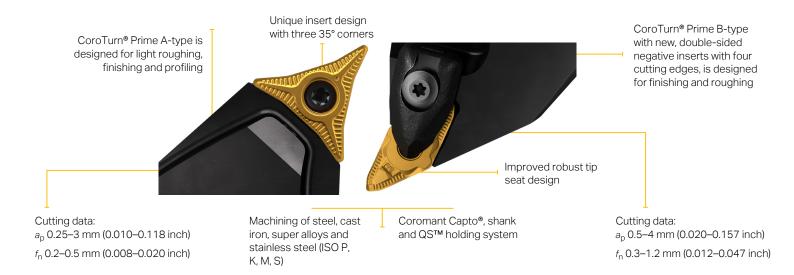


# The biggest innovation in turning... since turning

PrimeTurning<sup>™</sup> enables you to do turning in all directions in a much more efficient and productive way compared to conventional turning. This concept is comprised of the PrimeTurning<sup>™</sup> method, CoroTurn® Prime turning tools and the CoroPlus® Tool Path for PrimeTurning<sup>™</sup> software.

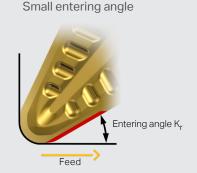




Secure maximum output by using the CoroPlus® Tool Path for PrimeTurning $^{TM}$  software. The software supplies programming codes and techniques to set up proper parameters and variables for your application.

## Success factors

The key attributes of PrimeTurning™ that result in increased productivity and long-lasting tool life:



Thin and wide chips spread the load and heat away from the nose radius.

### Efficient edge utilization



Three edges distribute wear over a longer edge and move heat away from the cutting zone.

### No chip jamming



By turning away from the shoulder, the risk of chip jamming is eliminated.

# Why should you switch to PrimeTurning™?



Reliable, secure and cost-efficient machining >50%

Productivity increase



Longer lasting inserts



Optimized tool inventory



Higher machine utilization



Faster metal removal rates

# Productivity gains with PrimeTurning™ and CoroTurn® Prime

## CoroTurn® Prime A-type

Material:	Cast, SAE 1045, CMC 02.1, 207 HB	
Coolant:	Emulsion	
	Competitor insert	CoroTurn® Prime A-type (CP-A1108-L5 4325)
$v_{\rm c}$ , m/min (ft/min)	300 (984)	300 (984)
f <sub>n</sub> , mm/rev (in/rev)	0.25 (0.010)	0.4 (0.016)
a <sub>p</sub> , mm (inch)	1.5 (0.059)	3 (0.118)
Result:		
Total cycle time	70 sec	44 sec
Total life/edge	360 pcs	558 pcs



# CoroTurn® Prime B-type

Material:	Stainless steel, M1.0.Z.AQ (1.4435)	
Operation:	Roughing, external PrimeTurning™	
	Existing insert (CNMG 190612-QM 4335)	CoroTurn® Prime B-type gen 2 (CP-B1208D-L4 4425)
$v_{\rm c}$ , m/min (ft/min)	80 (262)	180 (591)
f <sub>n</sub> , mm/rev (in/rev)	0.4 (0.016)	0.9 (0.035)
a <sub>p</sub> , mm (inch)	4.5 (0.177)	3 (0.118)
MRR, cm³/min (in³/min)	144 (8.79)	486 (29.7)
Time in cut, min	180	120
Result:		
Tool life, pcs	0.19	0.30

+93%
Increased productivity

Visit our website to see Prime Lurning™ in action: www.sandvik.coromant.com/primeturning

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