

DUR 6

CATEGORY FCAW Flux-Cored

TYPE Cobalt-based thermo shock resistant alloy for overlay applications.

PROPERTIES Outstanding alloy against abrasion, thermo-shock and corrosion combined with high temperatures. The weld deposit can be machined with tungsten tool tips and by grinding. The hardness of the weld deposit will decrease 16% at 300°C and about 30% at 600°C. Excellent alloy against thermal shock, abrasion, erosion, corrosion and cavitation at high temperature.

CLASSIFICATION

AWS	A 5.21: ERC CoCr-A
EN ISO	14700: T Co2-40-CKTZ
DIN	8555: MSG 20-GF-40-CTZ

SUITABLE FOR Cladding valves, Steam-valves, high temperature liquid pumps, hot cutting tools, exhaust valves, seats, cutting knives, metal to metal wear, bearing surfaces, chemical industry, hot shear blades etc.

APPROVALS CE approved

WELDING POSITIONS:



WELD METAL ANALYSIS %

C	Co	Si	Cr	W	Mn	Fe
1.1	basis	1.0	28.0	4.5	0.6	< 3.0

Dur 6 is also available as LC type with low carbon and as HC type with higher carbon content.

MECHANICAL PROPERTIES

Heat Treatment	Rp0,2 (N/mm ²)	Rm (N/mm ²)	A5 (%)	Hardness HRC		
				20°C	300°C	600°C
AW				40-43	33-36	28-31

AW: as welded

WELDING PARAMETERS / PACKING

Welding Parameters			Packing	
D (mm)	Voltage (V)	Current (A)	spool type	kg / spools
1.2	20-24	150-200	BS 300 / B 450 / Drums	15 / 30 / 300
1.6	22-26	180-240	BS 300 / B 450 / Drums	15 / 30 / 300
2.0	25-27	220-260	BS 300 / B 450 / Drums	15 / 30 / 300
2.4	25-27	260-300	BS 300 / B 450 / Drums	15 / 30 / 300
2.8	26-28	280-340	BS 300 / B 450 / Drums	15 / 30 / 300

REDRYING TEMPERATURE 150°C / 24hr (usually not required)

GAS ACC. EN ISO 14175: M13: (99%Ar - 1%O2)