



Rib Machining Sample

Machined on an Ultra-Precision VMC

Material:	P20 Premium
Hardness:	29-35 HRC
Part Size:	15mm x 30mm x 30mm
Rib Feature:	0.725mm x 7.5mm
Sidewall Roughness:	0.2 Ra (μm)
Tools Used:	1 cutter used for all ribs
Cutting Tool:	0.70mm x 8.0mm +1.0deg / (NS Tool)
Cycle Time:	1 hour 50 minutes each rib channel
Machine Used:	Makino iQ300
Tool Path:	Single pass, full depth, trochoidal / (Makino FFCam)
Trochoid Motion:	Circular XY (0.0125mm per side) x 0.003mm step-over

