# ES FLUX 180

SAW

ESWECO
The Art of Welding

Type Neutral

EN 760: SA CS 1 89 AC

## Description

ES FLUX 180 is designed for use in the singleand multi-pass butt welding of mild and medium tensile steels where moderate impact strength is required. ES FLUX 180 is of the calcium-silicate type with a very high current-carrying capacity, even at low welding speeds with both AC and DC.

ES FLUX 180 is excellent for the butt welding of materials from 10 to 30 mm thickness and is used in the shipbuilding industry, for example. ES FLUX 180 is specially designed for use in combination with ES EL12 or ES EM12 in single-or multi-wire systems.

# Density

≈1.1 kg/dm<sup>3</sup>

#### **Basicity index**

1.1

#### Flux consumption, kg flux/kg wire

Voltage	DC+	AC
26	0.5	0.45
30	0.7	0.6
34	1.0	0.85
38	1.25	1.1

## Typical all weld metal composition, %

Wire	С	Si	Mn	Cr	Ni	Мо
ES EL 12	0.07	0.7	1.4	-	-	-
ES EM12	0.09	0.6	1.7	V.F.1	8,500	-

## Typical mech. Properties all weld metal

Wire	Yield Stress MPa	Tensile strength MPa	Charpy V		
			°C	J	
ES EL12	410	520	+20	110	
			0	80	
			-20	45	
			-29	40	
ES EM12	460	560	+20	90	
			0	70	
			-20	50	

# Classifications

Wire	EN 756	SFA/AWS A5.17
ES EL12	S 38 0 CS S1	F7A2-EL12/F6P0-EL12
ES EM12	S 42 0 CS S2	F7A2-EM12/F6P0-EM12