

ES FLUX 161

SAW

ESWECO
The Art of Welding

Type High-basic

EN 760: SA FB 1 65 DC

Description

ES FLUX 161 is designed for the single-wire, multi-run butt welding of mild, medium and high tensile steels with impact strength requirements down to -40°C/-60°C. Due to the non-alloying effect, ES FLUX 161 is designed for use with a suitable alloying wire. ES FLUX 161 can be used on DC±.

Density

1.1 kg/dm³

Basicity index

2.8

Flux consumption, kg flux/kg wire

Voltage	DC+	AC
26	0.6	
30	0.9	
34	1.2	
38	1.4	

Typical all weld metal composition, %

Wire	C	Si	Mn	Cr	Ni	Mo
ES EL12	0.07	0.15	0.5	-	-	-
ES EM12K	0.08	0.35	1.0	-	-	-
ES EH12K	0.09	0.3	1.4	-	-	-

Typical mech. Properties all weld metal

Wire	Yield Stress MPa	Tensile strength MPa	Charpy V	
			°C	J
ES EL12	355	445	+20	180
			-10	130
			-20	100
ES EM12K	440	520	-20	130
			-30	80
			-40	70
ES EH12K	440	550	-62	35
			-20	110
			-40	90
			-50	55
			-62	40

Classifications

Wire	EN 756	SFA/AWS A5.17
ES EM12K	S 38 4 FB S2Si	F7A8-EM12K/F6P8-EM12K
ES EH12K	S 42 5 FB S3Si	F7A6-EH12K/F7P8-EH12K