FLUX UP INOX L

Agglomerated Welding Flux
For stainless steels

Classification

ISO 14174 S A AF 2 64 AC H5

Description & Applications

Aluminate fluoride welding flux for submerged arc welding (SAW) and surfacing in combination with stainless steel wire electrodes like 300 series, also suitable for Duplex and Super steels. Excellent toughness at low temperature up to -196°C. Easy slag removal and nice aspect of weld bead. Good behaviour with 9% Ni steels.
The metallurgical behaviour of the flux is neutral. Could be used in AC.

Main applications: Offshore, nuclear plant, petrochemical industry, boiler and pressure vessels…

Wires recommended for

AWS A5.9	ISO 14343-A	AWS A5.14	ISO 18274
ER308L	S 19 9 L	ERNiCrMo-3	S Ni 6625
ER347	S 19 9 Nb	ERNiCrMo-4	S Ni 6276
ER316L	S 19 12 3 L	ERNiCr-3	S Ni 6082
ER318	S 19 12 3 Nb		
ER316LMn	S 20 16 3 Mn L		
ER309L	S 23 12 L		
ER2209	S 22 9 3 N L		
ER2594	S 25 9 4 N L		
ER385	S 20 25 5 Cu L		
ER308H	S 19 9 H		
~ER307	S 18 8 Mn		

Flux Typical Chemical Composition (%)

$SiO_2 + TiO_2$	$Al_2O_3 + MnO$	CaO + MgO	CaF_2	Basicity according To Boniszewski
10	40	0	50	1.6

Flux Characteristics (%)

Density (kg / dm^3)	Grain size ISO 14174	Current
1.2	2-20	DC +/-

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All Weld Metal Chemical analysis

Wire	C	Si	Mn	Cr	Ni	Mo	Nb	Cu	W	N2	FN
ER308L	0.015	0.5	1.5	19	10						8-10
ER347	0.03	0.5	1.4	19	10		0.6				8-10
ER316L	0.015	0.5	1.5	18	12	2.5					8-10
ER318	0.04	0.5	1.5	19	11	2.5	0.5				8-10
ER316LMn	0.025	0.5	6	18.5	15	2.6				0.15	
ER309L	0.015	0.5	1.5	23	13						10-20
ER2209	0.015	0.5	1.5	22	8	3.0				0.1	40-60
ER2594	0.03	0.5	0.6	25	9.5	3.6	0.2	0.7	0.6		30-60
ER385	0.03	0.6	1.5	19	25	4.1		1.2			
ERNiCrMo-3	0.006	0.4	0.1	21.5	64.5	8.7	3.8				

All Weld Metal Mechanical properties

Wire	$R_{p0,2}$ (MPa)	R_m (MPa)	A (%)	KV (J) -20°C	-40°C	-50°C	-196°C
ER308L	390	550	35	80	75		40
ER347	400	650	34			65	
ER316L	400	560	33	75	70		45
ER316LMn	375	630	33				
ER309L	400	580	33		70		
ER2209	585	765	27		75		
ER2594	670	880	21	70	45		
ERNiCrMo-3	520	780	40				100

Storage Recycling and Drying

The flux can be stored up to 3 years after delivery dry storage rooms. Flux that has picked up moisture should be re-dried 2h at 300-350°C. Flux could be re-drying up to 3 times. Flux could be recycled after removed slag and millscale. At least one part of new flux to three parts of recycled flux must be added. Supplied in moisture proof packaging.