

Classification

EN ISO 14174

SA AR 1 77 AC H5

Characteristics and typical fields of application

UV 306 is an agglomerated aluminate-rutile flux submerged arc welding of unalloyed steel grades. It is recommended for general-purpose applications and light steel constructions.

It is suited for direct and alternating current. It can be used for single- and multi-wire welding with high welding speed using the two-run technique as well as for fillet welding.

Mainly for single pass welds on thin plates (or a few subsequent passes).

Very good slag removability and nice bead appearance.

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

SiO ₂ +TiO ₂	Al ₂ O ₃ +MnO	CaF ₂ +CaO+MgO
24	50	14

Flux properties

Grain size (EN ISO 14174)	3 – 16 (0.3 – 1.6 mm)
Polarity	DC+ ; AC
Basicity (Boniszewski) wt%	0.6
Basicity (Boniszewski) Mol.%	0.8
Flux consumption	0.7-1.6 kg flux per kg wire
Redrying conditions	300 – 350°C, min 2 hrs
Diffusible hydrogen (ISO 3690)	≤ 5 ml / 100gr (as produced / re-dried).

Typical wires to combine

SAW wires	AWS A5.17 / A5.23	EN ISO 14171-A
Union S 2	EM12	S2
Union S 2 Si	EM12K	S2Si
Union S 2 Mo	EA2	S2Mo
Union S 2 NiCu 1	EG	S2Ni1Cu

Packaging formats

PE-BAG	25 kg
BIGBAG	500 kg ; 1000 kg