

# GEEFLUX 591 X GEESAW EB91

## IDENTIFICATION

GEEFLUX 591 X GEESAW EB91

## CLASSIFICATION

AWS/SFA 5.23: F9PZ EB91-B91

## Description:

- **GEEFLUX 591 X GEESAW EB91** is designed for submerged arc welding. Preheat and interpass temperatures of not less than 200 °C during welding.
- **GEEFLUX 591** is agglomerated highly basic flux designed for welding chrome-moly steels including grade P91. Metallurgical behavior of the flux is neutral. Damp flux must be redried at 400-450°C/for 2 to 3 hr.

## Weld Metal Analysis

Wire	C	Mn	Si	S	P	Cu	Cr	Mo	Nb	Ni	V	Nb (cb)	N	Al	Sn
EB91	0.07-0.13	1.25 max	0.30max	0.01 max	0.01 max	0.10 max	8.5-10.5	0.85-1.15	-	1.0 max	0.15-0.25	0.02-0.10	0.03-0.07	0.04 max	-
EB91+ Geeflux 591	0.07-0.13	1.25 max	0.15-0.30	0.010 max	0.010 max	0.10 max	8.0-10.50	0.85-1.20	0.03-0.10	1.0 max	0.15-0.25	-	0.03-0.07	0.04 max	0.005 max

**Basicity according to Boniszewski:** 2.6 and 2.9

**Mn+Ni in the weld metal:** 1.20 max

**Nitrogen in the weld metal:**  $\geq (0.5 \times \text{Aluminum content} + 0.03\%) \text{ minimum.}$

**Hardness of the weld metal as well as HAZ:** 195 HV to 320 HV

**Diffusible Hydrogen:** Max 4 ml/100 grams of the weld metal.

**Mechanical properties of the deposited weld metal (PWHT 750°C for 2 hrs min)**

Wire	UTS (MPa)	YS (MPa)	EL (%) (L=4D)	CVN Impact Value at +20°C	
				Temp	Joules
EB 91	630 min	540 min	17 min	-	27 min

## Typical Applications:

- Welding of A 387 grade 91 & equivalent grades of chrome-moly steels.
- For welding of P91 alloyed steel.

**Packing:** 25.0 Kg. flux in polythene lined bags.