Union S 2 / UV 400

SAW wire/flux combination, unalloyed

Classifications

Type	EN ISO 14171-A	AWS A5.17	AWS A5.23
Multi-run, AW	S 38 4 AB S2	F7A4-EM12 / F6P4-EM12	-
2-run, AW	S 3T 2 AB S2	-	F7TA0G-EM12

Characteristics and typical fields of application

Wire/flux combination for joint welding of unalloyed, fine grained and pipeline steel. UV 400 is an agglomerated, aluminate-basic flux. Its characteristic is a low Silicon and a middle Manganese pickup. It can be used on AC and DC. The good weld ability and the good mechanical properties offer a universal application. For information regarding UV 400 flux see our detailed data sheet.

Base materials

Steels up to a yield strength of 380 MPa (56 ksi)

S235JR-S355JR, S235JO-S355JO, S235J2-S355J2, S275N-S355N, S275M-S355M, S275NL-S355NL, S275ML-S355ML, P235GH-P355GH, P275NL1-P355NL1, P275NL2-P355NL2, P215NL, P265NL, P355N, P285NH-P355NH, P195TR1-P265TR1, P195TR2-P265TR2, P195GH-P265GH, L245NB-L360NB, L245MB-L360MB, GE200-GE240,

ASTM A 106 Gr. A, B, C; A 181 Gr. 60, 70; A 283 Gr. A, C; A 285 Gr. A, B, C; A 350 Gr. LF1, LF2; A 414 Gr. A, B, C, D, E, F, G; A 501 Gr. B; A 513 Gr. 1018; A 516 Gr. 55, 60, 65, 70; A 573 Gr. 58, 65, 70; A 588 Gr. A; A 633 Gr. A, C, D; A 662 Gr. A, B, C; A 707 Gr. L1, L3; A 711 Gr. 1013; A 841 Gr. A, B, C; API 5 L Gr. B, X42, X52, X56

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

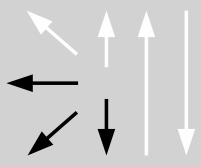
	C	Si	Mn
Wire %	0.11	0.12	1.1
Weld metal %	0.07	0.35	1.4

Mechanical properties of all-weld metal

Heat-treatment	Yield strength R_e	Tensile strength R_m	Elongation A (L_0=5d_0)	Impact work ISO-V CVN J		
	MPa	MPa	%	+20 °C	0 °C	–40 °C
aw	400	480	22	120	100	47
s	355	480	25	140	120	47

s stress relieved, 580 °C/5hrs/Air

Operating data



Polarity:	Redrying of flux:	ø mm
DC (+) / DC (–)	300 – 350 °C / 2 hrs min.	2.0 2.5 3.0 4.0

Approvals

TÜV (06170), DB (51.132.03), ABS, BV, GL, LR, DNV, CE