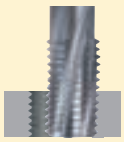
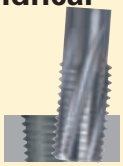
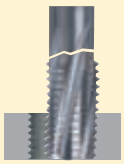
Application problems with new thread milling cutters

Problem	Possible causes	Solution
1 Thread produced is too large or too small 	Incorrect radius in CNC program and therefore milling of incorrect circle	Correct milling radius until thread is dimensionally correct
2 Thread not cylindrical 	Feed rate too high Synchronous milling path with long threads	Reduce feed rate Modify milling direction to opposite direction
3 Thread surface not according to requirements, chatter marks	Cutting speed too high Insufficient tool or workpiece clamping	Adjust cutting speed Check tool and workpiece clamping
4 Tool breakage 	CNC program error Cutting rates too high	Check CNC program Adjust cutting rates
5 Tool life insufficient	Cutting rates too high Tool applied uncoated Insufficient lubrication and chip evacuation	Adjust cutting rates Apply coated tool Improve lubrication, coolant delivery via the spindle
6 Tool breakage with drill/ milling cutter	Chip problems when drilling Feed rates too high when drilling	Apply tool with IC Incorporate pecking cycles