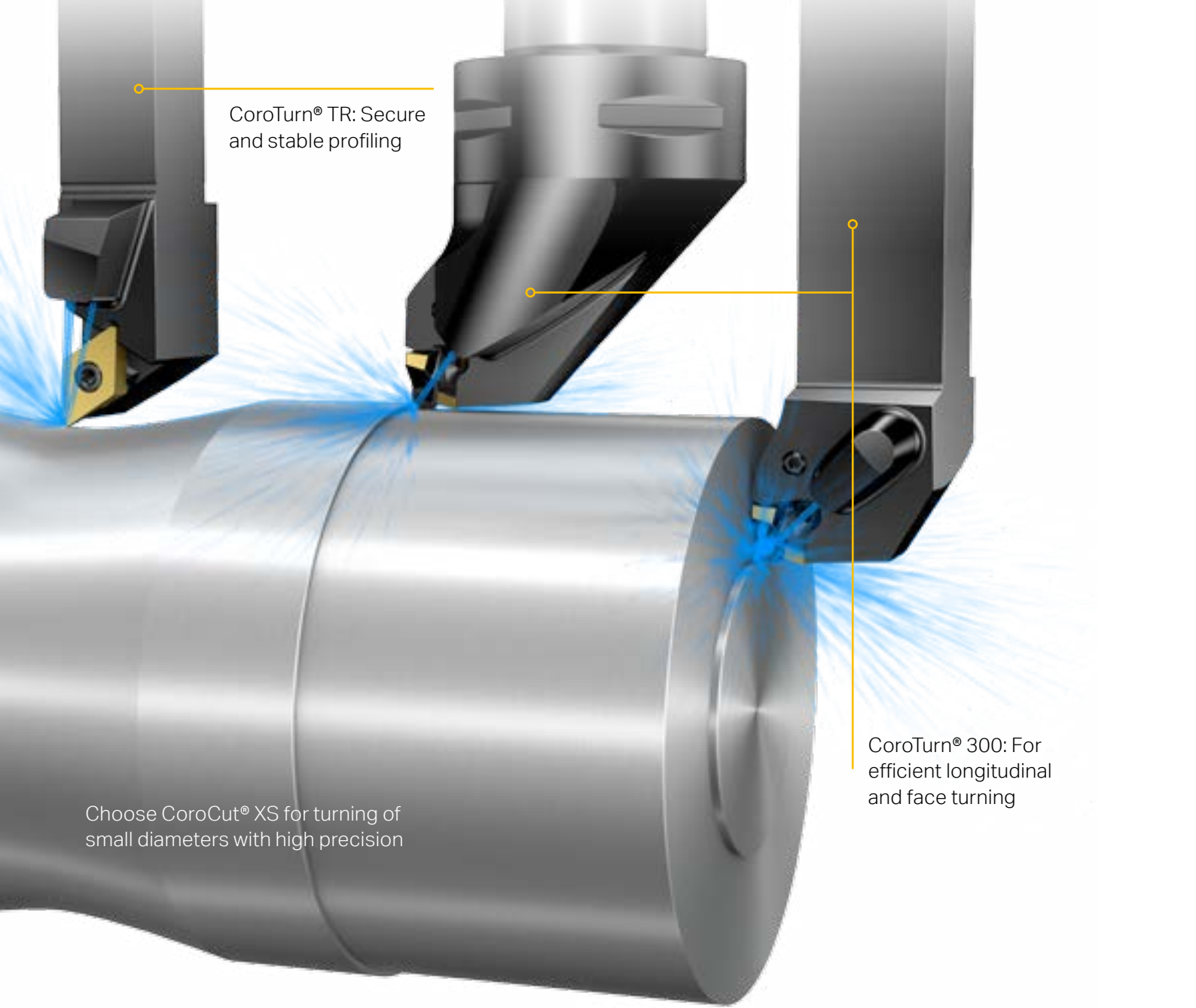


CoroTurn[®] 300 and CoroTurn[®] TR

Effective and high-quality turning

When you need that little extra in terms of quality and machining effectiveness – look no further than CoroTurn 300 and CoroTurn TR. Featuring high precision coolant and stable insert clamping solutions, these systems combine chip control and accuracy for long tool life and high surface quality. Add on the Coromant Capto[®] interface or QST[™] shanks for quick tool change and easy coolant connection for maximized production time.



CoroTurn® TR: Secure and stable profiling

Choose CoroCut® XS for turning of small diameters with high precision

CoroTurn® 300: For efficient longitudinal and face turning

Unique turning solutions

Benefits

- Predictable and secure machining
- Chip control and stable performance for high component quality and long tool life
- Handling efficiency: short set-up times when changing tool holder and insert save time and money

Stable insert position

To achieve the highest surface quality, the key is to prevent cutting forces from causing micro-movements of the insert. Both systems feature iLock™, an interface between insert and holder, developed to bridge this challenge.



iLock™
ingenious locking interface

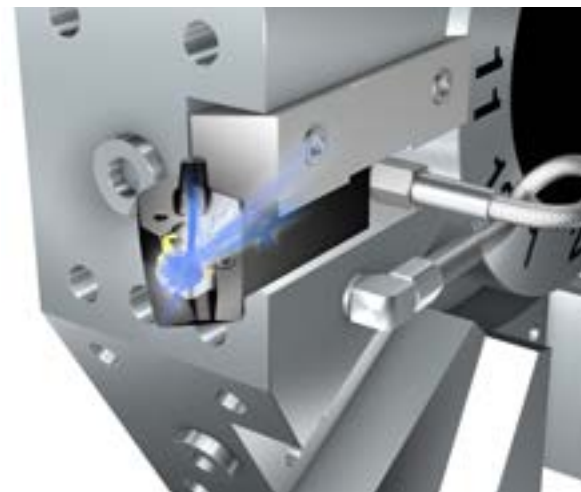
Over- and under coolant

High precision coolant from above controls the chip breaking for secure machining, while under coolant controls the temperature for long and predictable tool life. The coolant also has positive effects on surface quality.

More about the benefits of coolant on www.sandvik.coromant.com/coroturn300

Quick change tool holders

Coromant Capto® interface or QS™ shanks enable quick tool change and easy coolant connection for maximized production time.



Grades that endure

Inserts come in grades GC4325 and GC4315 with Inveio™ – for high wear resistance and long tool life in steel turning.

More information on www.sandvik.coromant.com/inveio



Eight-edged smartness

The eight-edged inserts of CoroTurn 300 ensure good heat transformation for predictable performance and wear. More edges also means fewer inserts which in turn means better control of the inventory. The geometries are designed for excellent chip breaking within their respective application areas. Last but not least; the eight-edged insert design means less carbide per edge which means less material to recycle and waste. Good for you and for the environment.

Extended tool life with correctly applied coolant



CoroTurn® TR

| | | | |
|---|-------------------------------------|--------------------|--------------------|
| Operation | Profiling | | |
| Workpiece material | Stainless steel, M1.0.Z.AQ (200 HB) | | |
| Cutting tool, insert | QS-TR-D13JCR 2020HP, D1308 2025 | | |
| v_c m/min (ft/min) | 200 (656) | | |
| f_n mm/rev (in/rev) | 0.18 (0.007) | | |
| Results | | | |
| | Competitor | CoroTurn TR | CoroTurn TR |
| Coolant, bar (psi) | External | 8 (116) | 50 (725) |
| Tool life, pcs | 190 | 340 | 470 |
| Tool life increase | - | 79% | 147% |

Profiling with CoroTurn TR

By changing to a CoroTurn TR QS shank, the customer could machine a remarkable number of components. As a result of implementing internal over- and under coolant, significant improvements were experienced both at high and low coolant pressures.

CoroTurn® 300

| | | | |
|---|-----------------------------------|---------------------------------|---------------------------------|
| Operation | External axial and facing | | |
| Workpiece material | Forged low-alloy steel, P2.1.Z.AN | | |
| v_c m/min (ft/min) | 350 (1148) | | |
| f_n mm/rev (inch/rev) | 0.35 (0.014) | | |
| a_p mm (in/rev) | 2.5 (0.10) | | |
| Time in cut | 1.19 min/component | | |
| Coolant pressure | 3 bar (43.5 psi) | | |
| Results | | | |
| | WNMG 080408-PF | CoroTurn 300¹ | CoroTurn 300² |
| Coolant, bar (psi) | 3 bar (43.6 psi) | 3 bar (43.6 psi) | 3 bar (43.6 psi) |
| Tool life, pcs | 9 | 23 | 27 |
| Tool life increase | - | 156% | 200% |

¹ over and under coolant ² under coolant only

For more information about coolant, the products and ordering see www.sandvik.coromant.com/coroturn300 or www.sandvik.coromant.com/coroturtr

Machining the inner CV joint with CoroTurn 300

When replacing the standard tool set-up with CoroTurn 300 and -L4 geometry the customer could gain remarkable increase in tool life. By applying correct type of coolant, the results were even better.