

## Classifications

<b>EN ISO 14171-A</b>	<b>AWS A5.23 / SFA-5.23</b>
S 46 6 AB TZ3Ni1Cu	F7A8-ECG

## Characteristics and typical fields of application

**diamondspark S NiCu1 – UV 400** is a wire flux combination for submerged arc welding of weather resistant applications. The basic-coated wire provides higher deposit rate compared to solid SAW wire and 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. With UV 400 it can be applied for all wall thicknesses with high toughness properties.

**UV 400** is an aluminate-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	0.04	0.35	1.4	1.0	0.55

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

Condition	Yield strength	Tensile strength	Elongation A	Impact energy ISO-V KV J		
	$R_{p0.2}$	$R_m$	$(L_0=5d_0)$	-60 °C	-40 °C	-20 °C
	MPa	MPa	%			
u, DC+	475 (≥460)	565 (480-650)	26 (≥20)	135 (≥ 47)	150 (≥ 47)	170 (≥ 47)

u untreated, as welded

## Operating data

	<b>Polarity</b>	DC+	<b>Dimension mm</b>
			2.4
			3.2
			4.0

## Approvals

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