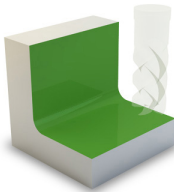


Summary of cutting data for Shoulder


Material details
JIS, A5052, Hardness: 55 HB, Material group:N1.2.Z.UT

Task details

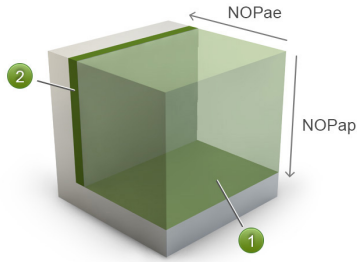


Shoulder

Operation type	Pre-machining and finishing
System stability	Excellent stability
Right angle demand	Right angle required
Axis position	vertical spindle position
Depth	10 mm
Width	50.8 mm
Length	50.8 mm
Corner radius	0 mm
Ra wall	3.2 µm
Cutting edge diameter	16 mm

Recommended solution															
Machining	Type of cooling	Coolant	Description	Grade	T _{mf} [min:s]										
Shoulder Milling	External	Emulsion 10%	Perform	WJ30ED	00:59.820										
<div></div> <div><table><tr><td>Tool</td><td>MC232-16.0W3BC-WJ30ED</td></tr><tr><td>Type</td><td>Body</td></tr><tr><td>No. of pieces</td><td>1</td></tr><tr><td>Description</td><td>Perform</td></tr></table></div> <div>Image similar</div>				Tool	MC232-16.0W3BC-WJ30ED	Type	Body	No. of pieces	1	Description	Perform				
				Tool	MC232-16.0W3BC-WJ30ED										
				Type	Body										
				No. of pieces	1										
				Description	Perform										

Cutting data



Legend

- 1 Premachining
- 2 Finishing

	1	2	
Working engagement (a_r)	2.29	0.32	mm
Depth of cut (a_p)	2	2	mm
Number of passes in AE direction (NOPae)	22	1	
Number of passes in AP direction (NOPap)	5	5	
Cutting speed (v_c)	400	386	m/min
Spindle speed (n)	7960	7680	1/min
Feed per tooth (f_z)	0.328	0.305	mm
Feed speed at the contour (v_{fe})	7830	7030	mm/min
Cutting power (P_c)	0.363	0.0515	kW
Cutting torque (M_c)	0.436	0.0641	Nm
Maximum chip thickness (h_{ex})	0.23	0.0854	mm
Material removal rate (Q)	35.9	4.5	cm ³ /min
Total cutting time ($T_{c\ tot}$)	00:49.560	00:02.850	min:s
Total non-cutting time ($T_{nc\ tot}$)	00:07.140	00:00.297	min:s
Tool life length (LifeLength)	3484.24	10302.32	m
Tool life time (LifeTime)	440	1500	min

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