

Classifications
EN ISO 14174

S A 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.

Delivers very good toughness properties at -60°C and CTOD values at -30°C in as welded and PWHT-condition.

The flux has, due to its great current carrying capacity, also a great capability for 2 run procedures with unalloyed and low alloyed wire grades (e.g. Union S 2 Mo and Union S 3 MoTiB), with very good toughness properties. In general the flux gives a very nice bead appearance with very good slag release, even in narrow gap preparations.

Flux properties

Polarity	DC / AC
Basicity index (Boniszewski)	2.7
Grain size (EN ISO 14174)	3 – 20 (0.3 – 2.0 mm)
Flux consumption	1.0 kg flux per kg wire
Redrying	300 – 350 °C. 2 hrs min.
Diffusible hydrogen (ISO 3690)	≤ 5 ml / 100gr (as produced / re-dried)

Composition of sub-arc welding flux

	SiO ₂ +TiO ₂	CaO+MgO	Al ₂ O ₃ +MnO	CaF ₂	CaF ₂ +CaO+MgO
wt. %	15	38	20	25	-

Typical wires to combine

Name	EN ISO	Class	AWS / SFA	Class
Union S 2 Ni 3,5	14171-A	S2Ni3	A5.23 / -5.23	ENi3
diamondspark S 770	26304-A	TZ	A5.23 / -5.23	ECF5
Union S 3 MoTiB	14171-A	S2MoTiB	A5.23 / -5.23	EA2TiB
Union S 2 Ni 2,5	14171-A	S2Ni2	A5.23 / -5.23	ENi2
Union S 3 NiMoCr	26304-A	SZ3Ni2,5CrMo	A5.23 / -5.23	EG
Union S 2 Si	14171-A	S2Si	A5.17 / -5.17	EM12K
Union S 2	14171-A	S2	A5.17 / -5.17	EM12
Union S 3 Mo	14171-A	S3Mo	A5.23 / -5.23	EA4
Union S 3 Mo	24598-A	S S MnMo	A5.23 / -5.23	EA4
Union S 3 Si	14171-A	S3Si	A5.17 / -5.17	EH12K
diamondspark S 55 HP	14171-A	T3	A5.17 / -5.17	EC1
UNION S 4 MO	14171-A	S4Mo	A5.23 / -5.23	EA3
Union S 3 NiMo	14171-A	S3Ni1,5Mo	A5.23 / -5.23	EG
diamondspark S NiCu1	14171-A	T2Ni1Cu	A5.23 / -5.23	ECG
Union S 2 Mo	14171-A	S2Mo	A5.23 / -5.23	EA2
Union S 3 NiMo 1	26304-A	S3Ni1Mo	A5.23 / -5.23	EF3
Union S 2 NiMo 1	14171-A	SZ2Ni1Mo0,3	A5.23 / -5.23	ENi1

Packaging

Type	Weight
BIGBAG DRY SYSTEM	500 kg / 1000 kg
drum	200 kg
DRY SYSTEM	25 kg
Bag	1000 kg