#### **Classification:**

EN S2 GB H08MnA AWS EM12



## **Low Alloy Copper Coated Welding Wires:**

This wire is a low carbon, low manganese, low silicon general purpose submerged arc wire is capable of making single pass or multiple pass welds.

### **Description:**

- Medium Manganese and Silicon wire nominal rust and mill scale tolerance
- Developed for general purpose welding on low and medium carbon steel.
- Applications include structural steels, medium strength pressure vessels, ship,barge and off store oil rig fabrication.

## **Chemical Composition of welding wire(wt.%):**

| С            | Si      | Mn        | S        | P        | Cu      |
|--------------|---------|-----------|----------|----------|---------|
| 0.06 to 0.15 | 0.10max | 0.80-1.25 | 0.035max | 0.035max | 0.35max |

### Mechanical Properties (weld metal) as welded:

| Yield strength(MPa)   | 370 | N/mm <sup>2</sup> |
|-----------------------|-----|-------------------|
| Tensile strength(MPa) | 470 | N/mm <sup>2</sup> |
| Elongation            | 26  | %                 |
| Impact energy         | 60  | J(-20°C)          |

**Packing:** Spool on G1 former

| Inner Dia | Width | Weight    |
|-----------|-------|-----------|
| 300mm     | 100mm | 15Kg/25Kg |

**Wire sizes available:** 1.6; 2; 2.5; 3.25; 4.00; 5.00 (ø mm)

#### **Classification:**

EN: S1 GB: H08A

AWS A 5.17: EL12



## **Description:**

- Low manganese and silicon wire minimal rust and mill scale tolerance
- Excellent ductility and crack resistance-recommended for restained welds and good machinability.
- Suitable for butt or fillet welds on lower strength carbon steels.
- Applications include high speed lap welds, build up or repair welding prior to machining and buttering or cladding operations.

## **Chemical Composition of welding wire(wt.%):**

| С    | Si      | Mn        | S       | P       | Cu      |
|------|---------|-----------|---------|---------|---------|
| 0.10 | 0.10max | 0.25/0.60 | 0.03max | 0.03max | 0.35max |

#### **Mechanical Properties (weld metal) as welded:**

| Yield strength(MPa)   | 360 | N/mm <sup>2</sup> |
|-----------------------|-----|-------------------|
| Tensile strength(MPa) | 470 | N/mm <sup>2</sup> |
| Elongation            | 30  | %                 |
| Impact energy         | 60  | J(-20°C)          |

**Packing:** Spool on G1 former

| Inner Dia | Width | Weight    |
|-----------|-------|-----------|
| 300mm     | 100mm | 15Kg/25Kg |

**Wire sizes available :** 1.6 ; 2.00 ; 2.5 ; 3.25 ; 4.00 ; 5.00 (ø mm)

#### **Classification:**

**EN: S1** 

AWS A5.17: EH14

GB H10Mn2

## **Low Alloy Copper Coated Welding Wires:**

Submerged arc welding wire for joining big sheets, high deposition rate and penetration bring about effective welding, smart weld bead with high mechanical properties.

# Chemical Composition of welding wire(wt.%):

| С            | Si    | Mn        | S      | P      |
|--------------|-------|-----------|--------|--------|
| 0.06 to 0.12 | ≤0.25 | 0.90-1.65 | ≤0.015 | ≤0.015 |

# Mechanical Properties (weld metal) as welded:

| Yield strength(MPa)   | 430 | N/mm <sup>2</sup> |
|-----------------------|-----|-------------------|
| Tensile strength(MPa) | 510 | N/mm <sup>2</sup> |
| Elongation            | 28  | %                 |
| Impact energy Akv     | 100 | J(-35°C)          |

**Packing:** Spool on G1 former

| Inner Dia | Width | Weight |
|-----------|-------|--------|
| 300mm     | 100mm | 25Kgs  |

**Wire sizes available :** 1.6, 2.0, 2.4, 3.2, 4.0(ø mm)

#### **Classification:**

EN: S2Si

AWS A5.17: EM12K

#### **APPLICATIONS:**

Single and multi layer welding of structural steels, shipbuildings, offshore structures, thick pressure vessels.

#### **CHARACTERISTICS ON USAGE:**

Good weldability for all range of thickness of plate. Excellent impact property and crack resistibility of welded metal. In active type flux not affected by welding parameter, especially suitable for multi layer welding of thick plate.

### CHEMICAL COMPOSITION OF WELDING WIRE(WT.%):

| С            | Si      | Mn        | S        | P        | Cu      |
|--------------|---------|-----------|----------|----------|---------|
| 0.06 to 0.15 | 0.10max | 0.80-1.25 | 0.035max | 0.035max | 0.35max |

#### MECHANICAL PROPERTIES (WELD METAL) AS WELDED:

| Yield strength(MPa)   | 420 | N/mm <sup>2</sup> |
|-----------------------|-----|-------------------|
| Tensile strength(MPa) | 510 | N/mm <sup>2</sup> |
| Elongation            | 30  | %                 |
| Impact energy Akv     | 110 | J(-40°C)          |

**Packing:** Spool on G1 former

| Inner Dia | Width | Weight |
|-----------|-------|--------|
| 300mm     | 100mm | 25Kgs  |

**WIRE SIZES AVAILABLE:** 1.6, 2.0; 2.5; 3.20; 4.00; 5.00 (ø mm)