

	KSW-12KHM (MODI-ECOWELD)	CLASSIFICATIONS: AWS/SFA5.17: EH12K EN 150 ISO 14171 -A- S3Si	 QCS-2024-CPR-0890
	Copper Coated solid Wire for Submerged Arc Welding		

Description:

KSW-12KHM is a manganese-alloyed with higher Si-content copper coated wire to be used with suitable flux for the Submerged Arc Welding of non-alloy and fine grain steels alloying (especially Off-

Shore)

Applications :

- ❖ Widely used for high tensile Shipbuilding steel
- ❖ **Vessel Steel**
- ❖ Boiler steel
- ❖ Off-Shore
- ❖ Pipes Steel

Chemical Composition of Solid Wire (WT. %):

C	Mn	Si	S	P	Cu
0.06 - 0.15	1.50 – 2.0	0.22 - 0.65	0.025 Max	0.025 Max	0.35 Max

Mechanical Properties of Weld Metal with SAW flux(Typical):

Tensile Strength (N/mm ²)	Yield Strength (N/mm ²)	Elongation, L = 4d (%)	Charpy Impact Value (Joules)
560	470	30	60 Joules Min at -40°C

Current Conditions: DC (+)

WELDING PARAMETERS						
Wire Size (mm)	1.60	2.00	2.4 / 2.5	3.15 / 3.20	4.00	5.00
Current (Amps)	250 - 350	300 - 400	350 - 450	425 - 525	475 - 575	550 -650
Voltage (V)	26 - 29	26 - 29	27 - 30	27 - 30	27 - 30	27 - 30
Typical Travel Speed range *	5-100 IPM	5-100 IPM	5-100 IPM	5-100 IPM	5-100 IPM	5-100 IPM
Electrode Extension	13 - 19	13 - 19	19 -32	25 - 38	25 - 38	25 - 38

Recommendation: Pay attention to welding voltage, Excessive welding voltage cause deterioration of joint properties.
 * The travel speed of a welding arc can vary depending on the thickness of the plates and the type of joint being welded.

- Packing :**
- 25 KGS MAX. IN BASKET SPOOL & in metallic ring.
 - Identification-Brand name & size is printed on label.
 - Packed in a corrugated cardboard box
 - 100 KGS/250 KGS/500 KGS 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”.

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