

SAW wire/flux combination, low-alloved

Classifications

EN ISO 14171-AS 46 4 AB S2Mo H5

F8A4-EA2-A2 / F8P4-EA2-A2

Characteristics and typical fields of application

Union S 2 Mo - UV 400 is a wire-flux combination for submerged-arc welding of unalloyed and low-alloyed steel grades. The combination is used in joining and surfacing applications with general-purpose structural steels, fine grained structural steels, boiler and pipe steels. It can be used on DC and AC. This combination combines very good welding characteristics with a high level of strength and toughness in the weld metal. It is suitable for single and multi-pass butt and fillet welding and also 2-run technique. Very good slag detachability.

UV 400 is an agglomerated flux of aluminate basic type. For information regarding this welding flux see our detailed data sheet.

Base materials

General and fine grained structural steels, shipbuilding steels, pipe steels up to 460 MPa minimum yield strength.

Typical analysis

wt%	C	Si	Mn	Мо
wire	0.10	0.15	1.05	0.55
all-weld metal	0.06	0.35	1.35	0.50

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

Condition	Yield strength R _e	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact energy ISO-V KV J		
	MPa	MPa	%	-40°C	-20°C	20°C
u, DC+	≥ 470	≥ 550	≥ 22	≥ 47	≥ 60	≥ 100
a1, DC+	≥ 470	≥ 550	≥ 22	≥ 47	≥ 60	≥ 100
u untreated, as welded; a1 = 1 hour 620 °C						

Operating data



Polarity DO	DC / AC	Dimension mm	
		2.0	
		2.5	
		3.0	
		4.0	

4.8

Approvals

TÜV (06233), DB (51.132.03), ABS, BV, DNV GL, LRS, CE