Star CNC's Newest Revolutionary Software Technology

HFT
High Frequency Turning

Star's latest software technology is a fitting addition to assist with chip control where chip breaking is difficult in materials such as 17-4 Stainless Steel, 316 Stainless Steel, 360 Brass, Aluminum, and Black Delrin. This software enables intermittent cutting on any linear axis which will disperse "stringy" chips into more workable, smaller chips.

HFT Benefits:

- Increased productivity with less operator intervention
- Extended tool life
- Lower machining temperatures
- Reduced risk of built-up edge
- Suitable for difficult-to-chip materials including aluminum, brass, stainless steel, copper, plastic, etc.
- Can be used in conjunction with FANUC's canned cycles
- Can be used on any linear axis
- Can be used for profile turning (with tool nose radius compensation)
- Can easily be added to any program with two additional lines of code
- Can be retrofitted (machine model and CNC control dependent)

HFT Machining Geometries

Star's HFT software is suitable for a wide range of machining techniques including:

Z-axis: Turning & ID Hole Making Cycles

HFT can be used for any rough or finish turning operation in the Z+ or Z- direction. HFT can also be used on both the main and subspindles simultaneously.

X-axis: Facing, Grooving, Cut-off & Cross Hole Making Cycles

HFT can be used to control chip breakage during facing, grooving and parting off operations. HFT cutting parameters can also be changed "on-the-fly" to control the chips at any diameter.

Y-axis: Milling & Slotting

HFT can be used in the Y axis on the main spindle or sub-spindle, the software also works in conjunction with any Fanuc hole making cycle.

Taper

HFT can be used on any tool path, for profiles that include tapers and chamfers, either the X or Z axis can be specified as the master "HFT" axis.

Radius

HFT can be used on any tool path, for profiles that include arcs the software interrupts both axes to break-up the chips.

Drilling

HFT can be used in conjunction with any hole making cycle including peck drilling (full retract) or hi-speed peck drilling.