

COPROD drill strings

Drill strings for SmartROC C50, SmartROC CL, Simba E60 S
and Simba E70 S



COPROD drill strings – the best of both worlds

COPROD is a unique rock drilling system combining the greater penetration rate and lower fuel consumption of topammer equipment with the hole quality and straightness of DTH drilling.

COPROD combines a threaded drill tube with an unthreaded drill rod. The drill tube transmits rotation, while the impact rod, fit in floating suspension inside the tube, transmits impact energy and feed force.

The flushing air passes between the tube and the rod, through the bit rod, to the front of the drill bit.

When the COPROD sections are joined, the impact rods stand on top of each other inside the drill tube.

This means that the impact energy is directly transmitted to the rock mass without passing a single thread. The result is superior energy transmission, reduced fuel consumption and minimized wear on the drill string.

⊕ Main benefits

Outstanding hole straightness

Less fuel per meter drilled

Delivers a lower total cost of ownership



Scan to read more about our products.

Epiroc COPROD drill rigs

SmartROC C50

SmartROC C50 is the smaller of the two surface drill rigs. For this drill rig, three drill strings are available: COPROD 76 mm, 89 mm and 102 mm giving blast holes ranging between 90-140 mm in diameter.

SmartROC CL

The larger surface drill rig, SmartROC CL can be equipped with COPROD 102 mm, 127 mm or 140 mm drill strings. This means SmartROC CL can drill 115 mm-216 mm blast holes.

Simba E60 S and Simba E70 S

Underground drill rigs, Simba E60 S and Simba E70 S, can be equipped with COPROD 76 mm drill string. This means Simba E60 S and Simba E70 S can drill 89 mm blast holes.



Superior hole quality. Enhanced productivity.

COPROD is particularly well suited for demanding drilling operations in broken rock. It offers excellent hole straightness. But, most importantly, it's possible to regulate air flow so that you don't flush out more rock than necessary.



+ Sustainability

Delivering the power of the drill down to the bit with virtually no loss of energy improves resistance and reliability, raising productivity with less wear, better fuel efficiency and sustainable drilling.



+ Operator in focus

An extremely efficient drilling system minimizes wear on the drill string, providing a safer working environment and less downtime needed for bit and rod changes.



+ Improved performance

Operators achieve the same efficiencies and hole straightness as a DTH drill, but with lower fuel consumption and a significantly greater penetration rate and scope to drill larger hole sizes.



A comprehensive service offering

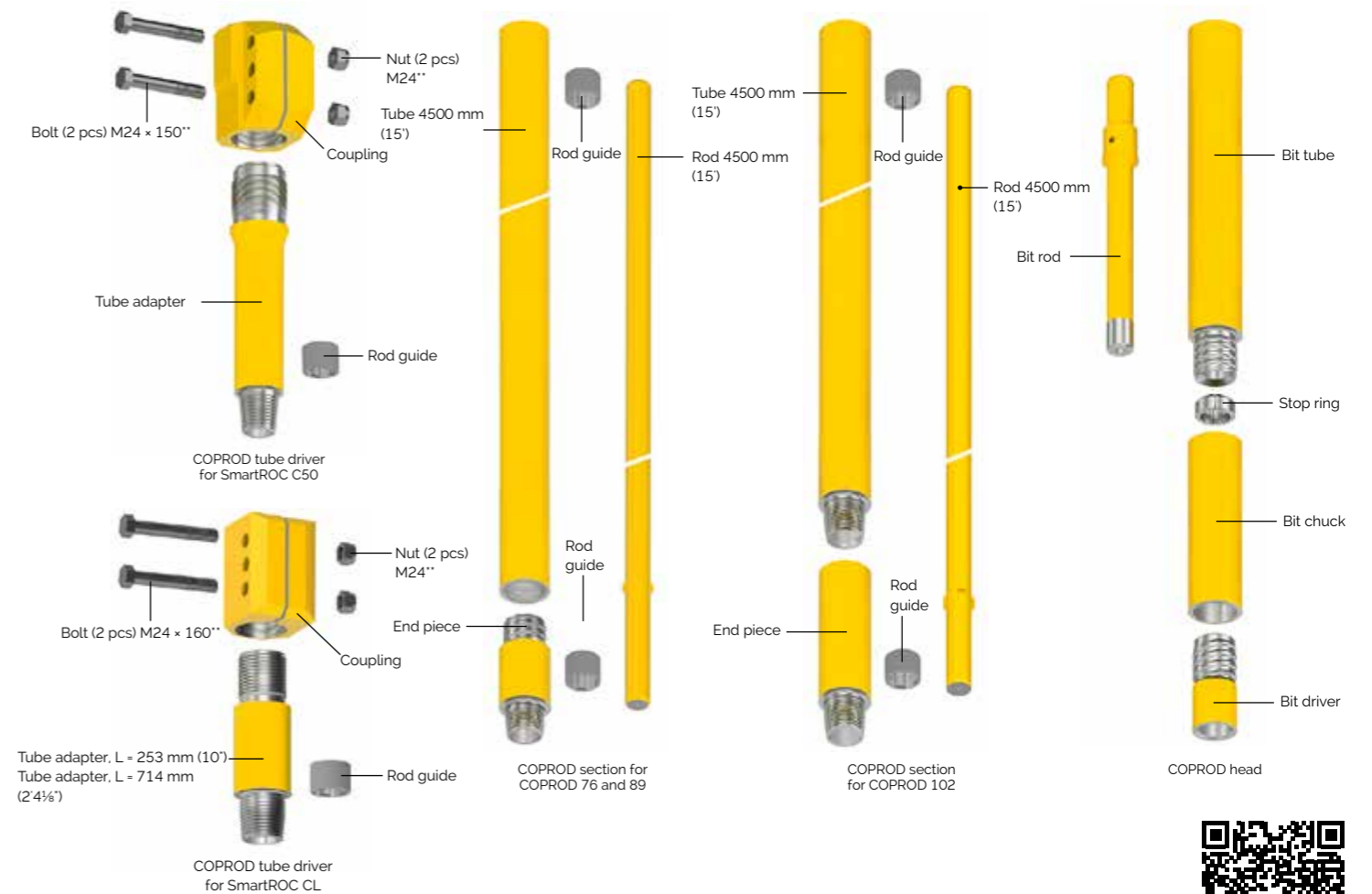
Even the best equipment needs to be serviced regularly to make sure it sustains peak performance. An Epiroc service solution offers peace of mind, maximizing availability and performance throughout the lifetime of your equipment. We focus on safety, productivity and reliability.

By combining genuine parts and an Epiroc service from our certified technicians, we safeguard your productivity – wherever you are.

Epiroc COPROD drill strings – Technical specifications

Epiroc COPROD 76, 89, 102, 127, 140 mm drill strings

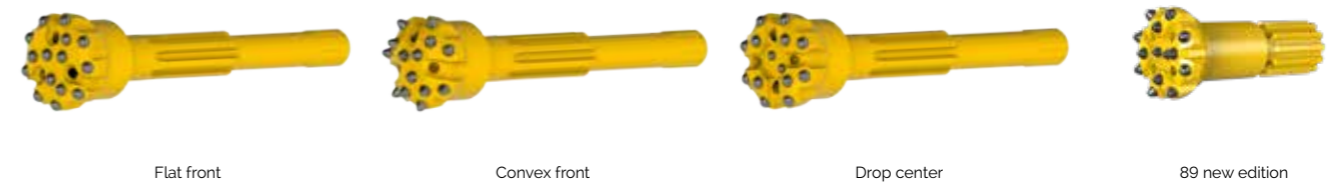
For SmartROC C50 and SmartROC CL



Discover more about Epiroc COPROD drill string family

Example of Epiroc drill bits for COPROD 76, 89, 102, 127, 140 mm

For SmartROC C50 and SmartROC CL



Please note: that all button bits are manufactured over-sized 0,5-2,5 mm (it depends on the size of bit and buttons), meaning that for example a 45,0 mm bit is at least 45,5 mm as new, or the size of a 140,0 mm new bit can be 141,5 mm to 142,5 mm (it depends on the model and type of bit). This is done because of the fast initial wear on button bits. It is important to consider that the drilled hole could vary in size thanks to drilling conditions, drilling practices and ground formation.

Epiroc COPROD 89 drill string - Built to outperform

The new COPROD 89 drill string was developed with one goal in mind: to meet the real needs of today's drilling operations. After listening closely to our customers, we focused on what matters most—higher productivity, lower fuel consumption, and easier maintenance. The result is a completely upgraded solution built to deliver reliable, long-term performance in demanding conditions.

At the core of this upgrade is the new Epiroc COPROD 89 drill string, redesigned from the ground up. It features improved flushing for cleaner and more efficient drilling, enhanced wear resistance for longer service intervals, and an all-new drill bit design supported by an expanded assortment to match various ground conditions. Every detail has been engineered to boost efficiency and reduce downtime.

These improvements translate into significant performance gains in the field. Compared to the previous head design, the new COPROD 89 drill string delivers up to 20% higher Rate of Penetration and 16% lower fuel consumption, giving operators more drilling progress per liter of fuel and more productivity per shift.

In the end, the benefits are clear: reduced fuel costs, increased drilling speed, and longer-lasting drill bits. The new COPROD 89 drill string is designed to help you drill smarter, faster, and more cost-effectively—no matter the challenge.

The new COPROD 89 drill string is built specifically for Epiroc rigs. This perfect match ensures maximum performance, reliability, and productivity in every drilling application.

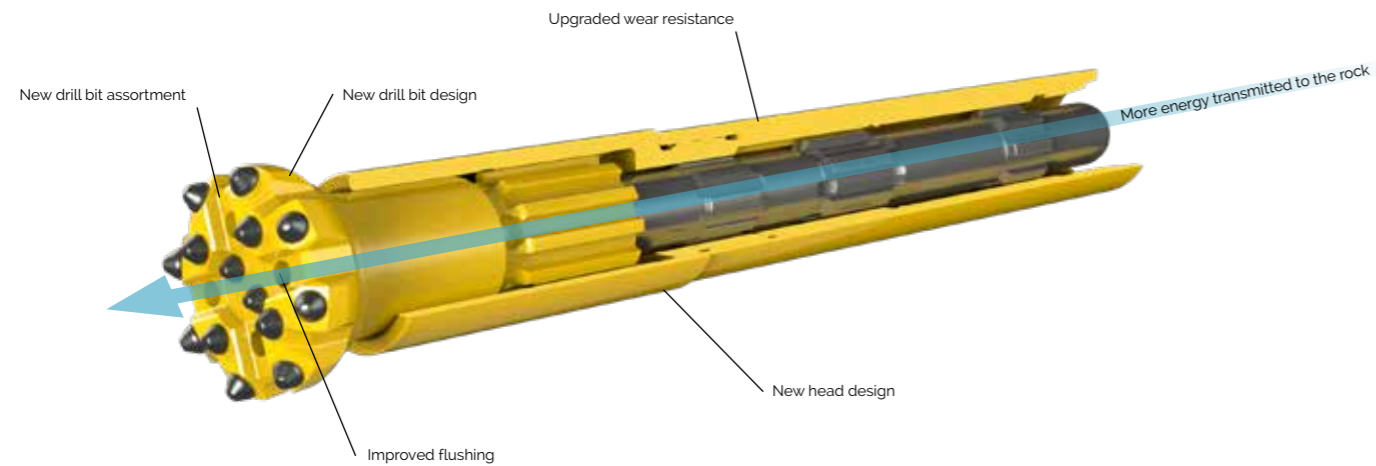
Designed for the toughest environments, the COPROD 89 drill string is ideal for selective mining, open-pit mining, and aggregate or limestone quarrying, delivering consistent results even in challenging ground conditions.

It is fully compatible with Epiroc's high-performance SmartROC C50.

With Epiroc equipment working together as one optimized system, you get higher efficiency, lower operating costs, and the confidence that your rig and drill string are built for each other.

Epiroc COPROD drill strings – Technical specifications

Epiroc COPROD 89 drill string - new head and bits



Epiroc COPROD 89 drill string - new edition for SmartROC C50

Main application area	Blasthole drilling
Rock drills	COP 2550CR, COP 3060CR, COP 4050CR
Hole diameter	105 mm - 140 mm
Section length	3660 mm, 4500 mm and 6100 mm

Epiroc COPROD drill strings – Technical specifications

Epiroc COPROD 76 drill strings for SmartROC C50

Main application area	Blasthole drilling
Rock drills	COP 2550CR, COP 3060CR
Hole diameter	89 mm - 105 mm
Section length	3660 mm and 4500 mm

Epiroc COPROD 89 drill strings for SmartROC C50

Main application area	Blasthole drilling
Rock drills	COP 2550CR, COP 3060CR, COP 4050CR
Hole diameter	105 mm - 140 mm
Section length	3660 mm, 4500 mm and 6100 mm

Epiroc COPROD 102 drill strings for SmartROC C50

Main application area	Blasthole drilling
Rock drills	COP 3060CR, COP 4050CR, COP 5060CR
Hole diameter	115 mm - 140 mm
Section length	3660 mm, 4500 mm and 6100 mm

Epiroc COPROD 102 drill strings for SmartROC CL

Main application area	Blasthole drilling
Rock drills	COP 4050CR, COP 5060CR, COP QM50
Hole diameter	115 mm - 140 mm
Section length	3660 mm, 4500 mm and 6100 mm

Epiroc COPROD 127 drill strings for SmartROC CL

Main application area	Blasthole drilling
Rock drills	COP 4050CR, COP 5060CR, COP QM50
Hole diameter	140 mm - 165 mm
Section length	6100 mm

Epiroc COPROD 140 drill strings for SmartROC CL

Main application area	Blasthole drilling
Rock drills	COP 4050CR, COP 5060CR, COP QM50
Hole diameter	165 mm - 216 mm
Section length	6100 mm

Epiroc COPROD 76 drill string - for underground production drilling

With a strong track record from surface drilling, we are now bringing the successful COPROD system to the Simba production drill rig family. Compared to traditional drilling methods, such as tophammer and ITH, COPROD offers up to 3 times higher penetration rate with excellent precision.

Quality - Excellent hole accuracy in combination with faster drilling provide huge downstream value benefits

Sustainability - Less blast induced damages, increased ore recovery and lower dilution enable optimization and a more sustainable mining operation

Productivity - Up to 3 times faster drilling compared to ITH and tophammer drilling



Epiroc COPROD 76 drill strings for Simba E60 S and Simba E70 S.

Main application area	Production drilling
Rock drills	COP 3060CRU
Hole diameter	89 mm
Section length	1760 mm

Rock drilling tool selector and configurator

To find all products related to Epiroc COPROD drill strings, please visit the rock drilling tool selector.

With its easy navigation, the rock drilling tool selector lets the user find the required product, desired attributes and its product number.

The configurator allow users to match rock drilling tools with Epiroc drill rigs.



Discover the rock drilling tool selector
and configurator



United in performance. Inspired by innovation.

Performance unites us, innovation inspires us, and commitment drives us to keep moving forward. Count on Epiroc to deliver the solutions you need to succeed today and the technology to lead tomorrow.
epiroc.com

