CEWELD®

DUR 12

CATEGORY	FCAW Flux-Cored
TYPE	Cobalt-based thermo shock resistant alloy for overlay applications.
APPLICATIONS	Steam-valves, high temperature liquid pumps, hot cutting tools, cutting tools for plastic, wood and paper as well as high stressed sealings and sliding surfaces.
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 degreas 20% at 600°C and has a nominal hardness of 49-53 HRc at room temperature. The weld deposit is high heat resistant up to 900°C. Dur 12 offers a low coefficient of friction of and exceptional resistance to galling. It has cavitation-erosion resistance ten times that of 304 stainless steel, Dur 12 can be used to protect bearing surfaces in non-lubricating conditions due to its resistance to metal-to-metal wear.
CLASSIFICATION	AWS A 5.21: ER C CoCr-B EN ISO 14700: Co3 DIN 8555: MSG 20-GF-50-CTZ
SUITABLE FOR	46-48 HRc, stellite 12 alloy with high temperature and abrasion resistance, thermo shock resistant and impact resistant, hardfacing valves, seats, pumps, knives, plastic recycling crushers etc.
APPROVALS	CE approved
WELDING POSITIONS:	

C	Co	Si	Cr	Ni	W	Fe
1.75	Rem	1.2	29	<2.5	9	<2.5

MECHANICAL PROPERTIES

Heat Treatment	$R_{P0,2}$ (N/mm^2)	Rm (N/mm^2)	A5 (%)	Hardness HRc 20°C	300°C	600°C
AW				50	46	40

AW: as welded

WELDING PARAMETERS / PACKING

Welding Parameters			Packing	
D (mm)	Length (mm)	Current (A)	kg / can	kg / 6pack
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

REDRYING TEMPERATURE	150ºC / 24hr (usualy not required)
GAS ACC. EN ISO 14175	M13: (99%Ar - 1%O2)