



Centerless grinding machine	Make: Officine Monzese Spa - Model: 1500 - wheel speed m/s: 45 (8856 fpm) - rpm: 1400		
Grinding wheel	Specification: ZB	Dimensions mm. 610 x 355 x 254 (inches 24x14x10)	
Regulating wheel	Specification: AZ120VRR	Dimensions mm. 305x 355 x 140 (inches 12x14x5,5)	
Dressing tool	Diamod tool bit		
Work piece	Needle rollers		
Material	UNI 100Cr6	DIN 100Cr6	AISI/SAE 52.100
Hardness	60 - 62 Hrc		
Initial dimensions of work piece	Ø mm. 10,10 (.397")	Lenght mm. 30,00 (1,17")	
Final dimensions of work piece	Ø mm. 10,00 (.393")	Lenght mm. 30,00 (1,17")	
Stock removal	Total mm. 0,10 (.004")	Roughing removal mm. 0,05 (.002") Finishing removal mm. 0,05 (.002")	
Feed rate	Roughing	mt/min' 3 (118 ipm)	
	Finishing	mt/min' 3 (118 ipm)	
Dimensional tolerances	Straightness	mm. 0,001 (.000039")	
	Parallelism	mm. 0,0007 (.000021")	
	Roundness	mm. 0,0007 (.000021")	
Surface finish	Ra 0,08	Rt 0,9	Rz 0,6
Dressing cycle	Dressing depth	mm. 0,03 - 0,04 (.0011"/.0015")	
	Dressing speed roughing	mm. 350/min' (13,78"/min)	
	Dressing speed finishing	mm. 350/min' (13,78"/min)	
	Dressing frequency	every 4 hours	
	Reason of the dressing	restore the roundness and reduce Ra	
Coolant	Water soluble coolant with 2,5% semi-synthetic oil Ph 8		
Notes	<i>The life of this ZB grinding wheel has been 12 months, working 16 hours a day.</i>		