

# ES FLUX 900

SAW

**ESWECO**  
*The Art of Welding*

Type Basic

EN 760: SA AB 1 66 AC H5

## Description

ES FLUX 900 is a basic agglomerated, slightly Si- and Mn-alloying flux for submerged arc welding, specially designed for fillet welding and for the single- and multi-pass butt welding of mild, medium and high tensile steels. ES FLUX 900 is of the aluminate basic type and, for this slag system, it has a very high current-carrying capacity on both AC and DC and very good operating characteristics. ES FLUX 900 is ideally suited to narrow gap welding due to the excellent slag detachability and smooth side-wall blending.

## Density

approx. 1.2 kg/dm<sup>3</sup>

## Basicity index

1.6

## Flux consumption, kg flux/kg wire

Voltage	DC+	AC
26	0.6	0.5
30	0.85	0.7
34	1.15	0.95
38	1.35	1.15

## Typical all weld metal composition, %

Wire	C	Si	Mn	Cr	Ni	Mo
ES EL12	0.04	0.3	1.0	-	-	-
ES EM12	0.05	0.3	1.35	-	-	-
ES EM12K	0.08	0.5	1.4	-	-	-
ES EA2	0.09	0.4	1.65	-	-	-

## Typical mech. Properties all weld metal

Wire	Yield Stress MPa	Tensile strength MPa	Charpy V	
			°C	J
ES EL12	360	365	0	125
			-20	95
			-30	75
			-40	65
ES EM12	410	510	+20	135
			0	125
			-20	80
			-40	55
ES EM12K	425	520	+20	150
			0	140
			-20	100
			-40	60
ES EA2	480	580	+20	130
			0	110
			-20	90
			-40	60

## Classifications

Wire	EN 756	SFA/AWS A5.17
ES EL12	S 35 4 AB S1	F6A4-EL12/F6P5-EL12
ES EM12	S 38 4 AB S2	F7A4-EM12/F6P4-EM12
ES EM12K	S 38 4 AB S2Si	F7A5-EM12K/F6P5-EM12K
ES EA2	S 46 3 AB S3	-