

Classifications

EN ISO 14171-A	AWS A5.17 / SFA-5.17
S 38 6 FB S2 H5	F7A8-EM12-H8 / F6P8-EM12-H8

Characteristics and typical fields of application

Union S 2 - UV 420 TT-LH is an agglomerated fluoride-basic flux with high basicity and neutral metallurgical behavior. It is suitable for single (DC) and tandem (DC 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 420 TT-LH is an agglomerated fluoride-basic flux with high basicity and neutral metallurgical behavior. For more information regarding this welding flux see our detailed data sheet.

Base materials

General purpose structural steels and fine grained structural steels up to 420 MPa min. yield strength. S235J2G3 – S355J2G3, S255N – S380N, S255NL – S380NL, P275NL1 – P380NL1, P235GH – P380GH, L210 – L360

ASTM A36 Gr. all; A106 Gr. all, A214; A266, A283 Gr. all; A285 Gr. all; A299, A515 Gr. all; A516 Gr. all; A556; A570, A572 Gr. 42, 50; A606 Gr. all; A607 Gr. 45; A656 Gr. 50, 60; A668 Gr. A, B

Typical analysis

wt.-%	C	Si	Mn
wire	0.1	0.07	1.1
all-weld metal	0.07	0.20	1.1

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

Condition	Yield strength R_e	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+	≥ 400	≥ 480	≥ 22	≥ 47	≥ 60	≥ 130
a1, DC+	≥ 360	≥ 420	≥ 25	≥ 47	≥ 60	≥ 140

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

Operating data

	Polarity	DC	Dimension mm	
				1.6
				2.0
				2.5
				3.0
				3.2
				4.0

Approvals

TÜV (03358), DB (51.132.02)