COFA-X FAQ

Question	Causes	Remedy
No or incomplete deburring	Incorrect direction of rotation – standard COFA-X blades are left-hand cutting (M4)	Observe direction of rotation and correct to left-hand cutting (M4)
	Bore diameter too large	Drill bore according to specifications – COFA-X requires a bore tolerance of +0.1/0.
	Bending spring too soft	Install a harder bending spring if the tool concept permits (modular)
	Blade worn, worn out	Change blade
	Cutting speed too high	Reduce cutting speed
	Working feed rate too high	Reduce working feed rate
	Incorrect starting position for deburring	Check traverse ranges
	Burr height	Reduce the burr height by drilling until burr-free or reduce the service life of the drill
Vibration, chatter marks	Cutting speed too high	Reduce cutting speed
	Working feed rate too high	Reduce working feed rate
Deburring too small	Burr height	Reduce the burr height by drilling until burr-free or reduce the service life of the drill
	Bending spring too soft	Install a harder bending spring if the tool concept permits (modular)
	Cutting parameters too high	Reduce the cutting parameters according to the specifications or carry out the deburring process twice
Deburring too large	Bending spring too hard	Install a softer bending spring if the tool concept allows it (modular)
Secondary burr	Bending spring too hard	Install a softer bending spring if the tool concept allows it (modular)
Short service life	Poorly clamped workpiece or tool (vibration)	Ensure that workpiece and tool are more firmly clamped
	Burr height	Reduce the burr height by drilling without burrs or reduce the service life of the drill
Blade or spring breakage	Tool and blade incorrectly positioned in the tool holder	Mount the tool correctly in the tool holder (Weldon)

Question	Causes	Remedy
Blade or spring breakage (continued)	Blade coordinates programmed incor- rectly – blade orientation does not match the machining edge	Correct the programming, check traverse ranges
	Cutting parameters too high	Reduce cutting parameters according to specifications
Converting standard COFA to COFA-X	Conversion not possible	The standard COFA is designed for the bore diameter and therefore does not allow an offset value.
Inserting a standard COFA blade into a COFA-X tool	Standard COFA blades do not work in a COFA-X.	Standard COFA cutting geometry does not match the preloaded position of the blade (30° blade, left-hand cutting)
Possible use of COFA-X in a standard lathe	Spindle orientation (tool blade orientated to the alignment of the X-axis) and eccentric entry into the bore required	COFA-X requires the application-specific blade to be aligned with the bore edge as well as an offset in the X-axis for entry or exit - similar to a turning tool for the undercut