



KSW-12KM

Classification:
AWS/SFA 5.17: EM 12K

Description:

KSW-12KM is a copper-coated, Medium-Manganese alloyed solid wire to be used with suitable flux for submerged arc welding medium and high-strength steels. It has excellent welding performance, stable arc, smooth weld pass, and easy slag peeling. It could meet the requirement of high energy input multi-layer welding, multi-pass welding, double-sided-single pass welding, high-speed welding etc.

Applications :

- ❖ Widely used for medium and high tensile structural steels.
- ❖ Shipbuilding industry
- ❖ Boiler
- ❖ Pressure Vessel
- ❖ Pipes industry
- ❖ Bridge

Chemical Composition of Solid Wire (WT. %):

C	Mn	Si	S	P	Cu*
0.05 - 0.15	0.80 - 1.25	0.10 - 0.35	0.030 Max	0.030 Max	0.35 Max

*In copper% included copper coating percentage also.

Mechanical Properties of Weld Metal with SAW flux:

Tensile Strength (N/mm ²)	Yield Strength (N/mm ²)	Elongation, L = 4d (%)	Charpy Impact Value (Joules)
520 Min.	420 Min.	25 Min.	40 Joules Min at -20°C

Current Conditions: DC (+)

WELDING PARAMETERS

Size (mm)	1.60	2.00	2.4	3.20	4.0
Current (Amps)	250 - 300	300 - 400	350 - 500	400 - 550	450 - 600
Voltage (V)	26 - 28	26 - 29	26 - 28	27 - 31	27 - 32
Welding Speed mm/mint.	300 + 20	330 + 20	350 + 20	350 + 20	400 + 20

Recommendation: For the first layer in the groove, keep current and speed low in the case of multi-Layer Welding.

Packing: 25 Kgs in Metal Basket & also available in Drum Packing

Caution:

Protect yourself and others. Fumes & gases can be dangerous to health. Arc rays can injure eyes and burn skin. Electric shock can kill. Refer to American National Standard Z49.1, "Safety in welding and cutting".

Works: Modi Arc Electrodes Company
Modi Industries Compound, Delhi-Meerut Road Modi Nagar-201204, Ghaziabad, Uttar Pradesh-India