

# Summary of cutting data for Ext. cylindrical surface

# Material details

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

### Task details



Ext. cylindrical surface	
Operation type	Pre-machining and finishing
Workpiece surface condition	Pre-machined
Cutting condition	Continuous cut
Start diameter	38.1 mm
End diameter	25 mm
Machined length	12 mm
Ra longitudinal	3.2 µm
System stability	Excellent stability

## Recommended solution

Machining	Type of cooling	Coolant	Description	Grade	Tmf [min:s]	Adaption type
Turning external only longitudinal	External	Emulsion 10%	WALTER-Turn	WSM10S	00:15.780	Rectangular shank -metric: 16 x 16

	Tool Type No. of pieces	VCGT160408-FM2 WSM10S Insert
Image similar		

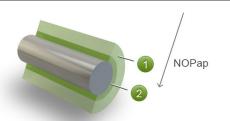


Tool PVJBR1616H16
Type Body
No. of pieces 1
Description WALTER-Turn

Image similar



## **Cutting data**



# Legend



Premachining



Finishing

	1	D.
- 1	-1	
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Number of passes in AP direction (NOPap)	6	1	
Start diameter (Dms)	38.1	26.678	mm
End diameter (Dme)	26.678	25	mm
Depth of cut (a <sub>p</sub> )	0.952	0.839	mm
Cutting speed (v <sub>c</sub> )	165	165	m/min
Feed per revolution (fn)	0.194	0.194	mm
Rotational speed maximum (rpmmax)	1970	2110	1/min
Max. cutting power (Pc max)	1.22	1.09	kW
Max. cutting torque (Mc max)	8.01	4.95	Nm
Tool life time (LifeTime)	19	19	min

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