

## Classification

**EN ISO 14174**

SA FB 1 55 AC H5

## Characteristics and typical fields of application

**UV 419 TT-W** is an agglomerated fluoride-basic flux for submerged arc welding of unalloyed and low alloyed steel grades. The basic flux has a neutral metallurgical behaviour regarding to Mn and Si, and is mainly recommended for multi-run procedures for relative great wall thickness. Nice flat bead appearance with very good slag detachability, especially in narrow gap applications.

Metallurgically, the flux has been optimised to provide excellent mechanical properties as well after PWHT-duration as also in as welded condition.

The flux generates a low amount of diffusible hydrogen content HD < 5 ml/100gr according to ISO 3690 in the weld metal.

## Flux properties

Grain size (EN ISO 14174)	3 – 20 (0.3 – 2.0 mm)
Basicity (Boniszewski) wt%	2.6
Polarity	DC+ ; AC
Flux consumption	0.9 - 1.1 kg flux per kg wire
Apparent Density	1 kg/dm <sup>3</sup>
Redrying conditions	300 – 350°C, min 2 hrs
Diffusible hydrogen (ISO 3690)	≤ 5 ml / 100gr (as produced / re-dried).

## Composition of sub-arc welding flux (weight %)

SiO <sub>2</sub> +TiO <sub>2</sub>	CaO+MgO	Al <sub>2</sub> O <sub>3</sub> +MnO	CaF <sub>2</sub>
15 %	35 %	21 %	26 %

## Typical wires to combine

SAW wires	AWS	EN ISO
Union S 3 Si	A5.17 : F7A8/F7P8-EH12K	14171-A : S 46 6 FB S3Si
Union S 2 Mo	A5.23 : F8A6/F8P6-EA2	14171-A : S 46 4 FB S2Mo
Union S 2 CrMo 1	A5.23 : F8P2-EB2R-B2	24598-A : S S CrMo 1 FB
Union S 3 NiMo1	A5.23 : P9A8/F9P8-EF3-F3	26304-A : S 55 6 FB S3Ni1Mo

## Packaging formats

Type	Weight (kg)
DRY SYSTEM (bag)	25