

Classifications

EN ISO 14171-A	AWS A5.23 / SFA-5.23
S 46 2 AR S2Mo H4	F8A2-EA2-A2-H4

Characteristics and typical fields of application

Union S 2 Mo - UV 306 is a wire-flux combination for submerged-arc welding of unalloyed and low alloyed steel grades. Very good slag detachability and nice bead appearance. It is recommended to be used for single-wire, especially for 2 run, however also for fillet welding and single pass welding.

UV 306 is an aluminate-rutile agglomerated flux suited for direct and alternating current. Low level of diffusible hydrogen (max 4 ml/100 gr ; verified with DCEP).

For more detailed information regarding this welding flux see the data sheet of the flux.

Base materials

General and fine grained structural steels, shipbuilding steels, pipe steels up to 460 MPa minimum yield strength and boiler plates and tubes alloyed with 0,5% Mo like 16Mo3.

Typical analysis


wt.-%	C	Si	Mn	Mo
wire	0.10	0.15	1.05	0.55
all-weld metal	0.06	0.60	1.40	0.50

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

Condition	Yield strength R_p MPa	Tensile strength R_m MPa	Elongation A ($L_0=5d_0$) %	Impact energy ISO-V KV J		
				-29 °C	-20 °C	0 °C
u, DC+	≥ 470 (510)	≥ 550 (590)	≥ 22 (24)	≥ 27 (40)	≥ 47 (60)	≥ 60

u untreated, as welded

Operating data

	Polarity	DC / AC	Dimension mm	
				2.0
				2.5
				3.0
				4.0
				4.8

Approvals

TÜV (7739), CE