

# Precision coolant tools for all turning applications

## Lower cost per component and longer unmanned machining

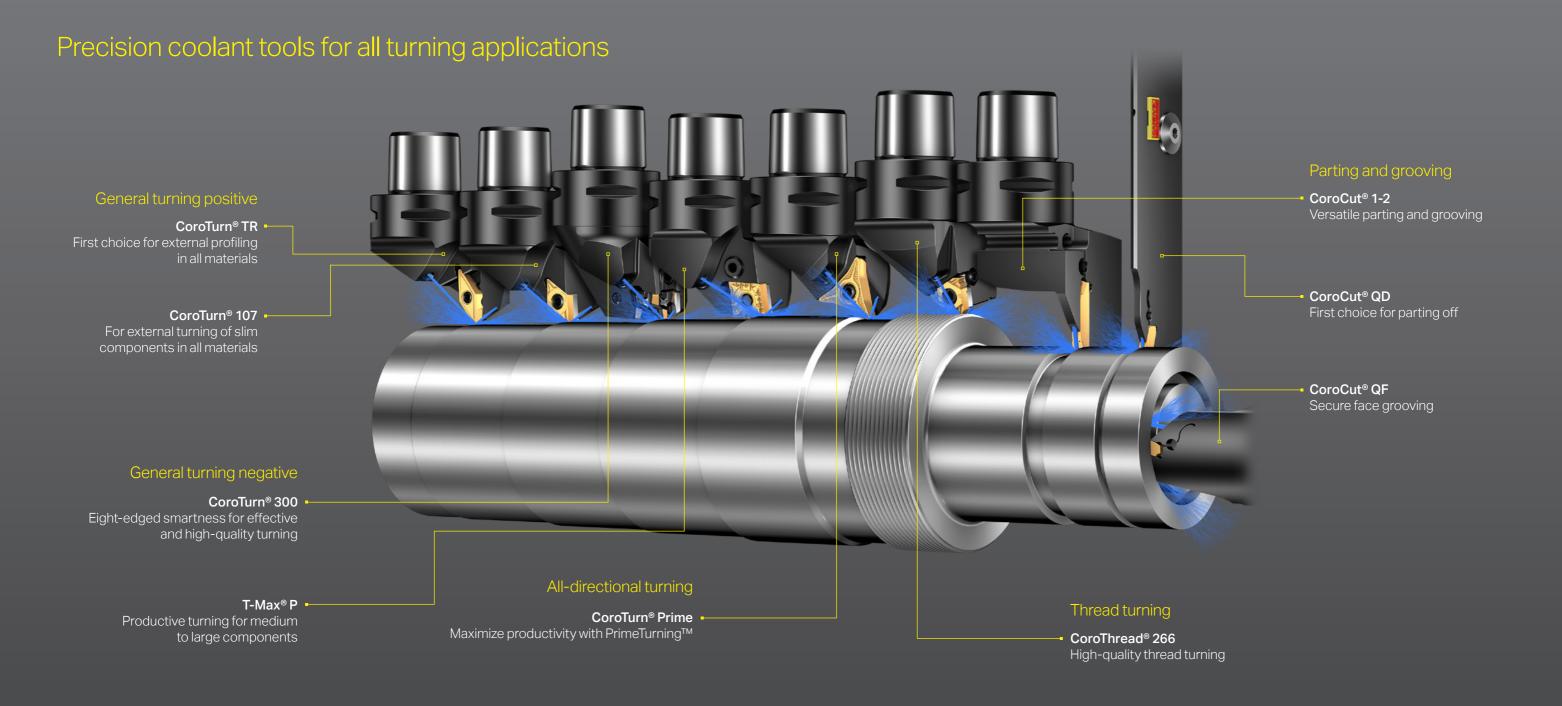
With through-tool delivery of precision over and under coolant, the new holders increase tool life and productivity for ISO S, M and P workpiece materials. Precision coolant is especially efficient for difficult-to-machine materials that generate high heat, protecting the tool from excessive wear and prolonging green light machining. Integrated under coolant boosts tool life by 20% or more which significantly reduces tool cost per component.

### Why precision coolant is so important

Precision coolant from above controls chip breaking for secure machining, while the under coolant controls the temperature for a long and predictable tool life. The coolant technology also has positive effects on surface and component quality. Visit https://www.sandvik.coromant.com/knowledge for information and expert recommendations on when and how to use over and under coolant for steel turning.

#### Benefits

Need	Solution	Value
Unmanned machining	Pre-directed precision over coolant can improve chip formation and increase the process window where no operator is needed.	Cost savings in terms of operator costs and/or green light machining
Easy setup	Plug and play. Pre-directed precise over coolant for chip control and under coolant for reliable tool life.	Simplify setup
Improved component cost	Integrated under coolant improves tool life by 20% or more. The benefit of under coolant becomes even greater with increased heat generation.	Reduce tool cost per component



#### Performance

**Component:** Main landing gear

Material: Steel, CMC 02.2 (MC P2.5.Z.HT)

**Operation:** Roughing, Pocketing



	Solution with flood coolant	New solution with precision coolant
Tool	C6-SRSCR(&L)-45065-16	C6-SRSCR(&L)-45065-16XC
Insert	RCMT 1606M0	RCMT 16 06 MP-H7 4425
v <sub>c</sub> , m/min (ft/min)	85 (280)	85 (280)
f <sub>n</sub> , mm (inch)	0.38 (0.015)	0.38 (0.015)
a <sub>p</sub> , mm (inch)	5.08 (0.2)	5.08 (0.2)
Coolant type	Flood	Precision over and under
Coolant pressure	5 bar	5 bar
Tool life components	0.0	2.0000000000000000000000000000000000000

Tool life, components 0.8 components 2 components

#### Result

GC4425 in combination with over and under coolant led to much increased tool life and enabled the customer to run 2 full components before any risk of insert failure, gaining productivity and cycle time by removing the stop for insert change.

