


# CoroMill® 331

## Reliable grooving and parting off

CoroMill 331 is a highly productive choice for reliable, multi-purpose side and face milling with high precision. The cutter is now available with new, valuable features such as internal coolant, more light-cutting geometries and surface treatment on the wedges, to bring your groove milling operations to a new level.



The internal coolant solution provides excellent chip evacuation – critical for groove quality and process security.

### Features and benefits

- Wide assortment of diameters, widths and mountings – always find the right cutter for every operation
- High-precision setting for excellent groove quality
- Wide setting range enables flexible machining for a broad application area
- Spring-loaded cassette with serrations for accuracy and stability, with pin-controlled adjustment range providing precision setting and easy handling



## Application

- Grooving
- Parting off
- Double half-side milling
- Shoulder milling
- Face milling
- Back face milling
- Gang milling
- Circular interpolation

## New light-cutting geometries

The M30 geometry delivers reliable ISO P and ISO K machining in weak set-ups and long overhangs. The L30 and L50 geometries provide great security, quality and tool life in ISO M and ISO S applications.

## Performance Customer case

Component:	Flow control ball valve for oil and gas industry
Material:	Austenitic stainless steel, M1.0.Z.AQ (316 SS)
Operation:	Grooving
Machine:	Special-purpose machine



	Existing insert (H-PL S30T)	New insert (L50 S30T)
Tool	N331.32-152T38EM0.394	N331.32-152T38EM0.394
Insert	N331.1A-08 45 08H-PL S30T	N331.1A-08 45 08E-L50 S30T
DC	152	152
$z_{n^*}$ ( $z_{eff}$ )	12 (6)	12 (6)
$n$ , rpm	1109	1109
$v_c$ , m/min (ft/min)	529 (1736)	529 (1736)
$h_{ex}$ , mm (inch)	0.036 (0.001)	0.036 (0.001)
$f_z$ , mm (inch)	0.1 (0.004)	0.1 (0.004)
$v_f$ , mm/min (in/min)	658 (25.9)	658 (25.9)
$a_{p1}$ , mm (inch)	11.5 (0.453)	11.5 (0.453)
$a_{p2}$ , mm (inch)	5.5 (0.217)	5.5 (0.217)
Time in cut / component, sec	2.5	2.5
Tool life, components	210	260



## Result:

By replacing the H-PL geometry with the new L50 geometry, tool life increased 24%. Additionally, the operation resulted in a more reliable and predictable insert wear pattern.

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