

**TECHNICAL SPECIFICATION FOR 16 X 1800 MM G.I STAY SETS.**

Galvanized stay sets of size 16×1800 mm shall be as per enclosed Drawing for supporting poles of overhead lines in tension location.

The rod and the cylindrical portion of the elbow shall be of steel conforming to IS-2062 'A' or latest amendments thereof, if any. The cross head of the bow shall have the word 'PVVNL-MT/(Sl. No.) cast / embossed thereon.

The rod shall be of the good finish, well forged and free from flaws and other defects. The head shall not fail when rods are tested to fracture at their full section by tensile stress. The rivet head of the bow shall be well riveted into the cross head and shall not draw when the bow is tested to fracture by tensile stress.

The ratchet nut and the ratchet face of cross head shall provide a good ratchet action. The screw thread of the rod and nut shall conform to IS: 84 medium fit or equivalent ISS if any. The screw threads of the rod shall be well oiled before the nut is on. The anchor plates shall be clearly cut off and punched.

The rod, bow, ratchet nut, anchor plate and thimble including the screw threads of the set and the ratchet nut shall be smoothly and continuously hot dip galvanized with Zinc conforming to IS-2633/1972 and IS- 4759/1968 with latest amendments thereof, if any. The nuts shall be well finished before galvanizing.

Stay set shall be subjected to the test to determine the tensile strength and shall not fail below the specified breaking load. The minimum guaranteed weight of finished 16mm. stay sets shall be 5.8 kg. This weight is for the purpose of acceptance of stay set.

Cross head component of stay sets shall be legibly and indelibly marked with the trademark of the manufacture. The tolerance of (±) 2.5% is allowed in dimensions only.

### 1. **GENERAL NOTE:**

- (a) The complete assembled stay sets be subjected to the test to determine the tensile strength and shall not fail below the specified breaking load. The load shall be applied between the outer end of the bow of complete assembled stay set and the forged end of the rod.
- (b) Test shall be performed either at Firm's premises or at their principal's premises, or at any Govt. approved test house at the cost of supplier.

### **TECHNICAL PARTICULARS :**

i. Size of stay set.	:	16 X 1800 mm.
ii. Material of rod, cylinder of elbow	:	Mild steel as per IS-2062 Gr. 'A'
iii. Material of cross head of elbow	:	Pig Iron Gr. 1 as per IS-224/65
iv. Material of thimble	:	Mild steel as per IS-1079 Gr. 'O' SK.
v. Material of ratchet nut and anchor plate.	:	Mild steel as per IS-2062 Gr. 'A'
vi. Standard to which screw thread of rod	:	BS 84 Medium fit.
Nut conforms.		
vii. <i>Breaking load of finished stay set in Kg.</i>	:	5229 Kgs.
<b>viii. <i>Minimum Guaranteed weight</i></b>	:	<b>5.8 Kgs.</b>
ix. Manufacturing Tolerance.	:	2.5% in dimensions only.
x. Identification Mark	:	All stay sets should carry identification mark of word PVVNL & size of stay . This should be engraved as stay rod to ensure proper identification of material.

### 3. **TESTING AND INSPECTION:**

Inspection & Testing shall be carried out by the representative of Superintending Engineer (Equator). Inspection and testing shall be carried out as per clause 2.7 of General requirement of specification.

The material shall be tested as per Drawing no.RESPO-16(enclosed) and also as per Technical specification referred to above. Testing of 1% or more stay sets shall be carried out at supplier's cost. No material shall be dispatched without inspection by the representatives of Superintending Engineer (Equator), PVVNL, Meerut. Intimation of offering of material for inspection must be sent to Superintending Engineer (MM-I), PVVNL, Meerut as well as to Superintending Engineer (Equator), PVVNL, Meerut.

All the measuring instruments used in testing and inspection would be properly calibrated and sealed once in a year. Calibration certificate when demanded by the Inspecting officer should be produced for verification purpose. In case of any dispute regarding calibration of instruments, Instruments sealed and signed by representative of supplier and purchaser would be sent to the Institution/ lab of repute at the cost of supplier. The result of such testing shall be binding on the supplier.

When the material is offered for inspection, the supplier should keep his material ready duly packed for dispatch. Inspecting officer(s) shall make random selection from this lot material according to the terms of the agreement or of the specification as the case may be.

The firm shall also render necessary assistance to the inspecting officer in making random sampling, whenever considered necessary. The material shall be duly marked or sealed as considered by the Inspecting officer after carrying out the inspection and the material approved for dispatch.

Not with standing the inspection carried out by the officer of PVVNL or their authorized representative, the supplier, shall be responsible to ensure correct supply of material at the destination both in terms of quantity as well as quality as per order. In case the material is not found ready when the inspecting team reached there at the call of supplier for inspection of material, the cost incurred by PVVNL on this account will become payable by the supplier. For this purpose Superintending Engineer, (MM-I) PVVNL, Meerut shall intimate to the supplier and the same shall be paid by the supplier.