

Classification

EN ISO 14174

SA FB 1 65 DC H5

Characteristics and typical fields of application

UV 420 TTR-C H4 is an agglomerated fluoride-basic welding flux with high basicity.

It is characterized by its neutral metallurgical behaviour and has been designed mainly for multi-pass welding. The flux is applied in high strength applications in oil and gas industry that need PWHT at relative high temperatures (e.g. 630 – 710°C) for relative long duration (e.g. up to 26 hrs). Also suited for weldments that will be exposed to a normalising heat treatment (N+A / Q +A).

UV 420 TTR-C H4 has the special feature of a Carbon support. Depending on the Carbon content in the wire, it results in either a reduced loss or a small increase of Carbon.

Compared to UV 420 TTR the Carbon content in the weld metal is about 0.02 – 0.04% higher.

UV 420 TTR-C H4 is similar to UV 420 TTR-C : Both fluxes have the same chemical composition, and both provide the same chemical composition and mechanical properties in the weld metal. The only difference of the H4-version is a lower amount of diffusible hydrogen in the weld metal.

Flux properties

Grain size (EN ISO 14174)	3 – 20 (0.3 – 2.0 mm)
Polarity	DC+
Flux consumption	0.9 - 1.1 kg flux per kg wire
Basicity (Boniszewski) wt%	3.4
Basicity (Boniszewski) mole %	2.1
Apparent density	1.0 kg/dm ³
Re-drying conditions	300 – 350°C (572-662°F), min 2 hrs
Diffusible hydrogen (ISO 3690)	< 5 ml / 100gr (as produced / re-dried).

Composition of sub-arc welding flux [weight %]

SiO ₂ +TiO ₂	CaO+MgO	Al ₂ O ₃ +MnO	CaF ₂
15	35	21	26

Typical wires to combine

SAW wires	AWS	EN ISO
Union S 3 NiMo 1	A5.23 : EF3	26304-A : S3Ni1Mo
Union S Ni1MoCr	A5.23 : EG	26304-A : SZ3Ni0.9MoCr
Union S 2 CrMo	A5.23 : EB2R	24598-A : S S CrMo1

Packaging

Type	Weight [kg]
Metal drum	30
DRY SYSTEM	25 kg