Flexible spline milling for streamlined manufacturing
New spline milling opportunities

Productivity gains plus new market opportunities

Shortening value streams by reducing the number of steps required to complete a component delivers many benefits. Faster working and greater productivity, for example. CoroMill® 171.4 now brings such gains to the realm of spline manufacturing.

CoroMill 171.4 allows the switch from specialized machines to standard CNC machines. If you outsource spline work today, or have previously said no to manufacturing requests, this milling tool opens up many enticing new business opportunities.

Cut through the barriers of dedicated spline machines

Work on multi-task machines, machining centres and turning centres
• Machine complete spline components on current multi-task machines, machining centres or turning centres. This lowers machine tool investment costs for new spline production equipment.

Single set-up machining
• Streamline manufacturing processes by reducing the number of production steps and total production time. Machine components with just one set-up!

Precision-ground inserts ensure quality
• Fully-ground, high-precision carbide inserts capable to meet DIN 7 quality standards for most spline components.

Dry machining
• Improves the working environment and saves on cutting fluid costs.

One cutter body – different insert profiles
• Possibility to use different inserts in the same cutter body reduces cutter body inventory.
Full profile, high-precision carbide inserts with four cutting edges.

Three standardized insert seat sizes. All inserts made with same blank size fit in the same cutter body.

Make the most of your machines

CoroMill 171.4 offers a versatile solution for milling high-quality spline profiles. Now you can produce splines in multi-task machines, machining centres and turning centres. Operations previously done on hobbing machines or sub-contracted out can now be completed on standard CNC machines in your own workshop.
High-quality spline milling
The CoroMill 171.4 milling tool solution will be tailored to your specific component. A wide range of common spline standards are covered.

Spline profile information
DIN 5480, ANSI B92.1, ISO 14. Other profiles on demand.

Insert assortment
Spline module range: 0.8–3.0 mm (DP 32/64–8/16)
Insert grade: Universal insert grade GC1130

Stocked tool body assortment

<table>
<thead>
<tr>
<th>Tool body</th>
<th>Insert size</th>
<th>Diameter</th>
<th>Coupling</th>
<th>No of inserts</th>
<th>Insert options / teeth size</th>
</tr>
</thead>
<tbody>
<tr>
<td>R171.4-30A25-S4</td>
<td>S</td>
<td>30 mm</td>
<td>Cyl. shank 25 mm</td>
<td>4</td>
<td>Small / module range 0.8–1.5</td>
</tr>
<tr>
<td>R171.4-50C4-M5</td>
<td>M</td>
<td>50 mm</td>
<td>Capto C4</td>
<td>5</td>
<td>Medium / module range 1.5–2.5</td>
</tr>
<tr>
<td>R171.4-63C5-L5</td>
<td>L</td>
<td>63 mm</td>
<td>Capto C5</td>
<td>5</td>
<td>Large / module range 2.5–3.0</td>
</tr>
<tr>
<td>R171.4-31D19-S4</td>
<td>S</td>
<td>1 1/4 inch</td>
<td>Cyl. shank 3/4 inch</td>
<td>4</td>
<td>Small / DP range 23/64–16/32</td>
</tr>
<tr>
<td>R171.4-51C4-M5</td>
<td>M</td>
<td>2 inch</td>
<td>Capto C4</td>
<td>5</td>
<td>Medium / DP range 16/32–10/20</td>
</tr>
<tr>
<td>R171.4-64C5-L5</td>
<td>L</td>
<td>2 1/2 inch</td>
<td>Capto C5</td>
<td>5</td>
<td>Large / DP range 10/20–8/16</td>
</tr>
</tbody>
</table>

Engineered tool body assortment
Tool diameter range: 30–125 mm (1.5–5 inch)
Couplings: Coromant Capto®, arbor, cylindrical shank, bore with keyway
Number of inserts: 3–10

For more information please contact your local Sandvik Coromant representative.