Union S 1 CrMo 2 - UV 420 TTR-C

SAW wire/flux combination, low-alloyed, creep resistant

Classifications

EN ISO 24598-A	AWS A5.23 / SFA-5.23
S S CrMo 2 FB	F9P2-EB3R-B3R-H4

Characteristics and typical fields of application

Union S 1 CrMo 2 - UV 420 TTR-C is a wire flux combination for submerged arc welding of creep resistant steel grades with 2,25% Cr – 1% Mo. This combination is especially recommended for DC+ polarity in normalising / quenching applications.
UV 420 TTR-C is agglomerated fluoride basic flux with the special feature of a Carbon support resulting in a compensated Carbon loss and a low level of diffusible hydrogen. More detailed information is available in the separate datasheet of the flux.

Base materials

1.7380 10CrMo9-10, 11CrMo9-10, 12CrMo9-10
A335 Gr. P22, A387 Gr.22, A542BCl4 and other similar steel grades

Typical analysis

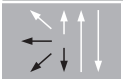
wt.-%	C	Si	Mn	Cr	Mo	X
wire	0.12	0.08	0.55	2.5	1.0	< 10
all-weld metal	0.10	0.20	0.80	2.4	1.0	

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength $R_{p0.2}$	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact energy ISO-V KV J	
	MPa	MPa	%	-40 °C	-10 °C
a1, DC+	450	590	28		180
a2, DC+	380	530	33		150
a3, DC+	380	540	28	200	

a1 = 0.5 hour 940°C + cool in air + 0,5 hour 740°C ; a2 = 0,5 hour 940°C + cool in air + 0,5 hour 740°C + 3 x 2 hours 720°C ; a3 = 1 hour 930°C + water + 2 hours 730°C + 26 hours 690°C

Operating data



Polarity	DC+

Dimension mm
2.5
3.0
4.0
5.0

Preheating, interpass temperature and post weld heat treatment are determined by the base metal.

Approvals

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