

ML-305

Basicity 4.6

EN ISO 14174 ES A FB 2B DC

Characteristics and Applications:

ML-305 is an agglomerated, neutral flux for Electroslag Strip Welding. It is suitable for surfacing with stainless strips of CrNi, CrNiMo types with or without Nb addition. ML-305 exhibits very smooth, tight-rippled weld bead appearance and excellent wetting action. The product features easy slag removal without slag residuals and can be attained in the first or the following layers.

- Corrosion resistant cladding of austenitic overlay
- Components for chemical plants and constructions

Notes on usage:

1. Flux is required to bake at 300-350 for 2hr holding time.
2. Re-circulation of flux should be mixed with twice its volume of new flux prior to further use.
3. We recommend using heated hoppers for storage of flux in production.

Typical chemical composition of weld metal (wt%):

Deposit Type	Strip	Layer	C	Mn	P	S	Si	Cu	Cr	Ni	Mo	Nb
308L	TBD-309L	1st layer: Strip	0.02	1.80	0.010	0.005	0.28	0.04	24.35	12.55	0.09	0.01
		1st layer: Weld metal	0.03	1.33	0.015	0.007	0.49	0.04	19.26	10.91	0.08	0.01
316L	TBD-309L	1st layer: Strip	0.02	1.80	0.010	0.005	0.28	0.04	24.35	12.55	0.09	0.01
	TBD-316L	2nd layer: Strip	0.02	2.38	0.020	0.009	0.33	0.05	20.46	13.34	2.63	0.02
		2nd layer: Weld metal	0.02	1.72	0.025	0.009	0.62	0.05	19.44	13.27	2.07	0.02
347	TBD-309L	1st layer: Strip	0.02	1.80	0.010	0.005	0.28	0.04	24.35	12.55	0.09	0.01
	TBD-347	2nd layer: Strip	0.02	1.85	0.018	0.007	0.38	0.05	19.56	10.36	0.08	0.58
		2nd layer: Weld metal	0.03	1.41	0.022	0.008	0.66	0.04	19.27	10.73	0.08	0.35
	TBD-309LNb	1st layer: Strip	0.02	2.07	0.018	0.007	0.35	0.07	23.48	12.19	0.16	0.87
1st layer: Weld metal		0.04	1.51	0.02	0.009	0.53	0.06	19.16	10.14	0.12	0.63	

Remark:

1. Welding parameter : 1200A, 24V, 15cm/min / 35mm stick-out / 150°C interpass temperature
Strip : 0.5X60mm
2. The chemistry will be influenced by welding parameter 、welding equipment and bead thickness etc.

Size of strip:

Width & Thickness: 30 x 0,5mm, 60 x 0,5mm, 90 x 0,5mm

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