

Summary of cutting data for Ext. plain face

Material details

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

Task details



Ext. plain face	
Operation type	Pre-machining and finishing
Workpiece surface condition	Pre-machined
Cutting condition	Continuous cut
Start diameter	38.1 mm
Width	2 mm
Ra facing	3.2 µm
System stability	Excellent stability

Recommended solution

Machining	Type of cooling	Coolant	Description	Grade	Tmf [min:s]	Adaption type
Turning external only facing	External	Emulsion 10%	WALTER-Turn	WSM10S	00:07.080	Rectangular shank -metric: 20 x 20

Tool	VCGT160408-FM2 WSM10S
Туре	Insert
No. of pieces	1

Image similar



Tool	PVHBR2020K16
Туре	Body
No. of pieces	1
Description	WALTER-Turn

Image similar



Cutting data



Legend



Premachining



Finishing





Number of passes in AP direction (NOPap)	2	1	
Start diameter (Dms)	38.1	38.1	mm
Depth of cut (a _p)	0.667	0.666	mm
Cutting speed (vc)	165	165	m/min
Feed per revolution (fn)	0.197	0.197	mm
Rotational speed maximum (rpmmax)	6000	6000	1/min
Max. cutting power (Pc max)	0.901	0.901	kW
Max. cutting torque (Mc max)	6.22	6.22	Nm
Tool life time (Life⊤ime)	19	19	min

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