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 machine type.

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 adaptors make using tools equipped with internal coolant easy. The adaptors 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 slowing down the 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.

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.

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.

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

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.

For more information and insert recommendations visit: www.sandvik.coromant/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, whose 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.

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 build-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 only. When it comes to getting the coolant to the cutting zone, the extensive assortment of plug-and-play adaptors helps a lot too, eliminating the need for time-consuming hoses or pipes.

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.

<table>
<thead>
<tr>
<th>Customer</th>
<th>Auto parts suppliers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component</td>
<td>Valve, parting off D46 mm bar</td>
</tr>
<tr>
<td>Workpiece material</td>
<td>1.4418, ferritic/martensitic stainless steel (200 HB)</td>
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<tr>
<td>Tool</td>
<td>QD-RF26C2525A</td>
</tr>
<tr>
<td>Insert</td>
<td>QD-NG-Q000-0003-CR 1135</td>
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</table>

<table>
<thead>
<tr>
<th>Cutting data</th>
<th>Competitor blade</th>
<th>CoroCut QD without coolant</th>
<th>CoroCut QD blade with internal coolant</th>
</tr>
</thead>
<tbody>
<tr>
<td>v, m/min (ft/min)</td>
<td>85 (279)</td>
<td>85 (279)</td>
<td>105 (344)</td>
</tr>
<tr>
<td>f, mm/rev (in/rev)</td>
<td>0.15 (0.006)</td>
<td>0.15 (0.006)</td>
<td>0.17 (0.007)</td>
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<tr>
<td>a_p, mm (inch)</td>
<td>3 (0.12)</td>
<td>3 (0.12)</td>
<td>3 (0.12)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Results</th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Tool life / edge, pcs</td>
<td>120</td>
<td>175</td>
<td>220</td>
</tr>
<tr>
<td>Tool life increase</td>
<td>–</td>
<td>46%</td>
<td>83%</td>
</tr>
</tbody>
</table>

Quick & A with Antti Wikström, P&G Application Specialist at Sandvik Coromant
The right tools for every operation

- **CoroCut® XS**: The perfect high-precision tool for the external machining of small, slender components.
- **CoroCut® 3**: Narrow parting off and precision grooving down to the smallest widths.
- **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.
- **CoroCut® QD**: Strong and stable with a smart coolant solution, this system is highly effective when parting off or machining deep grooves, and is excellent for long overhangs.
- **CoroThread® 254**: Equipped with the t-railed iLock™ interface, these inserts are perfect for stable machining of circlip- and other shallow grooves.
- **CoroTurn® XS**: Designed for exact insert position, these tools are best suited for the internal machining of extremely small, precise holes and face grooving.

Find out more about our parting and grooving tools at: www.sandvik.coromant.com/parting-grooving-tools
Machining made easy

Ifind App
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