

## EM12K

AWS A5.17 EM12K

### Description:

EM12K submerged arc wire contains higher levels of carbon, manganese and silicon than EL12. The increased carbon content gives this wire greater tensile strength, while the increased manganese and silicon content yields improved deoxidation properties. Used for single and multipass welding of carbon and low alloy structural steels, like ship-buildings, offshore structures, thick pressure vessels etc.

### Diameters:

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

### Typical Mechanical Properties:

Tensile strength(MPa):	538
Yield strength(MPa):	442
Elongation(%):	30
Impact values( $\geq 47$ )/(-20°C):	70

### Typical Chemical Compositon:

C	Mn	P	S	Si	Cu
0.05-0.15	0.8-1.25	$\leq 0.030$	$\leq 0.030$	0.10-0.35	$\leq 0.35$

### Welding Current:

Dia:(mm)	2,0	2,5	3,2	4,0	5,0
Current/A	300-400	350-450	350-450	350-450	525-625
Voltage/V	26-29	27-30	27-30	27-30	27-30

### Note:

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