

Classifications

EN ISO 14171-A	AWS A5.23 / SFA-5.23
S 42 6 FB T2Ni1Cu H5	F7A8-ECG

Characteristics and typical fields of application

diamondspark S NiCu1 – UV 418 TT is a wire flux combination for submerged arc welding of weather resistant applications. The basic-cored wire is alloyed with Ni and Cu to make the weld metal weather-resistant and to give its characteristic rusty brown colouring after exposure to weather conditions. It is mainly applied to clad facades, for bridges and other engineering structures. Suitable for single pass and multi-pass welds.

UV 418 TT is a fluoride-basic flux. For more flux properties see separate datasheet of the flux.

Base materials

Weather resistant constructional steels

S235JRG2Cu, S235J2G4Cu, S235J0Cu, S235JRW, S355J0Cu, S355J2G3Cu, S355J0W, 235J2W-S355J2W, S355K2W ASTM A 588 Gr. A, B, C, K; A 618 Gr. II; A 709 Gr. 50 WF3

Typical analysis

wt.-%	C	Si	Mn	Ni	Cu
all-weld metal	0.06	0.45	1.2	1.0	0.55

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength R _{p0.2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact energy ISO-V KV J	
	MPa	MPa	%	-60 °C	-40 °C
u, DC+	450 (≥ 420)	530 (480-650)	31 (≥ 22)	160 (≥ 47)	170 (≥ 47)

U = Untreated, as welded

Operating data

Polarity	DC +	Dimension mm
		2.4
		3.2
		4.0

Approvals

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