

# 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 :

<b>SiO<sub>2</sub> + TiO<sub>2</sub></b>	<b>CaO+MgO</b>	<b>Al<sub>2</sub>O<sub>3</sub>+MnO</b>	<b>CaF<sub>2</sub></b>
15%	40%	20%	25%

## Basicity according to Boniszewski : Approx. 3.1

All - Weld metal analysis typical values in %

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

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

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