

Classification			
EN ISO 14174			
SA FB 2			
Characteristics and typical fields of application			
<p>Marathon 104 is an agglomerated fluoride-basic flux for submerged arc welding of stainless and heat resistant steel grades.</p> <p>Combined with stainless wire grades the flux has neutral metallurgical behaviour and it provides a high degree of purity in the weld metal, with good mechanical properties and good corrosion resistance. The flux does not have a Cr support.</p> <p>The weld metal is characterized by high resistance to hot cracking and is recommended for the highest demanding applications.</p>			
Flux properties			
Grain size (EN ISO 14174)	1-20 (0.2–2.0 mm)		
Polarity	DC+ , AC		
Basicity (Boniszewski) wt%	2.9		
Redrying conditions	300 – 350 °C / 2 hrs min.		
Apparent Density	1.0 kg/dm ³		
Composition of sub-arc welding flux (wt. %)			
SiO ₂ +TiO ₂	CaO+MgO	Al ₂ O ₃ +MnO	CaF ₂
15	36	20	25
Typical wires to combine			
SAW wires	AWS A5.9 / A5.14*	EN ISO 14343-A / 18274*	
Thermanit 13/04	ER410NiMo (mod.)	S 13 4	
Thermanit JE-308L	ER308L	S 19 9 L	
BÖHLER EAS 2-UP (LF)	ER308L	S 23 12 L	
Thermanit ATS 4	ER19-10H	S 19 9 H	
Thermanit GE-316L	ER316L	S 19 12 3 L	
Thermanit H-347	ER347	S 19 9 Nb	
Thermanit A	ER318	S 19 12 3 Nb	
Thermanit 25/14 E 309L	ER309L	S 23 12 L	
Thermanit 22/09	ER2209	S 22 9 3 N L	
Thermanit 25/09 CuT	ER2594	S 25 9 4 N L	
Thermanit 17/15 TT	EG	S Z 17 15 Mn W	
Thermanit 18/17 E Mn	ER317L (mod.)	S 18 16 5 N L	
Thermanit 19/15	ER316LMn	S 20 16 3 Mn N L	
Thermanit 20/25 Cu	ER385	S 20 25 5 Cu L	
Thermanit 25/22 H	ER310 (mod.)	S 25 22 2 N L	

SAW flux, fluoride-basic type, stainless and nickel-base

Thermanit Nicro 82	ERNiCr-3*	S Ni 6082 (NiCr20Mn3Nb)*
Thermanit Nimo C 276	ERNiCrMo-4*	S Ni 6276 (NiCr15Mo16Fe6W4)*
Thermanit 625	ERNiCrMo-3*	S Ni 6625 (NiCr22Mo9Nb)*

Packaging	
Type	Weight (kg)
Metal Drum	30