

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 iLockTM, an interface between insert and holder, developed to bridge this challenge.



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

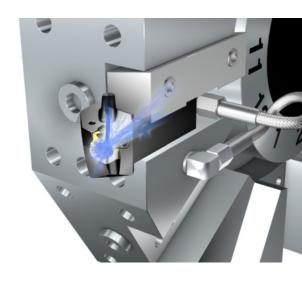
Quick change tool holders

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 mean 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 an 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 300 ¹	CoroTurn 300 ²	
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				

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 the correct type of coolant, the results were even better.

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

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¹ over and under coolant 2 under coolant only