

# CEWELD E DUR 21U

**TYPE** Cobalt-based thermo shock resistant alloy for overlay applications.( Stellite 21, CoCr-E, E Co1)

**APPLICATIONS** CEWELD® DUR 21U is a Stellite 21 alloy with excellent properties against abrasion, thermal shock and corrosion in conjunction with high temperatures. It produces a high-quality hardfacing on components that are exposed to multiple stresses from erosion, corrosion, cavitation, pressure, impact, abrasion and high temperatures up to 900 °C. For example: sealing surfaces on fittings, valve seats and cones for combustion engines, metal-to-metal sliding surfaces, highly stressed hot work tools without thermal shock, grinding, stirring and drilling tools..

**PROPERTIES** CEWELD® DUR 21U shows excellent welding properties and self-releasing slag. The weld metal can be machined with carbide tools and by grinding. The hardness of the weld metal decreases by about 20% at 600 °C. The weld metal is highly heat-resistant up to 900 °C. CEWELD® DUR 12U offers a low coefficient of friction and exceptional resistance to abrasion. Cavitation and erosion resistance is ten times that of 304 stainless steel. CEWELD® DUR 21U can be used to protect bearing surfaces in non-lubricated conditions due to its resistance to metal-to-metal wear.  
 Hardness of the pure weld metal: 31 - 37 HRC  
 work-hardened: approx. 45 HRC  
 Hot hardness at 600 °C: approx. 240 HB

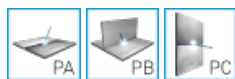
**CLASSIFICATION**

AWS	A 5.13: E CoCr-E
EN ISO	14700: E Co1
DIN	8555: E 20-UM-350- CTZ
F-nr	71

**SUITABLE FOR** Stellite 21 alloy for cladding Seats and Valves etc. low friction due to high cobalt content

**APPROVALS**

**WELDING POSITIONS**



**TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%)**

C	Si	Mn	Ni	Mo	Fe	Cr	Co
0.3	0.9	1	3	5.5	3	28	Rem.

**MECHANICAL PROPERTIES**

Heat Treatment	R <sub>P0,2</sub> (MPa)	R <sub>m</sub> (MPa)	A5 (%)	Hardness
As Welded				35 HRc

**REDRYING** Not required

**GAS ACC.** EN ISO 14175



# CEWELD E DUR 21U

E DUR 21U 2,4 X 350MM

Packaging	KG/unit	EanCode
Can	2,8	8720663402165

E DUR 21U 4,0 X 350MM

Packaging	KG/unit	EanCode
Can	2,8	8720663402189