



SANDVIK
Coromant

Tools for efficient parting and grooving



Equipped for parting-off

CoroCut® QD is the strongest and most advanced parting and grooving tool on the market. It's perfect for securely parting-off or machining deep grooves on any material with any type of machine.



For the widest, deepest, or narrowest grooves

CoroCut QD's inserts and parting blades are now thicker than ever – perfect for when you need to remove large amounts of stock in the widest and deepest grooves or pockets. We also offer the narrowest parting widths to date for when material savings is your primary concern.

Excellent chip control and extended tool life

The CoroCut QD's over- and under-coolant system cools the cutting zone for better chip control, prolonged tool life, and higher cutting data.

Coolant connection made easy

Plug-and-play adapters make using tools equipped with internal coolant easy. The adapters cover most common machine tool interfaces for connecting shanks and parting blades, as well as QS™ stops for easy connection in sliding head machines. No need for hoses or pipes that slow down set-ups.

Equipped for parting-off

Made of a strong material alloy with stable clamping, the blades are optimized for reliable parting-off and deep grooving. Reinforced parting blades are also available – perfect when working with long overhangs.



Reinforced blade

QS shank



Shank

Flexible tooling options

CoroCut® QD tool assortment includes parting blades, shanks, and QS shanks for sliding head machines. The inclusion of CoroTurn® SL blades opens the door to modular machining.



SL blade

Inserts that won't let you down

Cutting forces are high at the edge, which is why the CoroCut QD's insert geometries have been carefully designed for good chip formation, high stability, and good coolant access. Together with grades that provide excellent edge-line security in all materials, we offer inserts that excel in every parting-off operation, including wiper inserts for that extra surface finish.



Smooth insert changes and stability

The clamping has a railed insert seat and a quick-release key that eliminates the need for a torque wrench. This guarantees not only good stability and correct clamping force but also smooth insert changes.



Insert grade GC4325 with Inveio™ – For wear resistance and extended tool life in steel and cast iron applications.

For more information and insert recommendations visit:
www.sandvik.coromant.com/corocutqd

The power of coolant

The key to long tool life and few machine stoppages is good chip control. We've achieved this by combining over- and under-coolant, where the effects are noticeable at both high and low pressures. The coolant is also integral when it comes to producing excellent surface finish.

Take a look at our CoroCut® QD and CoroCut 1-2 to see the power of coolant in action.



Over- and under-coolant – When to use which?
Quick Q&A with Antti Wikström, P&G Application Specialist at Sandvik Coromant

CoroCut QD and CoroCut 1-2 tools both feature over- and-under coolant. Why?

Over- and under-coolant improves performance in terms of tool life and chip control. Its effect depends on your machining conditions. Sometimes you need only one coolant option, but nine times out of ten you get the best result by using both.

When do you recommend using over-coolant?

Over-coolant improves chip control, which is the key to long tool life and fewer machine stoppages. It can also reduce built-up edge – a common wear type in these applications.

So what does under-coolant add to the operation?

Under-coolant effectively controls the temperature at the cutting edge, resulting in less tool wear and more stable performance. It also improves chip evacuation. We've seen that under-coolant produces large gains in long cuts where temperature is often the limiting factor.

So the secret to high productivity lies in the coolant?

Yes, but not just there. When it comes to getting the coolant to the cutting zone, the extensive assortment of plug-and-play adapters helps a lot too, eliminating the need for time-consuming hoses or pipes.

CoroCut® QD performance

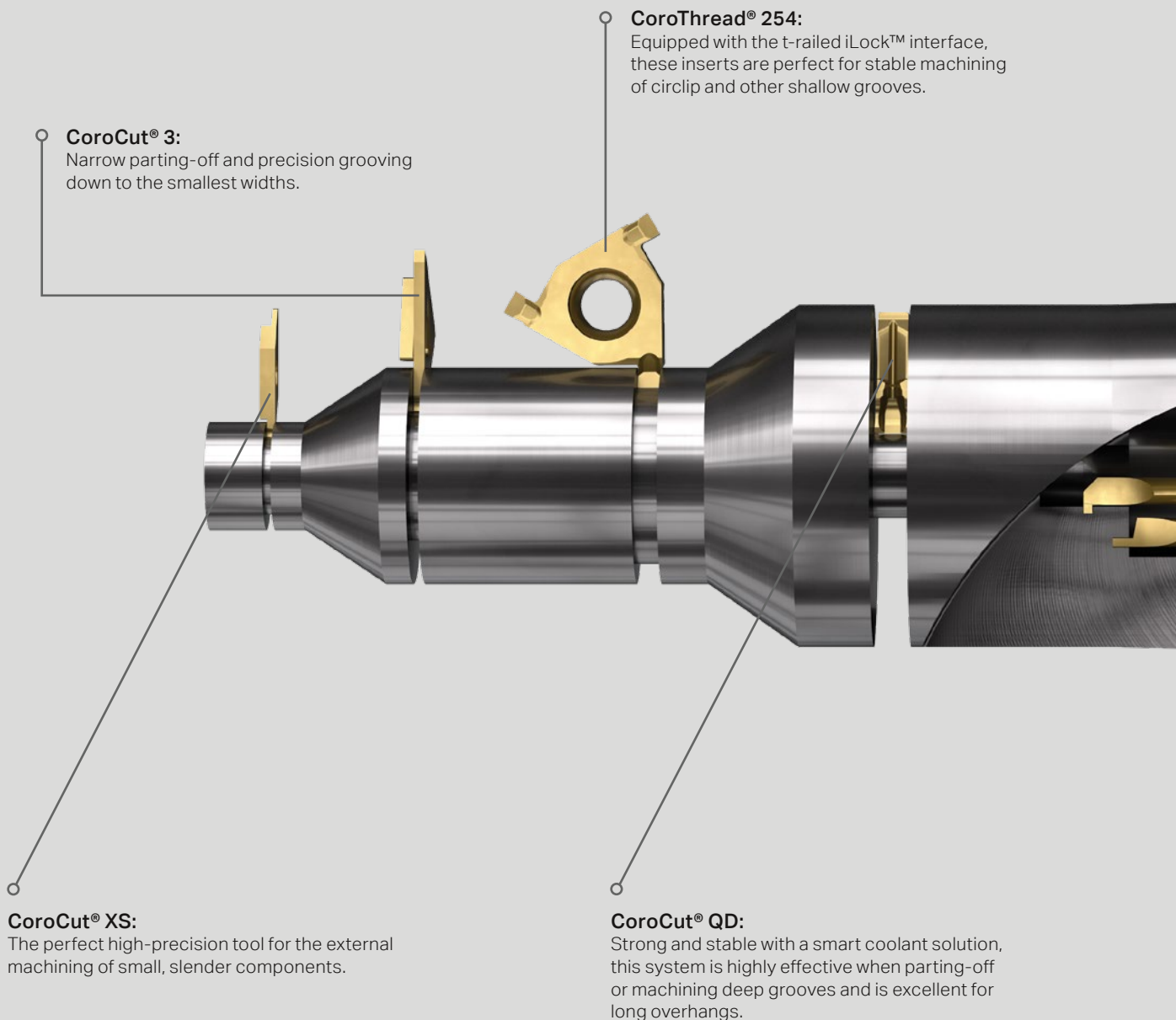
Customer	Auto parts suppliers		
Component	Valve, parting-off D46 mm bar		
Workpiece material	1,4418, ferritic/martensitic stainless steel (200 HB)		
Tool	QD-RFG26C2525A		
Insert	QD-NG-0300-0003-CR 1135		
Cutting data	Competitor blade	CoroCut QD without coolant	CoroCut QD blade with internal coolant
v_c m/min (ft/min)	85 (279)	85 (279)	105 (344)
f_n mm/rev (in/rev)	0.15 (0.006)	0.15 (0.006)	0.17 (0.007)
a_p mm (inch)	3 (0.12)	3 (0.12)	3 (0.12)
Results			
Tool life/edge, pcs	120	175	220
Tool life increase	-	46%	83%

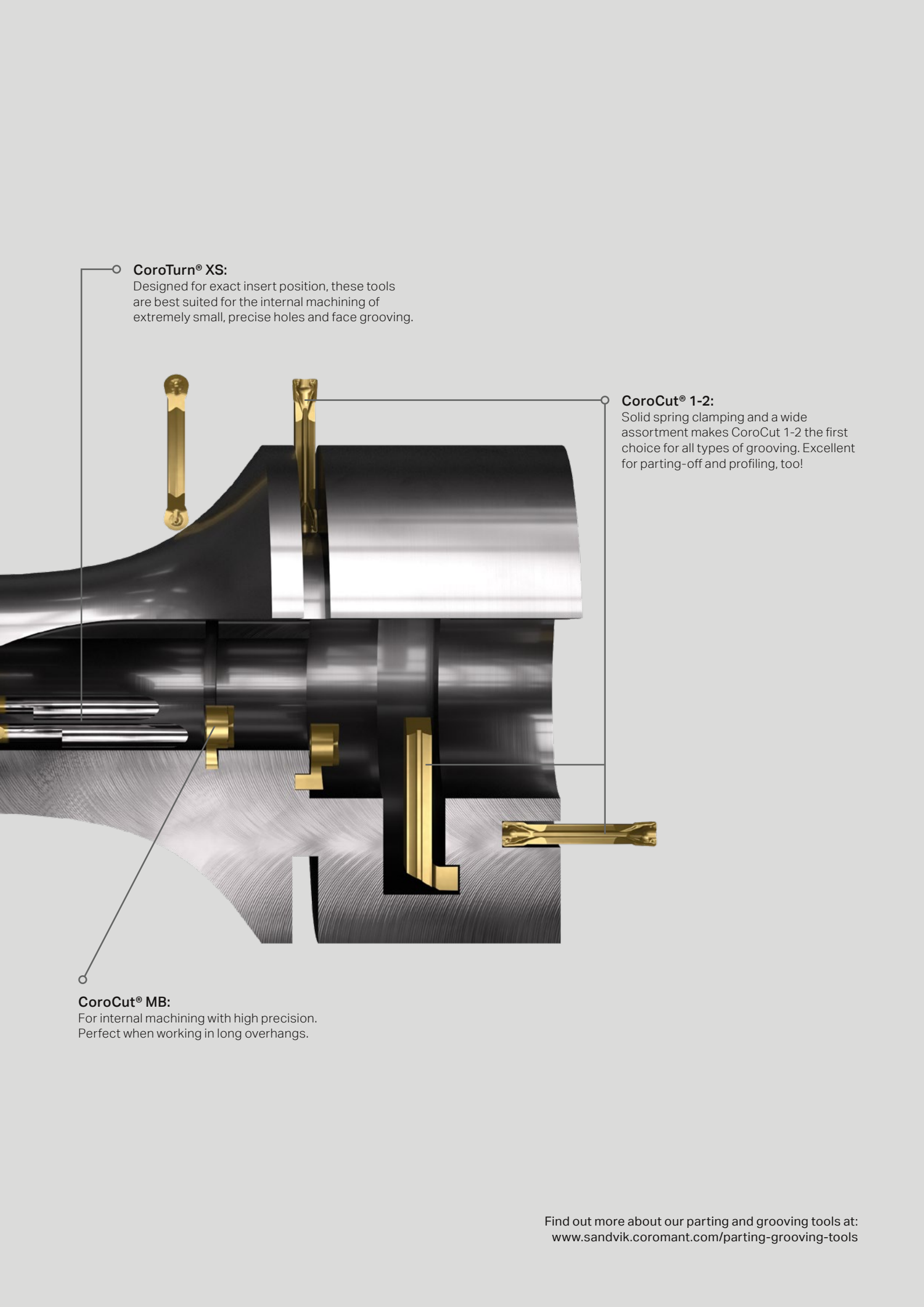


Set the bar higher for productivity

Switching to a CoroCut QD blade in your current tool block will yield immediate benefits in terms of material savings and increased productivity, even without internal coolant. Installing CoroCut QD with internal over- and under-coolant unlocks a whole new level of productivity and cost savings.

The right tools for every operation





CoroTurn® XS:

Designed for exact insert position, these tools are best suited for the internal machining of extremely small, precise holes and face grooving.

CoroCut® 1-2:

Solid spring clamping and a wide assortment makes CoroCut 1-2 the first choice for all types of grooving. Excellent for parting-off and profiling, too!

CoroCut® MB:

For internal machining with high precision. Perfect when working in long overhangs.

Machining made easy



Quickly find the right cutting tool and adapter combo

Our tool builder offers consultation for all turning tools with plug-and-play solutions. Simply select your operation and machine interface to get an instant 3D rendition of the best tooling combination for your job. See more at: www.tool-builder.com

Find and order your tools

Look through our Parting and Grooving catalog, where you can easily find and order the right tools for your machining operation. Our catalog is available both offline and online at: www.sandvik.coromant.com/publications

Get first choice recommendations

Don't know where to start with a machining job? Our First Choice app offers you expert consultation on the tools you need to get up and running. Choose your application and get expert tool recommendations here: www.sandvik.coromant.com/firstchoice

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