

Classifications

EN ISO 14174

S A FB 1 65 AC H5

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 operating characteristics on both AC and DC+, and is suitable for the Tandem process. Very good slag detachability in narrow gap welding. UV 420 TTR-W is especially recommended for welding operations with AC in combination with wire electrodes Union S 1 CrMo 2 and Union S 2 CrMo to maintain the highest strength levels after long PWHT and to 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 on AC for the highest mechanical properties, however the flux can also be use with DC+ polarity. Also suitable for other wires grades.

Flux properties

Polarity	DC / AC
Basicity index (Boniszewski)	2.6 wt %
Grain size (EN ISO 14174)	3 – 20 (0.3 – 2.0 mm)
Apparent density	1.0 kg/dm ³
Flux consumption	1.5 lbs flux per lb wire
Redrying	600°F +/- 25 for 2 hrs min.
Diffusible hydrogen (ISO 3690)	≤ 5 ml / 100 gr deposited weld metal (as produced / re-dried)

Composition of sub-arc welding flux

	SiO ₂ +TiO ₂	CaO+MgO	Al ₂ O ₃ +MnO	CaF ₂
wt. %	14	34	22	27