

**TECHNICAL SPECIFICATION OF 11 KV 'V' TYPE CROSS ARMS (Galvanized)**

- 1.1** Salient features regarding the technical particulars are given below the same shall be taken care of for strict compliance:
- (i) The 'V' type Steel Cross Arms made of Mild Steel shall be as per enclosed Drawing.
  - (ii) Mild Steel used in the Cross Arms shall conform to IS: 2062 Gr. 'A' and its latest amendments, thereof if any.
  - (iii) For welding, ISI handbook of manual metal welding and IS: 823-1964 or latest amendments thereof shall be followed. Electrodes to be employed in the welding shall conform to IS: 814 (Part-I): 1984 and IS: 815:1974. It shall be ensured that welded joints have the same strength as that of main section.
  - (iv) Alignment of various portions and Arm shall be as per drawing and shall not be disturbed in any case. Cross Arms shall be mounted on vertical plane and therefore its all portions/arms shall remain in one plane only.
  - (v) Holes of size 22 mm (dia) suitable for 11 KV pin as shown on the drg. shall be drilled in vertical alignment.
  - (vi) 2 Nos. slots of size 18 mmx50mm which are 241mm distance apart as shown in the drg. shall be drilled.
  - (vii) It shall be noted that appearance of a sound weld is characterized by uniform ripped surface, even contours and bead width, and absence of external defects such as under cut, blow holes, surface cracks etc.
  - (viii) The cross arms shall be fabricated exactly as per drawing, out of single piece of Mild Steel angles (65x65x6 mm) having cutting and welding in one flange only and bending in the other flanges.
  - (ix) On the two ends of Cross Arms, 80 mm piece of 65x65x6 mm. M.S. Angle shall be welded to form a perfect box, as shown in the drawing.
  - (x) The guaranteed weight of 11 KV 'V' type Steel Cross Arms shall be 9.1 Kg.
  - (xi) Total running length should be 1620mm.

**1.2 TOLERANCES:**

- (a) Dimension of Steel Cross Arms as shown and mentioned in the Drg. are subject to  $\pm 2.5\%$  tolerance.
- (b) Steel Section shall have tolerances as per relevant I.S.S.

**1.3 GALVANIZATION:** Each Steel Cross Arms should be hot dipped galvanized as per IS 4759 and coating of Zinc should be min 610gm/Mtr<sup>2</sup>

**1.4 MARKING:** A marking of PVVNL-MT/MM/58/22-23 (Sl. No.) Supplier's Trade Name or Mark "shall be painted in black through stencil on each Steel Cross Arms in the contour.