Union S 2 NiMo 1 - UV 420 TTR-C

SAW wire/flux-combination, low-alloyed, high strength

Classifications

EN ISO 14171-A	AWS A5.23 / SFA-5.23
S 50 6 FB SZ2Ni1Mo0,3 H4	F8A8-ENi1-Ni1-H4 / F8P8-ENi1-Ni1-H4

Characteristics and typical fields of application

Union S 2 NiMo 1 - UV 420 TTR-C is a wire flux combination for submerged arc welding of unalloyed and low alloyed steel grades. It is mainly recommended for weldments that will be exposed to a normalising / quenching heat treatment (N+A / Q +A).
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

General purpose structural steels, fine grained structural steels, medium and high tensile steels up to 460 MPa minimum yield strength.

Typical analysis

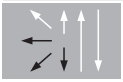
wt.-%	C	Si	Mn	Ni	Mo	S	P
wire	0.11	0.15	1.10	0.95	0.25	≤ 0.010	≤ 0.010
all-weld metal	0.09	0.25	1.30	0.93	0.25	≤ 0.010	≤ 0.012

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	%	-60°C	-40°C	-20°C
u, DC+	560 (≥ 520)	640 (550-690)	25 (≥ 20)	120 (≥ 47)	135 (≥ 60)	175 (≥ 75)
a1, DC+	≥ 500	≥ 590	≥ 20	≥ 47	≥ 60	≥ 75
a2, DC+	575	665	23	45	75	135

u untreated, as welded ; a1 = 1 hour 620 °C ; a2 = 25 min 920 °C + water + 50 min 620 °C + air

Operating data



Polarity	DC +

Dimension mm
2.5
3.2
4.0

Preheating and interpass temperature as required by the base metal.

Approvals

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