

# 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 pincontrolled 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

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

Austenitic stainless steel, M1.0.Z.AQ (316 SS)

Operation: Grooving

Special-purpose machine

	Existing insert (H-PL \$30T)	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 <sub>n</sub> , (z <sub>eff</sub> )	12 (6)	12 (6)
<i>n</i> , rpm	1109	1109
v <sub>c</sub> , m/min (ft/min)	529 (1736)	529 (1736)
h <sub>ex</sub> , mm (inch)	0.036 (0.001)	0.036 (0.001)
$f_z$ , mm (inch)	0.1 (0.004)	0.1 (0.004)
v <sub>r</sub> , mm/min (in/min)	658 (25.9)	658 (25.9)
$a_{p}$ , mm (inch)	11.5 (0.453)	11.5 (0.453)
a <sub>e</sub> , 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.









