diamondspark S 900 HP - UV 422 TT-LH

SAW-flux cored wire/flux combination, high strength

Classifications

EN ISO 26304-A	AWS A5.23 / SFA-5.23
S 89 6 FB TZ3Ni2,5CrMoMn1.9 H4	F13A8-ECG-G-H4

Characteristics and typical fields of application

diamondspark S 900 HP - UV 422 TT-LH is a wire flux combination for joint welding of high-strength, quenched and tempered fine grained structural steels up to MSYS = 890 MPa. The special design of the wire gives the special benefit to weld with relative high deposit rate at a relative low welding current. The weld metal composition has been optimised to achieve maximum charpy toughness level (until -60ºC)
Very good welding characteristics with nice bead appearance, fusion and good slag detachability. The seamless coppered 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. Very low level of diffusible hydrogen (max 4 ml/100 gr according to ISO 3690).
UV 422 TT-LH is an agglomerated fluoride-basic flux with high basicity, neutral metallurgical behavior and very low level of diffusible hydrogen. For information regarding this welding flux see our detailed data sheet.

Base materials

S890Q, QL, QL1
alform 900 x-treme

Typical analysis

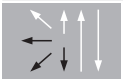
wt.-%	C	Si	Mn	Cr	Ni	Mo
all-weld metal	0.08	0.4	1.9	0.5	2.6	0.6

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	-51 °C	-40 °C	-20 °C
u, DC+	920 (≥ 890)	1000 (940–1050)	17 (≥ 15)	70 (≥ 47)	75 (≥ 47)	80 (≥ 47)	100 (≥ 47)
u, AC SW	945 (≥ 890)	1000 (940–1050)	17 (≥15)	80 (≥ 47)		85 (≥ 47)	95 (>47)

u untreated, as welded

Operating data



Polarity	DC + or AC

Dimension mm
2.4
3.2

Mechanical properties are depending on the thermal weld cycle and dilution rate with the base metal.
Square wave technology is recommended in case AC current is applied.

Approvals

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