



<b>Centerless grinding machine</b>	Make: Officine Monzese Spa - Model: 500 - wheel speed m/s: 45 (8856 fpm) - rpm: 1670		
<b>Grinding wheel</b>	Specification: <b>ZB</b>	Dimensions mm. 508 x 250 x 254 (inches 20x10x10)	
<b>Regulating wheel</b>	Specification: <b>A120V4R</b>	Dimensions mm. 305x 250 x 127 (inches 12x10x5)	
<b>Dressing tool</b>	Diamod tool bit		
<b>Work piece</b>	Piston for hydro-washing machine		
<b>Material</b>	UNI X30C13	DIN 27-68MK	AISI/SAE 420C
<b>Hardness</b>	53 Hrc		
<b>Initial dimensions of work piece</b>	Ø mm. 12,25 ( .482" )	Lenght mm. 54,00 ( 2,12" )	
<b>Final dimensions of work piece</b>	Ø mm. 12,00 ( .472" )	Lenght mm. 54,00 ( 2,12" )	
<b>Stock removal</b>	Total mm. 0,25 ( .01" )	Roughing removal mm. 0,20 ( .008" ) one pass Finishing removal mm. 0,05 ( .002" ) one pass	
<b>Feed rate</b>	Roughing	mt/min' 1,6 ( 63 ipm )	
	Finishing	mt/min' 1,6 ( 63 ipm )	
<b>Dimensional tolerances</b>	Straightness	mm. 0,001 ( .00004" )	
	Parallelism	mm. 0,001 ( .00004" )	
	Roundness	mm. 0,001 ( .00004" )	
<b>Surface finish</b>	Ra 0,09	Rt 0,9	Rz 0,6
<b>Dressing cycle</b>	Dressing depth	mm. 0,02 ( .0008" )	
	Dressing speed	mm. 250/min'	
	Dressing frequency roughing	every 2 hours	
	Dressing frequency finishing	every 6 hours	
	Reason of the dressing	restore surface and reduce Ra	
<b>Coolant</b>	Water soluble coolant with 3% semi-synthetic oil Ph 8		
<b>Notes</b>	<i>The life of this <b>ZB</b> grinding wheel has been 6 months, working 10 hours a day.</i>		