

Summary of cutting data for Shoulder

Material details

AISI/SAE, 1045, Hardness: 207 HB, Material group:P1.2.Z.AN

Task details



Shoulder		
Operation type	Pre-machining	
Workpiece surface condition	Pre-machined	
System stability	Excellent stability	
Right angle demand	Right angle required	
Axis position	vertical spindle position	
Depth	10	mm
Width	38.1	mm
Length	38.1	mm
Corner radius	0	mm
Cutting edge diameter	16	mm

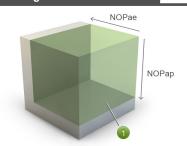
Recommended solution

Machining	Type of cooling	Description	Grade	Tmf [min:s]		
Shoulder Milling	Dry	Perform	WJ30ED	00:14.340		

	Tool	MC232-16.0W3BC-WJ30ED
	Туре	Body
	No. of pieces	1
	Description	Perform
Image similar		



Cutting data



Legend





Working engagement (ae)	9.52 mm
Depth of cut (a _p)	10 mm
Number of passes in AE direction (NOPae)	4
Number of passes in AP direction (NOPap)	1
Cutting speed (vc)	164 m/min
Spindle speed (n)	3250 1/min
Feed per tooth (fz)	0.08 mm
Feed speed at the contour (vfe)	781 mm/min
Cutting power (Pc)	2.53 kW
Cutting torque (Mc)	7.44 Nm
Maximum chip thickness (hex)	0.08 mm
Material removal rate (Q)	74.4 cm3/min
Total cutting time (Tc tot)	00:14.160 min:s
Total non-cutting time (Tnc tot)	00:00.154 min:s
Tool life length (LifeLength)	55.61 m
Tool life time (LifeTime)	71 min