

## Dur 1U

**CATEGORY** SMAW Stick Electrodes

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

**APPLICATIONS** Steam-valves, high temperature liquid pumps, Hot cutting blades, exhaust valves.

**PROPERTIES** Outstanding properties against strong abrasion, erosion and corrosion in high temperature (900°C) environments. This electrode can also perfectly be used for applications which are subject to high friction.

**CLASSIFICATION**

AWS	A 5.13:R CoCr-C
EN ISO	14700: E Co3
DIN	8555: E 20-UM-55-CTZ

**SUITABLE FOR** 53-55 HRc, Stellite 1 alloy with high resistance to abrasion, oxidation and erosion, metal to metal friction and wear, heat resistant, high hardness at high temperatures, completely tempering resistant

**WELDING POSITIONS:**

### WELD METAL ANALYSIS %

C	Cr	Co	W	Si	Mn	Fe
2.3	32	rest	13	-	-	-

### MECHANICAL PROPERTIES

Heat Treatment	R <sub>p0,2</sub> (N/mm <sup>2</sup> )	R <sub>m</sub> (N/mm <sup>2</sup> )	A <sub>5</sub> (%)	Hardness (HRc)		
				20°C	600°C	800°C
AW				54-56	42	34

AW: as welded

### WELDING PARAMETERS PACKING

Welding Parameters			Packing		
D (mm)	Length (mm)	Current (A)	kg / can	kg / 6pack	kg / 1000
2.5	350	70-90	3.0	18.0	23.4
3.2	350	90-130	3.0	18.0	37.9
4.0	350	120-160	3.0	18.0	54.9
5.0	350	140-180	3.0	18.0	86.2

**NOTE** This electrode is also available as high recovery type (160%).