

**Classifications**
**EN ISO 14174**

S A FB 1 65 DC H4

**Characteristics and typical fields of application**

UV 420 TTR 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. Very good slag detachability in narrow gap weld preparations. UV 420 TTR has been optimised for welding operations in combination with wire electrodes Union S 1 CrMo 2 and Union S 2 CrMo to maintain high strength levels after long PWHT-durations with good toughness. The pick-up of Phosphorus is limited to +0.004 % and makes the flux suited for step-cooling requirements.

**Flux properties**

Polarity	DC
Basicity index (Boniszewski)	2.9
Grain size (EN ISO 14174)	3 – 20 (0.3 – 2.0 mm)
Apparent density	1.0 kg/dm <sup>3</sup>
Flux consumption	0.9 - 1.1 kg flux per kg wire
Redrying	300 – 400 °C. 2 hrs min.
Diffusible hydrogen (ISO 3690)	max 4 ml/100 g (as produced or re-dried)

**Composition of sub-arc welding flux**

	SiO <sub>2</sub> +TiO <sub>2</sub>	CaO+MgO	Al <sub>2</sub> O <sub>3</sub> +MnO	CaF <sub>2</sub>
wt. %	14	34	19	26

**Typical wires to combine**

Name	EN ISO	Class	AWS / SFA	Class
UNION S 2 Si	14171-A	S2Si	A5.17 / -5.17	EM12K
UNION S 3	14171-A	S3	A5.17 / -5.17	EH10
UNION S 3 Si	14171-A	S3Si	A5.17 / -5.17	EH12K
Union S 3 NiMo	14171-A	S3Ni1,5Mo	A5.23 / -5.23	EG
UNION S 4 MO	14171-A	S4Mo	A5.23 / -5.23	EA3
UNION S 3 NIMO 1	26304-A	S3Ni1Mo	A5.23 / -5.23	EF3
UNION S 3 NiMoCr	26304-A	SZ3Ni2,5CrMo	A5.23 / -5.23	EG
UNION S 2 MO	14171-A	S2Mo	A5.23 / -5.23	EA2
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 2 CRMO	24598-A	S S CrMo1	A5.23 / -5.23	EB2R
UNION S 1 CRMO 2	24598-A	S S CrMo2	A5.23 / -5.23	EB3R

**Packaging**

Type	Weight
DRY SYSTEM	25 kg
Metal bucket	30 kg
Steel drum	200 kg