

GEEFLUX 544 X EH 14



AWS/SFA 5.17 : F7A(p)5EH 14

Fluoride -basic type

Welding flux for submerged -arc welding process

CHARACTERISTICS :

Geeflux-544 is an agglomerated fluoride-basic type flux, preferably used for welding of high-strength fine grain structural steels, as well as cryogenic steels and steels resistant to ageing. Owing to its neutral behaviour as to the pick-up and burn-out of the elements silicon and manganese, it is advisable to use wire electrodes having a lower silicon and higher manganese content. Geesaw 544 flux is suitable to be employed for welding offshore components. The weld metal produced in combination with corresponding wire electrodes meets high toughness requirements at subzero temperatures. Welds are uniformly shaped, without constrictions and undercuts. The flux is suitable to be used on either DC, positive pole, or AC up to about 1000A.

Damp flux must be redried at 300-350C

TYPICAL APPLICATION :

- Welding of fine grained medium tensile steel such as BS:EN10028-3-All grades to P460NL1, A516 grade 60/70
- Pressure vessels, pipes, forgings etc.

Main constitu-ents :

SiO₂ + TiO₂	CaO+MgO	Al₂O₃+MnO	CaF₂
15%	40%	20%	25%

Basicity according to Boniszewski : Approx. 3.1

All - Weld metal analysis typical values in %

Wire EH 14	C = 0.10-0.18
	Mn = 1.70-2.20
	Si = 0.10 max
	S = 0.030 max
	P = 0.030 max
	Cu = 0.35 max

Mechanical properties of the deposited weld metal (With EH 14 Wire) :

Wire	As welded After ORs PWHT at 610/3hrs	Ultimate Tensile Strength MPa	0.2% Proof Stress MPa	Elongation (%) (L=4D)	Charpy V- notch Impact strength in joules	
					Temp	Joules
EH 14		510-620	440 min	22-28	-46C	50-120