

Classifications

EN ISO 14174

S A FB 1 55 DC H5

Characteristics and typical fields of application

Marathon 543 is a special agglomerated fluoride-basic welding flux with high basicity suitable for multi-run welding of high creep resistant 9%Cr-steels like grade P91/T91, 1.4903 - X10CrMoVNb9-1, grade P92/T92, NF616 and 1.4905 - X11CrMoWVNb9-1-1. The metallurgical behavior concerning Si and Mn is neutral. The flux produces well contoured and smooth welding beads with good slag release as well as appropriate weld metal ductility and impact behavior after tempering. Marathon 543 is a hydrogen-controlled welding flux with low diffusible hydrogen content.

Flux properties

Polarity	DC+
Basicity index (Boniszewski)	3.0 (wt%) ; 4.5 (mol)
Grain size (EN ISO 14174)	3-20 (0.3–2.0 mm)
Apparent density	1.0 kg/dm ³
Redrying	570 – 750°F / 2 hrs min.
Diffusible hydrogen (ISO 3690)	Max 5 ml/100 g acc. to EN ISO 14174 ; max 4 ml / 100 g acc. to AWS A5.23

Composition of sub-arc welding flux

	CaF ₂	SiO ₂	CaF ₂ +CaO+MgO
wt. %	21	8	62