

Classifications

EN ISO 24598-A

AWS A5.23 / SFA-5.23

S S CrMo2 FB

F8P2-EB3R-B3-H8

Characteristics and typical fields of application

Union S 1 CrMo2 – UV 420 TT-LH is a wire-flux combination for submerged-arc welding of creep resistant steel grades with 2,25% Cr – 1% Mo. The very good welding behavior in narrow gap joint configurations without limitation in thickness.

UV 420 TT-LH is a fluoride-basic flux with high basicity and neutral metallurgical behaviour, designed for welding with DC+ polarity with a low level of diffusible hydrogen. For information regarding welding flux UV 420 TT-LH see our detailed data sheet.

Base materials

1.7380 10CrMo9-10, 11CrMo9-10, 12CrMo9-10

A335 Gr. P22, A387 Gr.22, A542BCI4 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	0.08	0.25	0.7	2.3	0.95	

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

Condition	Tensile test Temperature	Yield strength R_e	Tensile strength R_m	Elongation A ($L_0=5d_0$)	Impact energy ISO-V KV J	
	°C	MPa	MPa	%	-30°C	-20°C
a1, DC+	+20	490 (≥ 470)	600 (≥ 550)	24 (≥ 16)	≥ 27	≥ 47
a1 = 1 hour 690 °C						

Operating data

	Polarity	DC +	Dimension mm	
				1.6
				2.0
				2.5
				3.0
				4.0
				5.0

Approvals

TÜV (05209), DB (51.132.02), CE