Union S 2 - UV 305

SAW wire/flux combination, mild steel

Classifications

EN ISO 14171-A	AWS A5.17 / SFA-5.17
S 38 0 AR S2 H5	F7AZ-EM12

Characteristics and typical fields of application

Union S 2 - UV 305 is a wire-flux combination for submerged-arc welding of unalloyed steel grades.
Very good slag detachability and nice bead appearance. It is recommended to be used for single-wire or Twin-arc welding with small wire diameter (e.g. with 2,0 mm) with high welding speed, especially for fillet welding in low wall thickness. (< 10 mm).
It is particularly well-suited to welding of water walls (tube-web-tube joint) for steam water-tube boiler.
UV 305 is an aluminate-rutile agglomerated flux suited for direct and alternating current. 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 400 MPa minimum yield strength and boiler plates and tubes.

Typical analysis

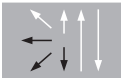
wt.-%	C	Si	Mn
wire	0.1	0.07	1.1
all-weld metal	0.06	0.5	1.25

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	%	0°C
u, DC+	425 (≥ 400)	520 (≥ 500)	29 (≥ 24)	65 (≥ 47)

u untreated / as welded

Operating data



Polarity	DC / AC
Redrying	300 – 350 °C / 2 hrs min.

Dimension mm
1.6
2.0
2.5
3.0
3.2
4.0

Approvals

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