

EM12

AWS A5.17 EM12

Description:

EM12 is a copper coated carbon structural steel wire for Submerged Arc Welding (SAW) of carbon steels and corresponding strength low alloy steels. The bead metal with excellent mechanical properties when using with TM,SJ101 flux. Welding for carbon steels and corresponding strength low alloy steels, like 16Mn steel automatic welding.

Diameters:

2.0mm, 2.4mm, 3.2mm, 4.0mm, 5.0mm.

Typical Mechanical Properties:

Tensile strength(MPa):	490
Yield strength(MPa):	378
Elongation(%):	32
Impact values(≥ 47)/(-20 $^{\circ}$ C):	84

Typical Chemical Compositon:

C	Mn	P	S	Si	Ni	Cr	Mo	Cu
0.060	0.98	0.014	0.010	0.020	0.01	0.010	--	0.07

Welding Current:

Dia:(mm)	2,0	2,5	3,2	4,0	5,0
Current/A	380-420	430-470	480-520	530-570	580-620
Voltage/V	28-32	28-32	28-32	28-32	28-32

Note:

1. Rusty, water, oil and other impurity should be cleaned before welding.
2. Flux should be bake 1-2 hours in 300-350 $^{\circ}$ C before using.
3. According to the requirements to choose right welding parameter.