

Classifications

EN ISO 14171-A	AWS A5.23 / SFA-5.23
S 50 6 AB TZ3Ni1Mo H5	F9A8-ECNi5-Ni5

Characteristics and typical fields of application

diamondspark S 550 HP - UV 400 is a wire flux combination for joint welding of pipe steels API-5L X70 and other high-strength, quenched and tempered fine grained structural steels up to MSYS = 550 MPa. The weld metal demonstrates very good toughness at low temperatures and good strength properties, which allows to weld with relative high heat-input at high welding speed resulting in high productivity with a good bead appearance, nice fusion and good slag detachability. The seamless cored wire has a high deposit rate (~13 kg/hr for single wire 3,2 mm, 750 Amp, DC+). The wire is not sensitive to moisture pick up, has a good resistance to deformation (wire feed rollers) and is very easy to straighten to ensure the best current transfer with low contact tip consumption.

UV 400 is an aluminate-basic flux. For more flux properties see separate datasheet of the flux.

Base materials

API 5 LX65, X70

Typical analysis

wt.-%	C	Si	Mn	Ni	Mo
all-weld metal	0.06	0.4	1.7	0.9	0.3

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} MPa	R _m MPa	(L ₀ =5d ₀) %	-60 °C	-40 °C	-20 °C
u, DC+	605 (560)	680 (620-720)	22 (18)	55 (47)	135 (47)	160 (47)
u, AC	630 (560)	710 (620-750)	22 (18)	80 (47)	140 (47)	160 (47)

u untreated

Operating data

Polarity	DC / AC	Dimension mm
Polarity	DC + / AC	

Approvals

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