




GRIND TODAY,
HEAR TOMORROW,
OUTPERFORM ALWAYS

Reshaping
your
world.




CASE STUDY 1

OPERATION: CENTERLESS BAR GRINDING – SPAIN MARKET: GENERAL ENGINEERING

Heat treatment		No	The Century45 wheel		Results	
Working piece			Shape and dimension	SET_600x300x305	Gratio	+20% Vs comp
Material	AISI 300 Series Austenitic – Mainly 304-303		Specification	1NQG60RB45	MRR	+25% Vs comp
Workpiece	Bars D 40-100mm x 2000 - 6000		UPC number	69078649561	Roundness	< 6 µm
Hardness	35Hrc		MOS	50 m/s	Roughness	< 1,5 Ra
Stock removal	0,1 – 0,3 on D Rough				Reduced dressing frequency	N/A
Required roughness	Ra 1,3-1,5 µm					
Machine			Competitor			
OEM	SHUMAG SHLEIPO II 2 Opposite Operating Wh		Dimension	SET_600x300x305		
Coolant	WSO 4-6%		Specification	CUB/ALOX # 60-B		
Dresser	MP					

CASE STUDY 2

OPERATION: CENTERLESS BAR GRINDING – SPAIN MARKET: STEEL & ROLLING MILLS

Working piece		The Century45 wheel		Results	
Material	SS - 75% Austenitic 25 Martensitic	Shape and dimension	SET_660x400x304.8	Higher MRR	Reduced cycle time -20%
Heat treatment	Yes on Martensitic	Specification	3NQG54-SB45	Gratio	+15% Vs std Wheel
Piece	Bars D 10-100 L 3000-7000	UPC number	66253491472		
Hardness	45 - 50 HrC	Periferical speed	50 m/s		
Stock removal	0,1 - 0,2mm dep on D				
Surface roughness	Ra 1,5 - 2				
Machine		Competitor			
OEM	DANOBAT	Brand	Norton		
Coolant	WSO 3-5%	Dimension	SET_660x400x304.8		
Dresser	N/A	Specification	3NQG54QBQN24		