

SAW-flux for un and low alloyed wires

Brand Standard AWS Standard EN ISO	Main constituent: %				Grain size / density	Characteristics and Applications
UV 420 TTR / UV 420 TTR-W EN ISO 14174: SA FB 1 65 DC / SA FB 1 65 AC	SiO ₂ +TiO ₂ 15	CaO+MgO 35	Al ₂ O ₃ +MnO 21	CaF ₂ 26	Grain size acc. EN ISO 14174: 3-20 (0.3-2.0mm)	UV 420 TTR is an agglomerated flux of fluoride basic type. It displays neutral metallurgical behaviour and is characterised by a high degree of purity. It is particularly suitable for welding hydrocrackers because of the low P pick up of 0.004% max. When used in combination with electrodes Union S 2 CrMo and Union S 1 CrMo 2 it is possible to meet the most stringent toughness requirements at sub zero temperatures even after step cooling treatment. UV 420 TTR-W permits sound welding on AC, by this achieving a higher level of toughness when welding with CrMo alloyed sub arc wires.
UV 421 TT EN ISO 14174: SA FB 1 55 AC H5	SiO ₂ +TiO ₂ 15	CaO+MgO 38	Al ₂ O ₃ +MnO 20	CaF ₂ 25	Grain size acc. EN ISO 14174: 3-20 (0.3-2.0mm)	UV 421 TT is an agglomerated flux of fluoride basic type for joining and surfacing of high strength steels and cryogenic fine grained structural steels. The silicon and manganese pickups and burn off rates are neutral because of its metallurgical behaviour. The cryogenic toughness of the weld metal is very good. It can be welded with nearly every wire electrode. The flux can be used for tandem and multi wire welding with DC and AC. Very good slag detachability.
MARATHON 543 EN ISO 14174: SA FB 1 55 DC	SiO ₂ +Al ₂ O ₃ 35	CaF ₂ +CaO+MgO 60			Grain size acc. EN ISO 14174: 3-20 (0.3-2.0mm)	Marathon 543 is an agglomerated fluoride basic special welding flux with high basicity for multipass welding of creep resistant 9% Cr steels like P91/ T91, P911 and NF 616 (grade P92/T92). The metallurgical behaviour concerning Si and Mn is neutral. The flux produces well contoured and smooth welding beads with good slag release as well as appropriate weld metal ductility and impact behaviour after tempering. Marathon 543 is a hydrogen controlled welding flux with hydrogen contents of maximum 5ml / 100g weld deposit.
UV C 418 TT-M EN ISO 14174: SA FB 1 56 AC H5	SiO ₂ + TiO ₂ 15	CaO + MgO 32	Al ₂ O ₃ + MnO 20	CaF ₂ 28	Grain size acc. EN ISO 14174: 3-20 (0.3-2.0mm)	UV C 418 TT-M is an agglomerated flux of fluoride basic type for joining and surfacing applications. Mainly for multipass butt welding of medium and high strength fine grained and structural steels. The flux can be used for tandem and multi wire welding with DC+ and AC. Very good slag detachability and impact toughness of weld metal at low temperatures.
UV C 418 TT EN ISO 14174: SA FB 1 55 AC H5	SiO ₂ + TiO ₂ 16	CaO + MgO 33	Al ₂ O ₃ + MnO 20	CaF ₂ 27	Grain size acc. EN ISO 14174: 3-20 (0.3-2.0mm)	UV C 418 TT is an agglomerated flux of fluoride basic type for joining and surfacing applications. Mainly for high strength and cryogenic fine grained structural steels. It is characterized by its neutral metallurgical behaviour. Very good slag detachability. Excellent for narrow gap welding. The flux can be used for tandem and multi wire welding with DC+ and AC.

SAW-flux for un and low alloyed wires

Brand Standard AWS Standard EN ISO	Main constituent: %				Grain size / density	Characteristics and Applications
UV C 401 EN ISO 14174: SA AB 1 67 AC H5	SiO ₂ + TiO ₂ 19	CaO + MgO 31	Al ₂ O ₃ + MnO 29	CaF ₂ 20	Grain size acc. EN ISO 14174: 3-20 (0.3-2.0mm)	UV C 401 is an agglomerated flux of aluminate basic type for joining and surfacing applications with general purpose structural steels, boiler and pipe steels. The flux is characterized by low Silicon and Moderate manganese pick up. The welding characteristics are good producing a smooth weld bead with excellent slag detachability.
UV C 305 EN ISO 14174: SA AR 1 76 AC H5	SiO ₂ + TiO ₂ 28	CaO + MgO 0	Al ₂ O ₃ + MnO 55	CaF ₂ 10	Grain size acc. EN ISO 14174: 4-14 (0.4-1.4mm)	UV C 305 is an agglomerated flux of aluminate rutile type for joining applications with general purpose steels. The flux is characterized by low silicon and moderate manganese pick up. The welding characteristics are good producing a smooth weld bead with excellent slag detachability. The flux is particularly well suited for single wire or twin arc fillet welding with small wire diameter (1.6-2.4 mm) with high welding speed. Wall thickness <10 mm.

SAW-flux for high alloyed wires

Brand Standard AWS Standard EN ISO	Main constituent: %				Grain size / density	Characteristics and Applications
AVESTA C 807 EN ISO 14174: SA FB 2	SiO ₂ + TiO ₂ 10		Al ₂ O ₃ 38	CaF ₂ 50	Grain size acc. EN ISO 14174: 3-16 (0.3-1.6mm)	AVESTA C 807 is specially designed for joining stainless steels which is used for austenitic stainless wires type 308L, 316L and 309L for applications where high impact strength values and high corrosion resistance is required. It can also be used for cladding unalloyed or low alloy steel. Very good welding properties and easy slag removal.
AVESTA C 805-D EN ISO 14174: SA AF 2 56 55 Mo DC	SiO ₂ + TiO ₂ 10	CaO+MgO 0	Al ₂ O ₃ +MnO 40	CaF ₂ 50	Grain size acc. EN ISO 14174: 3-16 (0.3-1.6mm)	Avesta C 805-D is an agglomerated flux of aluminate fluoride basic type. Flux 805-D is specially designed for joining duplex stainless steels but can also be used for austenitic stainless wires type 308L, 316L and 309L for applications where high corrosion resistance is required. The flux is alloyed with Cr and Mo which will improve the corrosion resistance. This makes it well suitable for surfacing. The alloy addition will cause a slight increase of the ferrite content (typically 2-3 % units) compared to the wire. Very good welding properties and easy slag removal.
MARATHON 431 EN ISO 14174: SA FB 2 DC	SiO ₂ 10%		Al ₂ O ₃ 38%	CaF ₂ 50%	Grain size acc. EN ISO 14174: 4-14 & 4-16 mm (0.4-1.4 & 0.4-1.6)	Marathon 431 is a fluoride basic agglomerated flux for submerged arc welding of CrNi(Mo) stainless steel grades. The flux gives a nice bead appearance without any slag residues. The flux can be applied in multi pass and single pass welding procedures and has also very good welding properties in fillet welds. It provides a high degree of purity in the weld metal and provides good mechanical properties with good corrosion resistance. The flux does not have a Cr support.