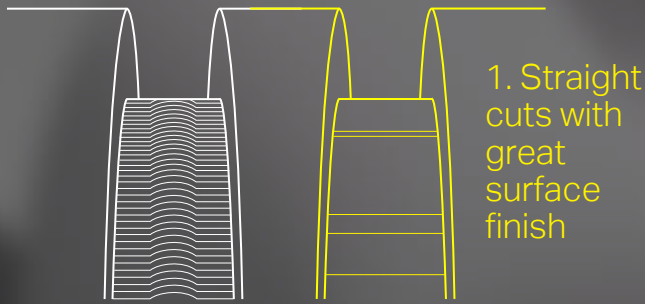
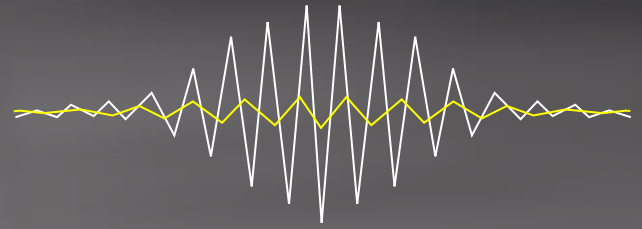


# FIVE REASONS FOR Y-AXIS PARTING

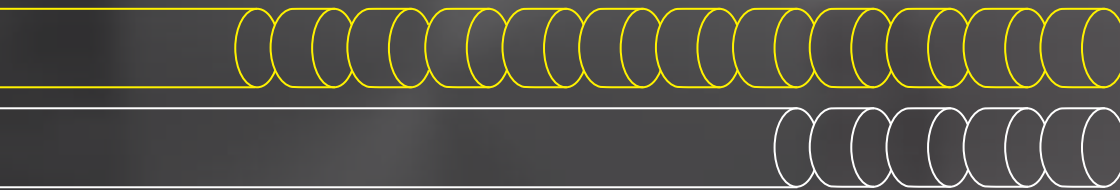


1. Straight cuts with great surface finish



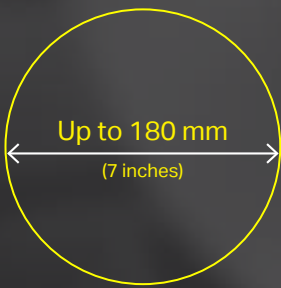
2. Less vibration – less noise

■ Y-axis parting    ■ Conventional parting



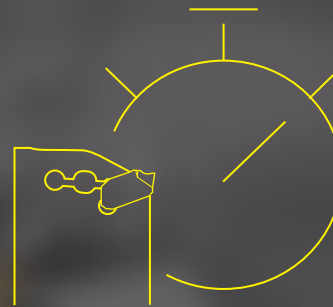
3. You get more done in a day

With a six-time higher blade stiffness, you can increase the feed or use a longer overhang without losing stability.



4. No more bandsawing

Y-axis blades allow parting-off larger diameters than what has previously been possible.



5. It makes your machine better

Reach the full potential of your multi-task machine or machining center by utilizing the Y-axis.

## Customer cases

Component	Material	Diameter, mm (inch)	Feed current method, mm/rev (in/rev)	Feed Y-axis parting, mm/rev (in/rev)	Productivity increase	Tool life increase
Magnetic valve	Stainless steel HB365	65 (2.56)	0.15 (0.006)	0.3 (0.012)	100%	70%
Bolt	316L stainless steel	60 (2.36)	0.15 (0.006)	0.3 (0.012)	100%	50%
Bearing roller	Bearing steel	40 (1.57)	0.12 (0.005)	0.3 (0.012)	150%	40%
Pump housing	Stainless steel HB365	55 (2.17)	0.12 (0.005)	0.3 (0.012)	200%	±0%
Aerospace blank	Inconel 718	180 (7.1)	Bandsaw (20 min)	0.15 (0.006)	550%	Not evaluated

## Machine tool development milestones

Y-axis turn-mill machines were introduced in the late 1990s to add live tooling to turning centers.

The Y-axis was added to move the live tool across the spindle face, creating a vertical dimension perpendicular to the Z- and X-axis plane.

The first live tools were limited to be driven only in the same two axes of motion as the turning tools, i.e. the X- and Z-axes.

The Y-axis is now a standard feature in nearly all multi-task machines and optional in many new turning centers.

### What is Y-axis parting?

By rotating the insert pocket 90 degrees and feeding the tool along the Y-axis, you get a much more beneficial direction of the cutting force, resulting in reduced vibration and higher stability.

Almost unbelievably simple.

