Union S 3 Mo / UV 418 TT

SAW wire/flux combination, low-alloyed, creep resistant

Classifications

EN ISO 14171-A	AWS A5.23
S 46 4 FB S3Mo	F8A5-EA4-A4 / F8P6-EA4-A4

Characteristics and typical fields of application

Union S 3 Mo - UV 418 TT is a wire flux combination for submerged arc welding of un and low-alloyed steel grades. Very good slag detachability also for narrow gap welding. Flux can especially be used for multi-pass butt welding of medium tensile steels. Very good impact toughness of weld metal at low temperatures.
UV 418 TT is an agglomerated fluoride-basic flux with high basicity and neutral metallurgical behaviour. For more information regarding this welding flux see our detailed data sheet.

Base materials

Creep resistant steels and similar alloyed cast steels, ageing resistant and steels resistant to caustic cracking, creep resistant constructional steels with comparable yield strength.

16Mo3, S275JR, S275J2G3, S355J2G3, P275T1-P355T1, P275T2-P355T2, P255G1TH, S255N, P295GH, P310GH, P315N-P420N, P315NH-P420NH, BHW 2.5, WB 25

ASTM A335 Gr. P1; A161-94 Gr. T1; A182M Gr. F1, A204M Gr. A, B, C; A250M Gr. T1; A217 Gr. WC1, API 5L X52-X65
S460N, S460M, S460NL, S460ML, S460Q, S460QL1, P460N, P460NH, P460NL1, P460NL2, L415NB, L415MB, L415QB, API 5 L X60, X65, X60Q, X65Q

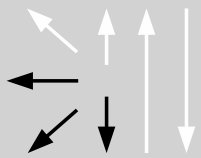
Typical analysis of the wire and of all-weld metal (wt.-%)

	C	Si	Mn	Mo
Wire	0.10	0.15	1.50	0.50
Weld metal	0.06	0.25	1.35	0.45

Mechanical properties of all-weld metal

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	-20 °C	-46 °C	-51 °C
aw	>470	>550	>24	>140	>80	>47	
600°C x 2hr	>470	>550	>24	>140	>80	>47	>27

Operating data



Polarity
DC +

ø mm
2.5
3.0
4.0

Preheating and interpass temperature: 180 – 220 °C

Approvals

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