FLUX UP LA01

Agglomerated Rutile Welding Flux

Classification

ISO 14174 S A AR 1 76 AC H5

Description & Applications

Aluminate-Rutile Flux for submerged arc welding (SAW-process) for joint welding of low-alloy structural and boiler quality steels with yield strengths (Ys) up to 355MPa. The flux shows constant metallurgical characteristics.
Flux UP LA01 is formulated to achieve high speed welding (up to 2/ m/min), good weld bead appearance and easy slag removal (even in fillet welding).

Recommended to use for single-run, two-run and fillet welding.

Wires recommended for

ISO 14171-A	***AWS A5.17***
S1	EL12
S2	EM12
S2Si	EM12K
S2Mo	EA2
ISO 24958-A	***AWS A5.23***
S S CrMo1	EB2

Typical Chemical Composition (%)

$SiO_2 + TiO_2$	$Al_2O_3 + MnO$	CaO + MgO	CaF_2	Basicity according To Boniszewski
25	55	5	10	~0.6

Flux Properties

Density (kg / dm³)	Grain size ISO 14174	Current carrying capacity
1.0	2 - 16 ; Tyler 10x65	Up to 800A (AC or DC) using one wire

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All Weld Metal Typical Chemical analysis (%)

Wire	C	Si	Mn	Cr	Mo
S1	0.04-0.08	0.3-0.6	0.8-1.1		
S2	0.04-0.08	0.3-0.6	1.0-1.4		
S2Si	0.04-0.08	0.4-0.8	1.0-1.4		
S2Mo	0.04-0.08	0.3-0.7	1.0-1.4		0.4-0.6
S S CrMo1	0.04-0.08	0.3-0.7	0.9-1.3	1.0	0.4-0.6

All Weld Metal Typical Mechanical Properties

Wire	$R_{p0,2}$ (MPa)	R_m (MPa)	A (%)	KV (J) +20°C	KV (J) 0°C	KV (J) -20°C
S1	>400	>510	>24	>70	>40	
S2	>420	>530	>22	>70	>47	
S2Si	>430	>540	>22	>70	>47	>27
S2Mo	>480	>580	>20	>60	>47	>27
S S CrMo1 *	>470	>570	>20	>50		

* After PWHT at 680°C/10h

Storage Recycling and Drying

It is recommended to store and use the flux up to 1 year after delivery in dry storage rooms. Nevertheless, the flux can be used even if stored for more than one year, just requires the user to make a weldability test to check if all is well.
Drying conditions specific to the flux: 200 ± 50°C. Supplied in moisture proof packaging.