

BHARATH HEAVY ELECTRICALS LIMITED TIRUCHIRAPALLI-620 014 WELDING TECHNOLOGY CENTRE

WCPI : 015

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WELDING CONSUMABLE PURCHASE INSTRUCTION FOR SAW WIRE FOR STRUCTURAL WELDING, ASME.SEC.II.C SFA - 5.17/5.17M, CLASS EL8 LOW MANGANESE WIRE

1.0 GENERAL:

- The wire shall conform to the requirements of AWS-A5.17 class EL8. Additional requirements specified below also apply.
- II. The wires shall be supplied in sizes and quantities as specified in the purchase order.

2.0 CHEMICAL COMPOSITION:

I. The chemical composition of the wires shall conform to ASME SECII.C SFA-5.17, EL8.

3.0 FINISH AND TOLERANCE:

- I. The wire shall be smoothly finished, free of injuries sliver, depressions, seams, laps, scratched, scale, drawing compounds, rust or other foreign materials.
- II. The wire shall be copper coated.
- III. The wire diameter shall not vary from the specified size by more than +/- 0.05mm.
- IV. Out of roundness shall not exceed +/- 0.025mm.
- V. The wire may be spliced, provided the splicing is done before the final annealing and drawing operations. The spliced area shall conform to the requirements of para 3.3 and 3.4 and shall not cause stoppage or break while using in an automatic equipment, No supplies are permitted between different heats of wire.

4.0 TEMPER:

 The Wire shall be annealed and drawn to produce proper temper to enable smooth uninterrupted feeding on automatic equipment.

5.0 SPOOLING AND PACKING:

I. The wire supplied shall be coiled with coils size as given below.

Inner Diameter

: 300 mm

Width

: 100 mm

Net Weight

: 25 Kg

- II. The wire shall be layer wound and free of kinks, waves or sharp bend that would interface with feeding.
- III. The cast and helix shall be such as not interface with the uniform feeding of the wire made from a single heat of material.
- IV. Each coil shall contain one continuous length of wire made from a single heat of material.

- V. One end of the coils should be fastened to a hole in the sheet metal ring provided in the ID. The coils should be tied with the binding wires at a minimum 6 places. The free end of the wire should be booked on to one of the binding wires to prevent unwinding by itself.
- VI. The coils should be completely wrapped with water proof polythene sheeting over which gunny packing should be provided. All the coils should be free from moisture.
- VII. The coils shall be packed in wooden crates lined with waterproof material.
- VIII. Weight of each crate shall not exceed 1000kg

6.0 LABELLING:

- I. Adhesive labels containing following information shall be attached to the outside and inner core of each coil.
 - a. Brand Name.
 - b. AWS Specification & Class.
 - c. Size
 - d. Heat / Melt No.
 - e. Net Weight.

7.0 TESTING & CERTIFICATION:

- I. Three copies of Manufactures Test Certificate and Guarantee certificate to be provided against Each consignment of wires supplied.
- II. Batch /Lot classification shall be Class S3 and Intensity of Testing shall be as per Schedule 'I' of SFA-5.01 Filler metal procurement guidelines of ASME Sec.II.C. (Latest Edition and Addenda).
- III. The Testing Authority shall certify that supplies made against the batch conform to the requirements of the Latest Edition & Addenda (Applicable on the date of issue of Purchase Order) of ASME Sec.II.C.SFA-5.17 EL8.

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