

Classification

EN ISO 14174

SA FB 1 55 AC H5

Characteristics and typical fields of application

UV 418 TT is an agglomerated fluoride basic flux for submerged arc welding of a very wide scope of unalloyed and low alloyed steel grades. It has a high basicity and neutral metallurgical behaviour and is designed for medium and high strength fine grained structural steels.

Suited for very good toughness properties and CTOD values in as welded condition and PWHT-condition. In general the flux gives a very nice bead appearance with very good slag release, even in narrow weld preparations.

Flux properties

Grain size (EN ISO 14174)	3 – 20 (0.3– 2.0 mm)
Basicity (Boniszewski) wt%	2.7
Polarity	DC+ ; AC
Flux consumption	1 kg flux per kg wire
Redrying conditions	300 – 350°C, min 2 hrs
Diffusible hydrogen (ISO 3690)	≤ 5 ml / 100gr (as produced / re-dried).

Composition of sub-arc welding flux (wt. %)

SiO ₂ +TiO ₂	CaO+MgO	Al ₂ O ₃ +MnO	CaF ₂
15	38	20	25

Typical wires to combine

SAW wires	AWS A5.17 / A5.23	EN ISO 14171-A / 26304-A
Union S 2	EM12	S2
Union S 2 Si	EM12K	S2Si
Union S 3 Si	EH12K	S3Si
Union S 2 Mo	EA2	S2Mo
Union S 3 Mo	EA4	S3Mo
Union S 4 Mo	EA3	S4Mo
Union S 2 NiMo 1	ENi1	SZ2Ni1Mo
Union S 3 NiMo 1	EF3	S3Ni1Mo
Union S 3 NiMo	EG [EF1 (mod.)]	S3Ni1,5Mo
Union S 3 NiMoCr	EG [EF6 (mod.)]	SZ3Ni2,5CrMo
Union S 2 Ni 2,5	ENi2	S2Ni2
Union S 2 Ni 3,5	ENi3	S2Ni3

Packaging formats	
Type	Weight (kg)
DRY SYSTEM (bag)	25 ; 1000
Sealed Bucket	30