

Classification

EN ISO 14174

SA FB 1 65 AC

Characteristics and typical fields of application

UV 420 TTR-W is an agglomerated fluoride-basic flux for Submerged Arc Welding of un- and low-alloyed steel grades. It is characterized by its neutral metallurgical behaviour and has been designed mainly for multi-pass welding. During welding the flux shows very nice operative characteristics on both AC and DC+, and is suitable for Tandem process. Also very good slag detachability in narrow gap weld preparations.

It has been optimised for welding operations with AC-polarity in combination with wire electrodes Union S 2 CrMo and Union S 1 CrMo 2, to maintain high strength levels after long PWHT-durations and meet the most stringent toughness requirements at sub-zero temperatures even after step-cooling treatment. The pick-up of Phosphorus is limited to +0.004 %.

UV 420 TTR-W is particularly suitable for welding hydrocrackers with Union S 1 CrMo 2 (AC-current), however the flux can be applied also with other wires in other applications (either AC or DC+).

Flux properties

Grain size (EN ISO 14174)	3 – 20 (0.3 – 2.0 mm)
Polarity	AC (and DC+)
Flux consumption	0.9 - 1.1 kg flux per kg wire
Basicity (Boniszewski) wt%	2.6
Apparent density	1.0 kg/dm ³
Re-drying conditions	300 – 350°C (572-662°F), min 2 hrs

Composition of sub-arc welding flux [weight %]

SiO ₂ +TiO ₂	CaO+MgO	Al ₂ O ₃ +MnO	CaF ₂
14	34	21	27

Typical wires to combine

SAW wires	AWS	EN ISO
Union S 2 CrMo	A5.23 : EB2R	24598-A : S S CrMo1
Union S 1 CrMo 2	A5.23 : EB3R	24598-A : S S CrMo2
Union S 3 NiMo 1	A5.23 : EF3	26304-A : S3Ni1Mo

Packaging

Type	Weight [kg]
Metal drum	30
Metal drum	200
PE-BAG	25