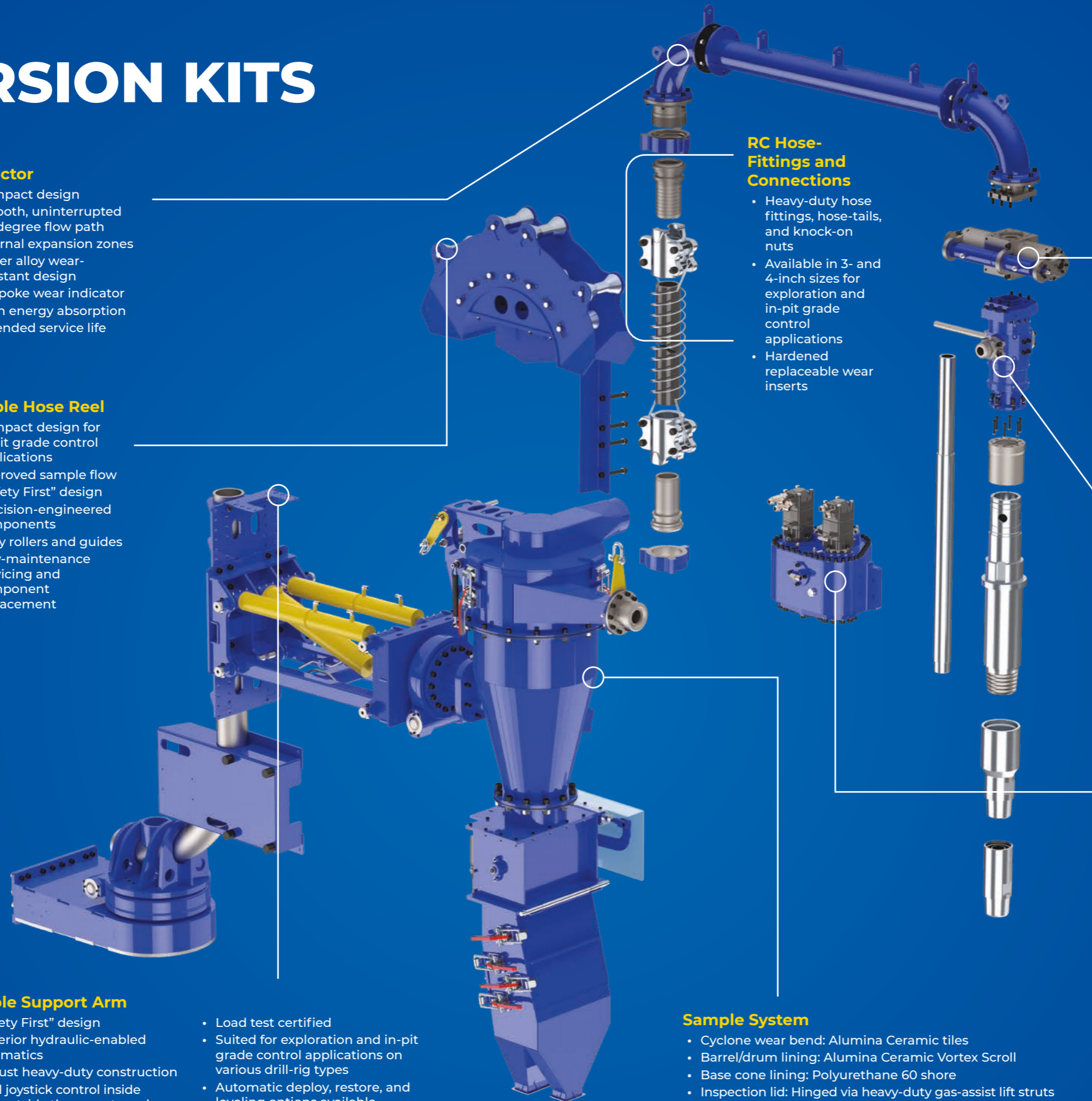
- Modular design for easy maintenance and inventory management
- Hard-coated shafts for extended longevity
- Rotary air seals rated from -40°C to +120°C
- Compatible with various RC head-wear tube configurations, sizes, and heavy-duty application
- High axial and radial load capacity
- Custom air-leak indicators for added safety

DQ8000 MK3

- Compact design
- Plus & Minus 90-degree from 0-degree for fan-type drilling
- Compatible with a wide range of hydraulic motors
- High radial and axial load capacity (30 - 40 tonnes)
- Minimal maintenance compared to industry standard
- "Float"-capable spindle shaft with replaceable keys
- Ultra-durable design for long service life

Sample System

- Cyclone wear bend: Alumina Ceramic tiles
- Barrel/drum lining: Alumina Ceramic Vortex Scroll
- Base cone lining: Polyurethane 60 shore
- Inspection lid: Hinged via heavy-duty gas-assist lift struts
- Inspection lid lock: Lockable over-center levers
- Multi heavy-duty vibrators: assist in un-clogging of damp sample
- Compatible with most sampling systems



DRILL RIG CONVERSION SERVICE AND SUPPORT



Mincon has been a leader in RC solutions for more than two decades, so we understand the importance of reliability, performance, and efficiency. That's why we offer RC drill rig conversion services that are tailored to meet the unique needs of exploration drillers.

Our service offering includes making use of Mincon's comprehensive range of precision-manufactured products and bespoke accessories that are designed to seamlessly convert your existing drill rigs to support exploration drilling activities. Whether you require modifications for specific brands or types of drill rigs, our expert team is equipped to deliver tailored solutions that enhance the performance of your equipment.

When you choose Mincon as your exploration drilling partner, you gain access to our highly experienced global team of drill masters. These seasoned professionals have decades of experience and are dedicated to assisting you in getting your new rig operational on-site efficiently. Moreover, our engineering teams are at your disposal to design bespoke components that precisely fit your rig's requirements, ensuring a seamless conversion process.

Our commitment to your success extends beyond the initial conversion. Mincon provides comprehensive after-sales support to guarantee that your equipment operates at peak performance and efficiency. Our team is dedicated to ensuring that you maximise the potential of your rig, delivering ongoing assistance and maintenance services to keep your operations running smoothly.

Partner with Mincon for unparalleled service and support when it comes to rig conversions and on-site expertise that elevates the capabilities of your exploration drilling equipment. Experience the difference with our tailored solutions and expert guidance, designed to optimise your drilling operations for maximum productivity and success.



THE COMPLETE PACKAGE

Mincon aims to offer comprehensive product range, allowing drillers to tailor a complete Mincon drilling solution for their application and drilling platform.

Our range includes DTH hammers, DTH drill bits, rotary drill bits, geotechnical and foundation drilling systems, reverse circulation systems for exploration drilling, horizontal directional drilling systems, and drill pipes. Each of these offerings has been designed in-house by Mincon and is manufactured at our state-of-the-art factories around the world.

In addition to our class-leading tools and solutions, we offer customers ancillary equipment for the operation and maintenance of their drill string. This equipment can be installed at customer sites or accessed through Mincon service centres.

We also offer a range of drilling fluids, including Mincon Envirosafe rock drilling oil which ensures the correct lubrication to prolong the service life of DTH hammers. The range includes Envirosafe Foamer and Hole Control, designed to stabilise boreholes in specific ground conditions.

Additional information on the complete Mincon product range can be obtained from your Mincon service centre, distributor, or by visiting www.mincon.com.





MINCON GROUP PLC

Smithstown Industrial Estate,
Shannon, Co. Clare, Ireland.

E. sales@mincon.com

W. mincon.com

The Driller's Choice