

Classification		
EN ISO 14174	SA FB 2	
Characteristics and typical fields of application		
<p><b>Marathon 431</b> is a fluoride-basic agglomerated flux for submerged arc welding of CrNi(Mo) stainless steel grades. The flux gives a nice bead appearance without any slag residues.</p> <p>The flux can be applied in multi-pass and single pass welding procedures and has also very good welding properties in fillet welds.</p> <p>It provides a high degree of purity in the weld metal and provides good mechanical properties with good corrosion resistance. The flux does not have a Cr-support.</p>		
Flux properties		
Grain size (EN ISO 14174)	4–14 and 3-16 (0.4–1.4 and 0.3-1.6 mm)	
Polarity	DC+	
Basicity (Boniszewski) wt%	2.2	
Redrying conditions	300° - 350, min 2 hrs	
Composition of sub-arc welding flux (weight %)		
SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	CaF <sub>2</sub>
10 %	38 %	50 %
Typical wires to combine		
SAW wires	AWS A5.9	EN ISO 14343-A
Thermanit JE-308L	ER308L	S 19 9 L
BÖHLER EAS 2-UP (LF)	ER308L	S 23 12 L
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
Packaging		
Type	Weight (kg)	
PE-BAG	25	
DRY SYSTEM	25	
Metal can	30	