

Classifications

Consumables	EN ISO 14171-A	AWS A5.23	EN ISO 14174
SAW Solid Wire	S2Mo	EA2	-
SAW Flux	-	-	SA FB 1 55 AC H5
SAW Wire / Flux	S 46 4 FB S2Mo	F8A6-EA2-A2 / F8P6-EA2-A2	-

Characteristics and typical fields of application

Union S EA2 - UV C 418 TT is a wire flux combination suited for fine-grained constructional steels of increased strength, specially used in boiler, vessel and pipe construction. UV C 418TT is an agglomerated fluoride-basic flux with high basicity and neutral metallurgical behavior. The Wire/Flux combination produce very good low temperature impact properties up to -51°C .

A nice bead appearance and good wetting properties, together with good slag detachability and low hydrogen content in the weld metal ($\leq 5 \text{ ml}/100 \text{ g}$) characterize this wire/flux combination.

It is particularly suitable for multi-pass welding of thick plates.

Base materials

16Mo3, S275J2G3, S355J2G3, P310GH, P315N-P420N, P315NH-P420NH
ASTM A355 Gr. P1, A161-94 Gr. T1, A182M Gr. F1, A204M Gr. A, B, C, A250M Gr. T1, A217 Gr. WC1, API 5L X52-X65,

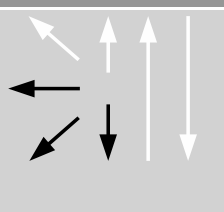
Typical analysis of the wire and of all-weld metal (wt.-%)

	C	Si	Mn	Mo	P	S
Wire	0.10	0.15	1.00	0.50	≤ 0.015	≤ 0.015
Weld metal	0.07	0.20	0.95	0.45	≤ 0.015	≤ 0.015

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

Heat-treatment	Yield strength $R_{p0,2}$	Tensile strength R_m	Elongation A ($L_0=5d_0$)	Impact work ISO-V CVN J		
	MPa	MPa	%	-20°C	-40°C	-51°C
AW	490	570	25	160	90	47
620 $^{\circ}\text{C}$ / 1hr.	470	550	30	180	100	47

Operating data

	Polarity: DC+ AC	Re-drying for flux: 300-350 $^{\circ}\text{C}$, min. 2 hours Preheating: RT – 150 $^{\circ}\text{C}$, depending on material and thickness Interpass temperature: 150 – 200 $^{\circ}\text{C}$ Heat Input : 2.0 KJ / mm
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Size and Packaging

Size mm	Weight / Basket-Basketless	Weight (Kg) / Coil	Amperage
2.4	25	700	350 – 450
3.2	25	700	425 – 525
4.0	25	700	475 – 575
4.8	25	700	525 - 625