Union S 2 NiMo 1 - UV 419 TT-W

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 H5	F8A10-ENi1-Ni1 - F8P10-ENi1-Ni1

Characteristics and typical fields of application

Union S 2 NiMo 1 - UV 419 TT-W is a wire flux combination It is suitable for single (AC or DC) and tandem (DC and AC or AC and AC) welding. Very good slag detachability also for narrow gap welding. Flux can especially be used for multi-pass butt welding of medium and high tensile steels. Very good impact toughness of weld metal at low temperatures.
UV 419 TT-W is an agglomerated fluoride basic flux for submerged arc welding of unalloyed and low alloyed steel grades. It has a high basicity with neutral metallurgical metallurgical behaviour and a low level of diffusible hydrogen : H5 verified acc. ISO 3690 with DCEP. 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 500 MPa minimum yield strength.

Typical analysis

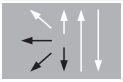
wt.-%	C	Si	Mn	Ni	Mo	S	P
wire	0.11	0.15	1.10	0.95	0.25	≤ 0.010	≤ 0.010
all-weld metal	0.08	0.20	1.30	0.95	0.25		

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	%	20°C	-40°C	-60°C
u, DC+	530 (≥500)	620 (≥570)	26 (≥22)	(≥180)	150 (≥100)	100 (≥70)
a1, DC+	490 (≥470)	600 (≥550)	26 (≥22)	(≥180)	160 (≥120)	110 (≥80)

u untreated, as welded ; a1 = 1 hour 620 °C

Operating data



Polarity	DC+ (AC)

Dimension mm
2.5
3.2
4.0

Preheating and interpass temperature as required by the base metal.

Approvals

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