

To  
peça acopladora

Subject: **monociclo**

desbaste e acabamento  
robodrill high speed

Summary of cutting data for Plain surface

Material details

Walter Code, N1, Hardness: 30 HB, Material group:N1.1.Z.UT

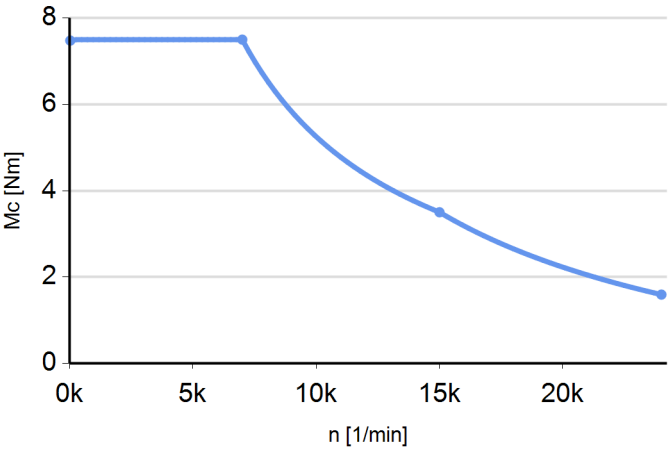
Task details

	Plain surface	
	Operation type	Pre-machining and finishing
	System stability	Excellent stability
	Depth	1 mm
	Width	50.8 mm
	Length	50.8 mm
	Ra bottom	3.2 µm
	Cutting edge diameter	64 mm

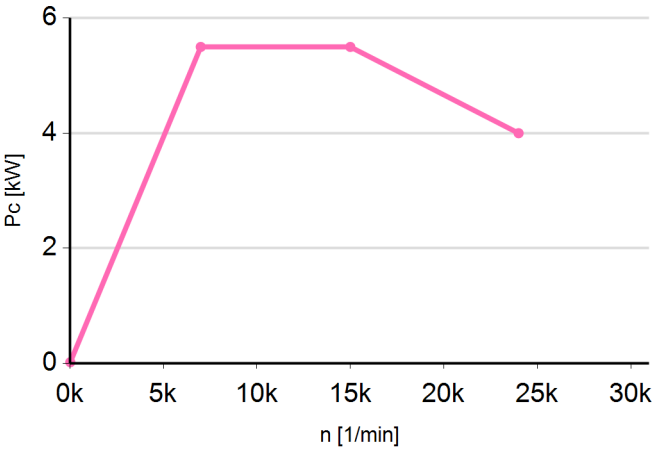
Machine

FANUC RoboDRILL α-D14LiB (High Speed)

Tool spindle - Torque diagram



Tool spindle - Power diagram



Recommended solution

Machining	Type of cooling	Coolant	Description	Grade	T <sub>mf</sub> [min:s]		
Face Milling	External	Emulsion 10%	Xtratec XT	WK10	00:02.802		



Image similar

Tool	M5009-050-B22-04-06-AP
Type	Body
No. of pieces	1
Description	Xtratec XT

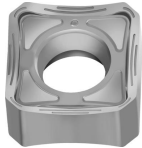
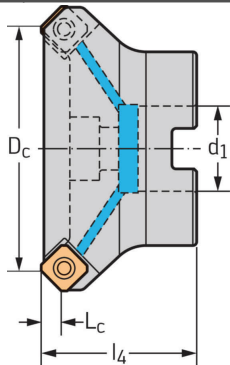


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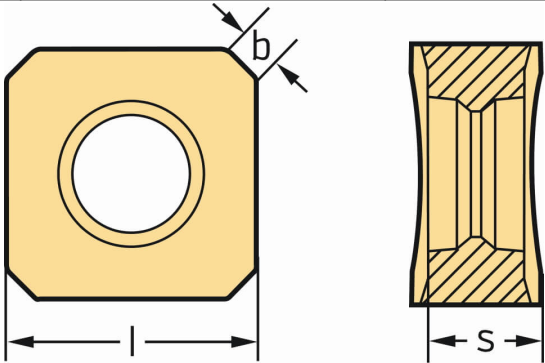
Tool	SNHX1205ANN-K88 WK10
Type	Insert periphery (A) INS_A
No. of pieces	4

M5009-050-B22-04-06-AP



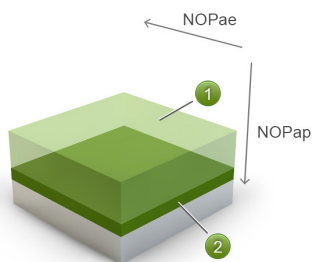
Approach angle ( $\kappa$ )	45 °
Cutting edge diameter ( $D_c$ )	50 mm
Max. cutting edge diameter ( $D_a$ )	64 mm
Drive size ( $d_1$ )	22
Maximum overhang ( $l_4$ )	40 mm
Max. depth of cut ( $L_c$ )	6 mm
Peripheral effective cutting edge count ( $Z$ )	4
Weight	0.608 kg
Cutting item count	4
Maximum ramping angle	0 °
Price	780.00 €

SNHX1205ANN-K88 WK10



Tolerance class insert	H
No. of corners	4
Number of sides	double sided
Cutting edge length (l)	12.7 mm
Insert thickness (s)	5.54 mm
Clearance angle major ( $\alpha$ )	0 °
Corner radius (r)	0.8 mm
Wiper edge length (b)	1.5 mm
Price	28.90 €

# Cutting data



## Legend

- 1 Premachining
- 2 Finishing

	1	2	
Working engagement ( $a_r$ )	16.93	16.93	mm
Depth of cut ( $a_p$ )	0.5	0.5	mm
Number of passes in AE direction (NOPae)	3	3	NOPae
Number of passes in AP direction (NOPap)	1	1	NOPap
Cutting speed ( $v_c$ )	2480	2480	m/min
Spindle speed (n)	15300	15300	1/min
Feed per tooth ( $f_z$ )	0.246	0.197	mm
Feed speed at the contour ( $v_{fe}$ )	15100	12000	mm/min
Cutting power ( $P_c$ )	1.83	1.53	kW
Cutting torque ( $M_c$ )	1.14	0.953	Nm
Maximum chip thickness ( $h_{ex}$ )	0.163	0.131	mm
Material removal rate (Q)	127	102	cm <sup>3</sup> /min
Total cutting time ( $T_{c\ tot}$ )	00:00.906	00:01.506	min:s
Total non-cutting time ( $T_{nc\ tot}$ )	00:00.169	00:00.224	min:s
Tool life length (LifeLength)	3245.63	1956.39	m
Tool life time (LifeTime)	220	160	min

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