

TECHNICAL DATA

STELLITE® 21 ALLOY

STANDARDS

DIN 8555 / E 20-UM-300-CKTZ

APPROVALS

CHARACTERISTICS

AC-weldable hardfacing electrode with an alloyed core and a recovery of 160 %. The deposit is a cobalt base alloy of high tenacity as well as extreme corrosion- and heat resistance. The weld metal is highly resistant to impact and is work-hardening up to 45 HRC. Working temperature should be kept between 400 and 600 C°, depending on base material and type of construction. Slow cooling, if necessary oven cooling, is recommended for low alloyed and austenitic steels. Subsequent heat treatment (stress relief at 700 C° approx.) is not necessary, except on large structures.

OPERATING TEMPERATURE

From room temperature up to + 300 C°

TYPICAL APPLICATIONS

Due to its above-mentioned characteristics STELLITE® 21 is particularly recommended for use on all work pieces which are subject to corrosion, impact wear as well as high temperatures or thermal shocks.

HARDNESS OF ALL WELD METAL (typical values)

AT RT. HRC	+ 300BC HB	WORK HARDENED HRC	MELTING- POINT	DENSITY G/CMH
ca. 30	ca. 280	ca. 45	1.250 C°	8,3

WELD METAL ANALYSIS (typical, wt. %)

C	Si	Mn	Cr	Mo	Mo	Co	Fe
0,3	0,9	1	28	5,5	3	Base	3



CURRENT

= + / ~ 42 V

WELDING POSITIONS

PA, PB, PC

REBAKING

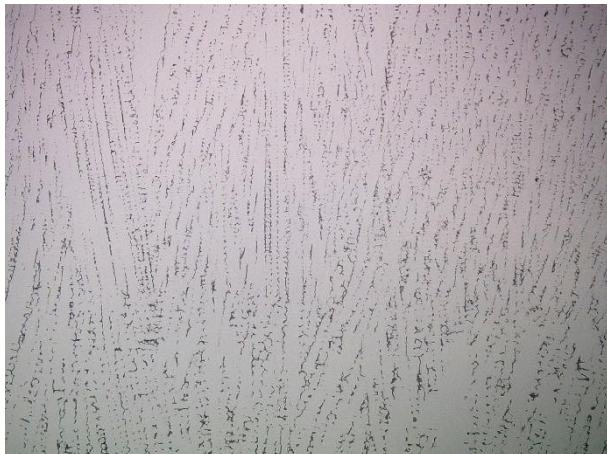
1 h, 350 + / - 10 °C (if required)

FLUX-CORED WIRE EQUIVALENT

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Dia./Length	Amperage (A)	Pcs./packet	Pcs./carton	kg/1000	kg/packet	kg/carton
2,5 x 350	50 - 60	145	580	34,5	5,0	20,0
3,2 x 350	90 - 130	84	336	59,5	5,0	20,0
4,0 x 350	120 - 170	62	247	81,0	5,0	20,0
5,0 x 350	150 - 200	38	152	131,2	5,0	20,0

TYPICAL STRUCTURE



Casted Stellite™ 12 Alloy (Resin Shell Casting)

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