

DUR 1

CATEGORY	FCAW Flux-Cored							
TYPE	Cobalt-based fluxcored wire with high abrasion and corrosion resistance.							
APPLICATIONS	Pump sleeves, expeller screws, plastic recycling, mixer blades for rubber, valves, seats etc..							
PROPERTIES	Dur 1 deposits a cobalt-base alloy with an austenitic-ledeburitic structure. This is the hardest of the standard cobalt-base alloys. It has a high resistance to corrosion (especially to reducing acids and impact), extreme wear and temperature shocks. The alloy is only machinable by grinding. Best used on wear pads, rotary seal rings, pump sleeves and centerless grinder work rests.							
CLASSIFICATION	AWS	A 5.21: ERC CoCr-C						
	EN ISO	14700: Co3						
	DIN	8555: MSG 20-GF-55-CTZ						
SUITABLE FOR	Thermal shock resistant, abrasion, erosion, corrosion, cavitation at high temperature, bearing surfaces, chemical industry, hot shear blades, valves							
APPROVALS	CE approved							
WELDING POSITIONS:								
WELD METAL ANALYSIS %	C	Mn	Si	Cr	Ni	Co	W	Fe
	2.5	1.0	1.0	32.0	<2.5	bal	13.0	<2.5
MECHANICAL PROPERTIES								
Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A5 (%)	20°C	Hardness (HRc)		Hardness HRc / HV	
AW				53	600°C	800°C		
					40-43	32-35		
AW: as welded								
WELDING PARAMETERS / PACKING (OTHER SIZES AND PACKING FORM AVAILABLE ON REQUEST)								
Welding Parameters					Packing			
D (mm)	Voltage (V)	Current (A)		spool type		kg / spool		
1.2	20-24	150-200		KD-300		15		
1.6	22-26	180-240		KD-300		15		
REDRYING TEMPERATURE	150C / 24hr (not often required)							
GAS ACC. EN ISO 14175	M13: (99%Ar - 1%O2)							