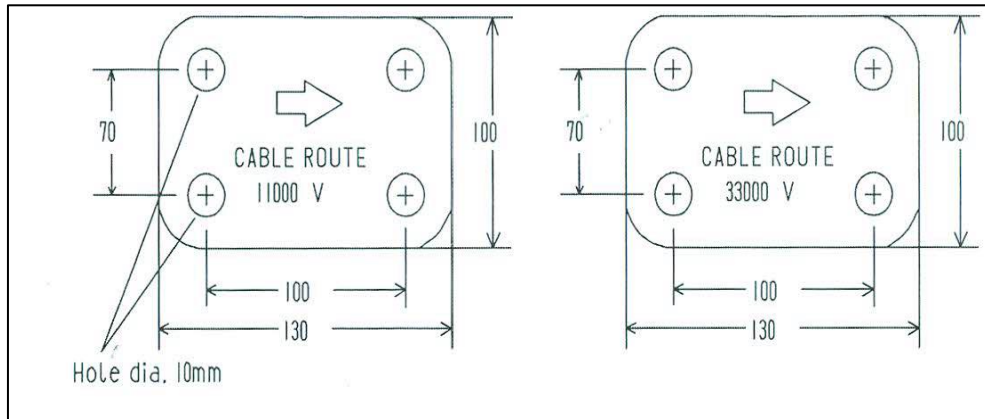


LOT-4: CONDUCTOR AND HARDWARE FITTINGS

Cable Route Markers

Cable Route Marker Plate with Nuts & Bolts. The length and breadth of the plate should be 130x100 mm. The thickness of the plate should be 10 mm. The diameter of the hole should be 10 mm. The length of the Nut (Nut and Bolt) should be 75 mm and the diameter should be 8 mm as per the below drawings.



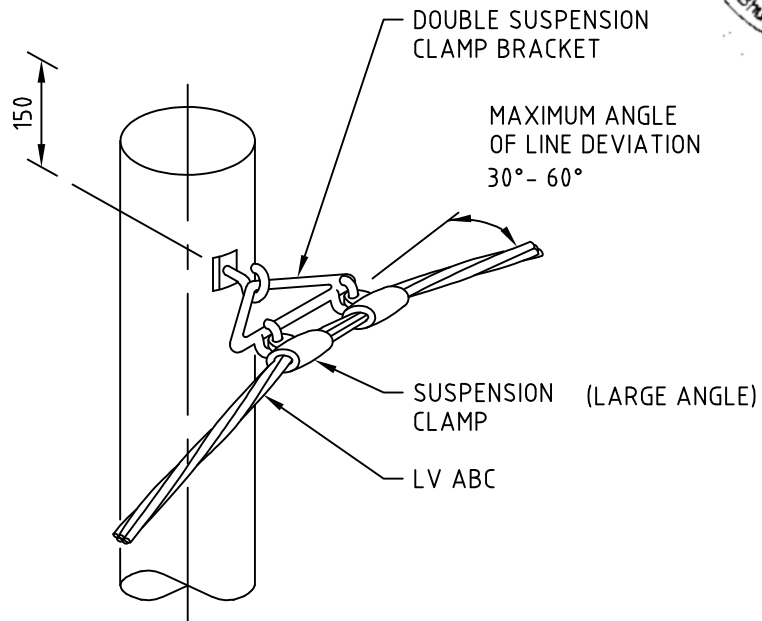
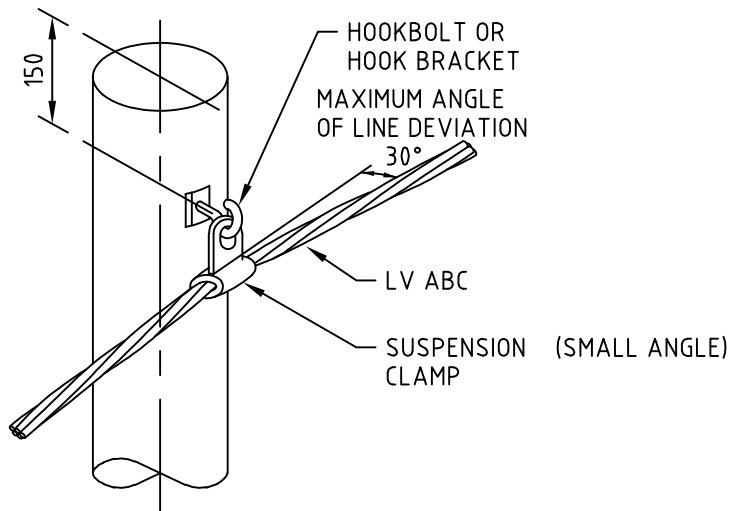
Suspension Clamp SA

Each assembly shall be delivered complete with all necessary devices suitable for attachment to round steel poles by stainless steel strap. All metal fitting shall be of good quality galvanized mild steel or cast aluminium alloy. Each of the suspension/angle/dead end assemblies shall be supplied with a 1.75 m of stainless steel trap with two buckles.

Bundled end protection shall be provided for protecting cable dead ends and shall comprise a set of heat shrinkable polymeric terminal caps for fitting on each conductor, together with protective black PVC sleeve of 500mm length.

Refer Drawing no. BPC-DDCS-2020-14/2-4





NOTES

1. DIMENSIONS AS SHOWN ARE IN mm.
2. DRAWING IS NOT TO SCALE.



BHUTAN POWER CORPORATION LIMITED

ENGINEERING AND RESEARCH DEPARTMENT

DISTRIBUTION DESIGN & CONSTRUCTION STANDARD

**LV ABC
INTERMEDIATE & ANGLE POLES DETAILS**

TITLE	NAME	DATE
DESIGNED BY		
CHECKED BY		
APPROVED BY		

DRAWING NO. BPC-DDCS-2020-14/2-4

**REVISION
2020**

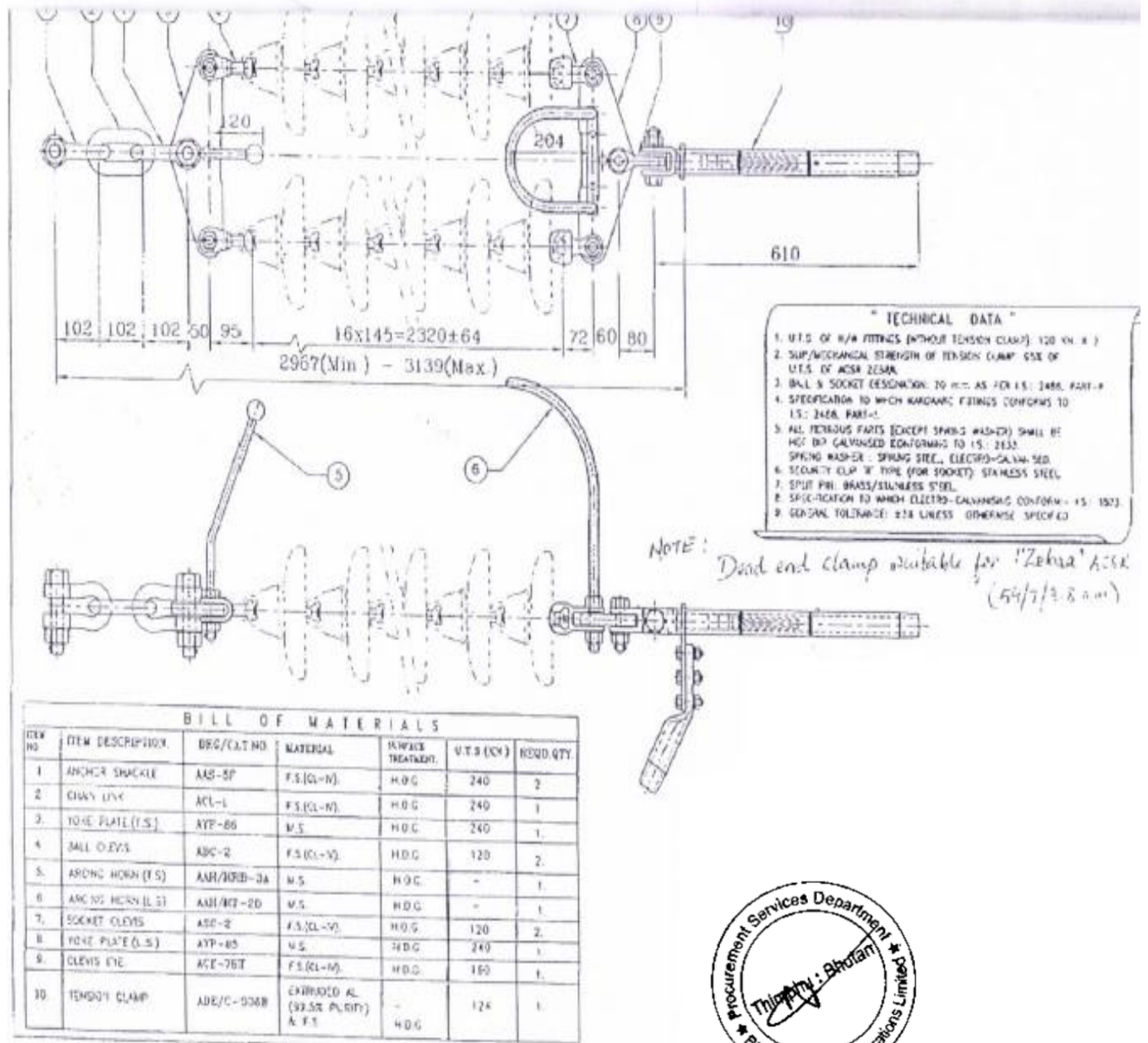
Technical Specification of ACSR Zebra Conductor:

Sl. Technical Particulars:

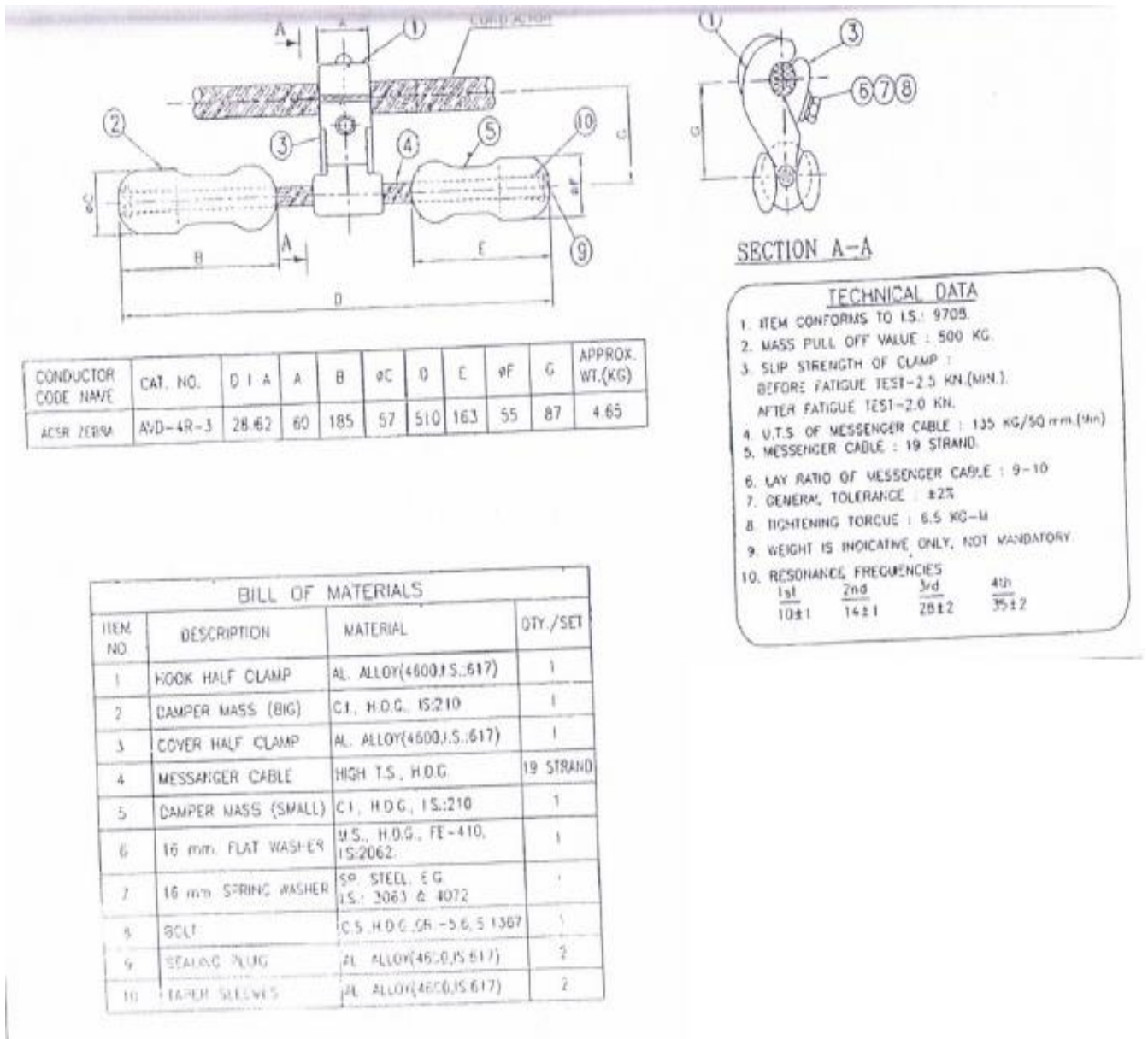
- | | | | |
|-----|---|---|---|
| 1. | Type of conductor | : | ACSR Zebra Conductor. |
| 2. | Applicable standards | : | IS – 398/ IEC 1089, IEC 888, IEC 189. |
| 3. | Nominal area of aluminum | : | 420 Sq.mm. |
| 4. | Sectional area of aluminum | : | 428.90 Sq.mm. |
| 5. | Total sectional area of aluminum | : | 484.50 Sq.mm. |
| 6. | Number of stranding and wire diameter | : | |
| | a. Aluminum | : | 54/3.18 mm. |
| | b. Steel | : | 7/3.18 mm. |
| 7. | Overall diameter of Al + Steel | : | 28.62 mm. |
| 8. | Weight mass of ACSR conductor | : | |
| | a. Overall weight | : | 1621 Kg/Km. |
| | b. Weight of Aluminum | : | 1182 Kg/Km. |
| | c. Weight of steel | : | 439 Kg/Km. |
| 9. | Calculated resistance at 20°C (maximum.) | : | 0.06915 Ohms/Km. |
| 10. | Ultimate tensile strength (minimum). | : | 121.45 kN. |
| 11. | Conductor current carrying capacities | : | |
| | a. Current carrying at 65°C. | : | 590.00 Amps. (Approx.) |
| | b. Current carrying at 75°C. | : | 737.00 Amps. (Approx.) |
| 12. | Joints in strands | : | |
| | a. Steel. | : | Not permitted. |
| | b. Aluminum wires. | : | No joint shall be permitted in the Aluminum wires in outer most layer of ACSR conductor. But permitted in the inner layer such that no two such joints are within 15 meters of each other in the complete stranded conductor. |
| 13. | Materials for construction of ACSR conductor. | : | The conductor shall be constructed of hard-drawn aluminum and aluminized steel wires as per above applicable IS & IEC standards. |



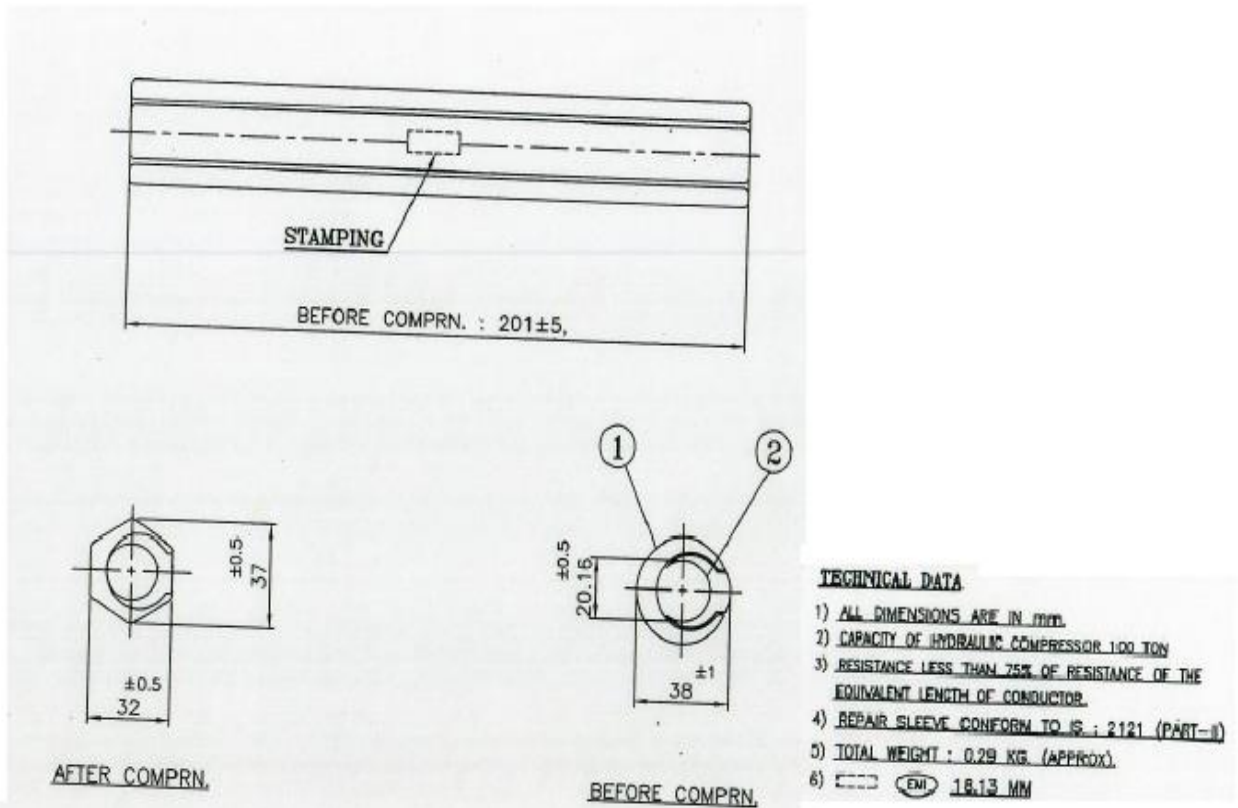
1. Double tension hardware fitting for 220kV ACSR Zebra conductors:



2. Vibration Damper for 220kV ACR Zebra conductor:



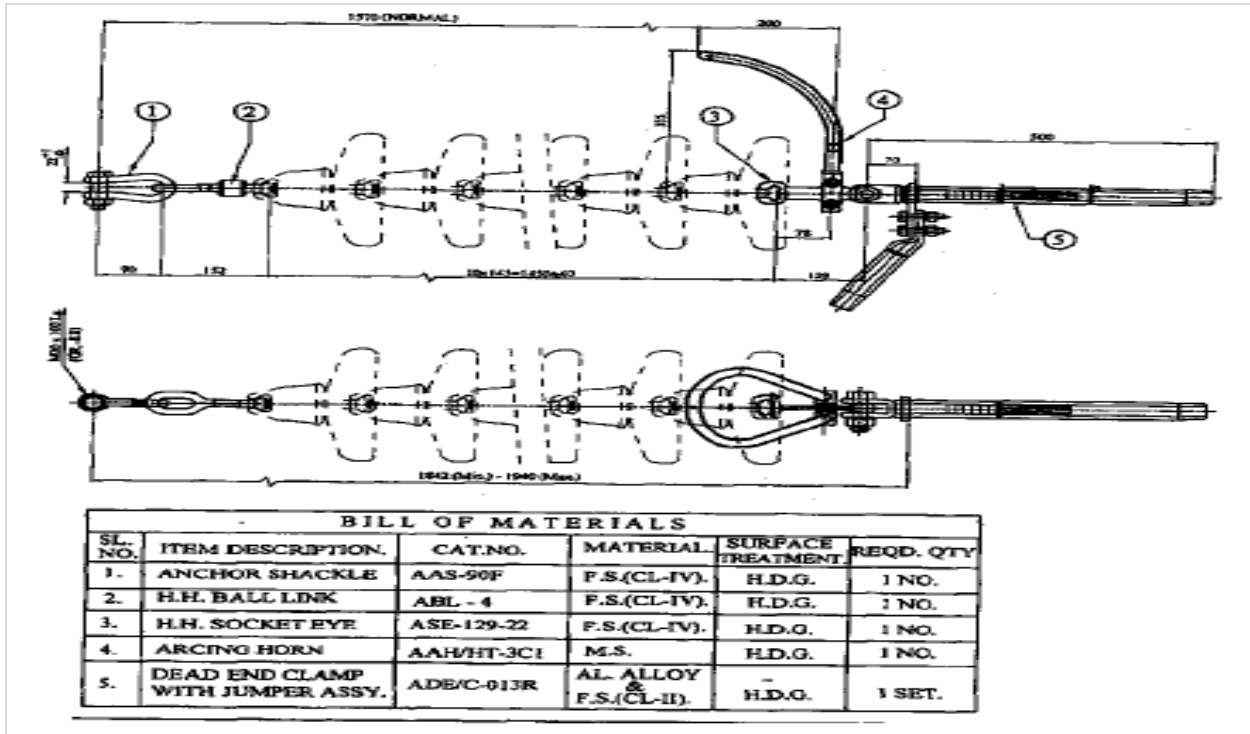
3. Repair sleeve for 66kV ACSR Wolf conductors:



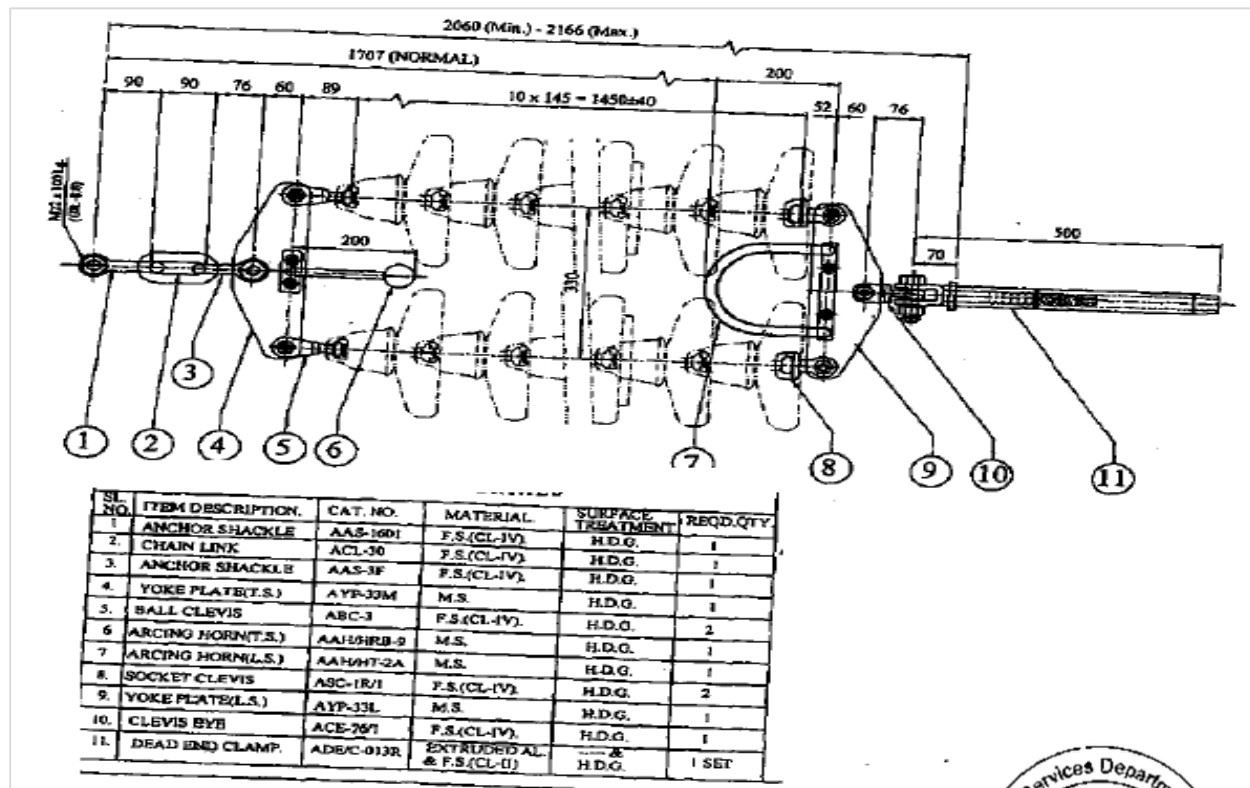
2	KEEPER PIECE	ALUMINIUM ALLOY 19500/1050 IS:733	----	2267	1
1	BODY	ALUMINIUM ALLOY 19500/1050 IS:733	----	2266	1
NO	DESCRIPTION	MATERIAL	SURFACE TREATMENT	REF.NO.	QTY.



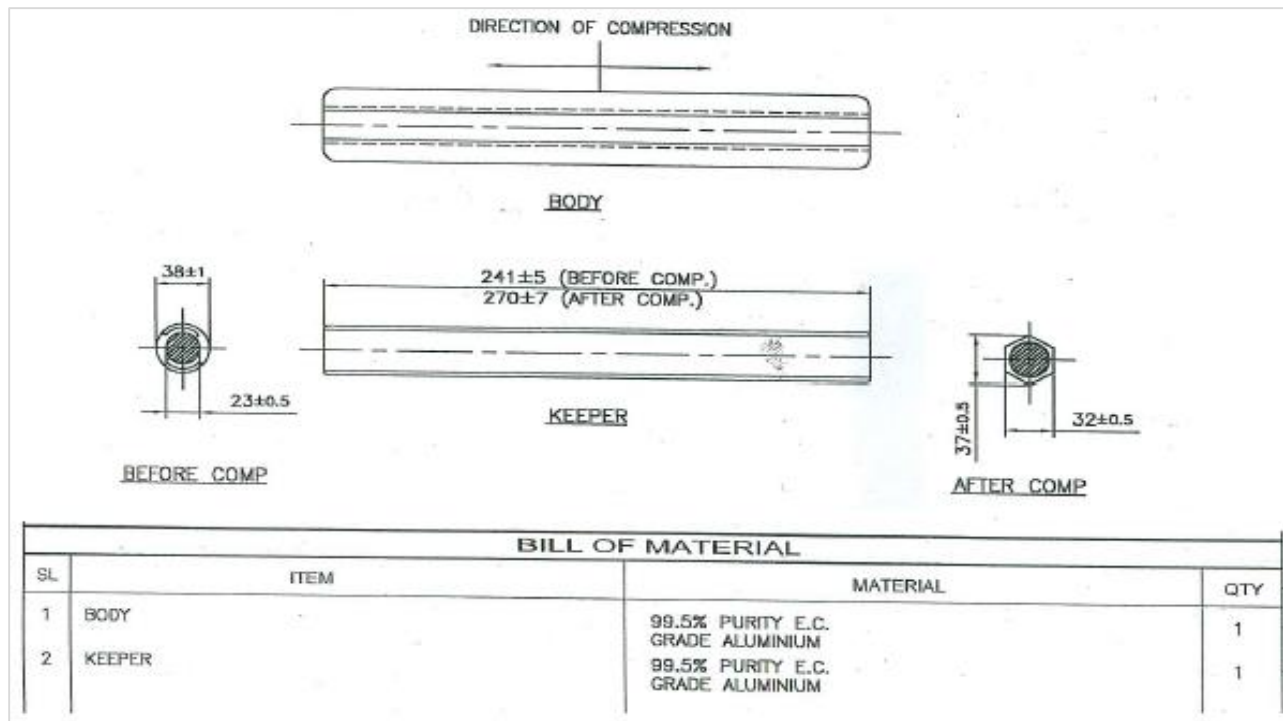
1. Single tension hardware fitting for 132kV ACSR Panther conductors:



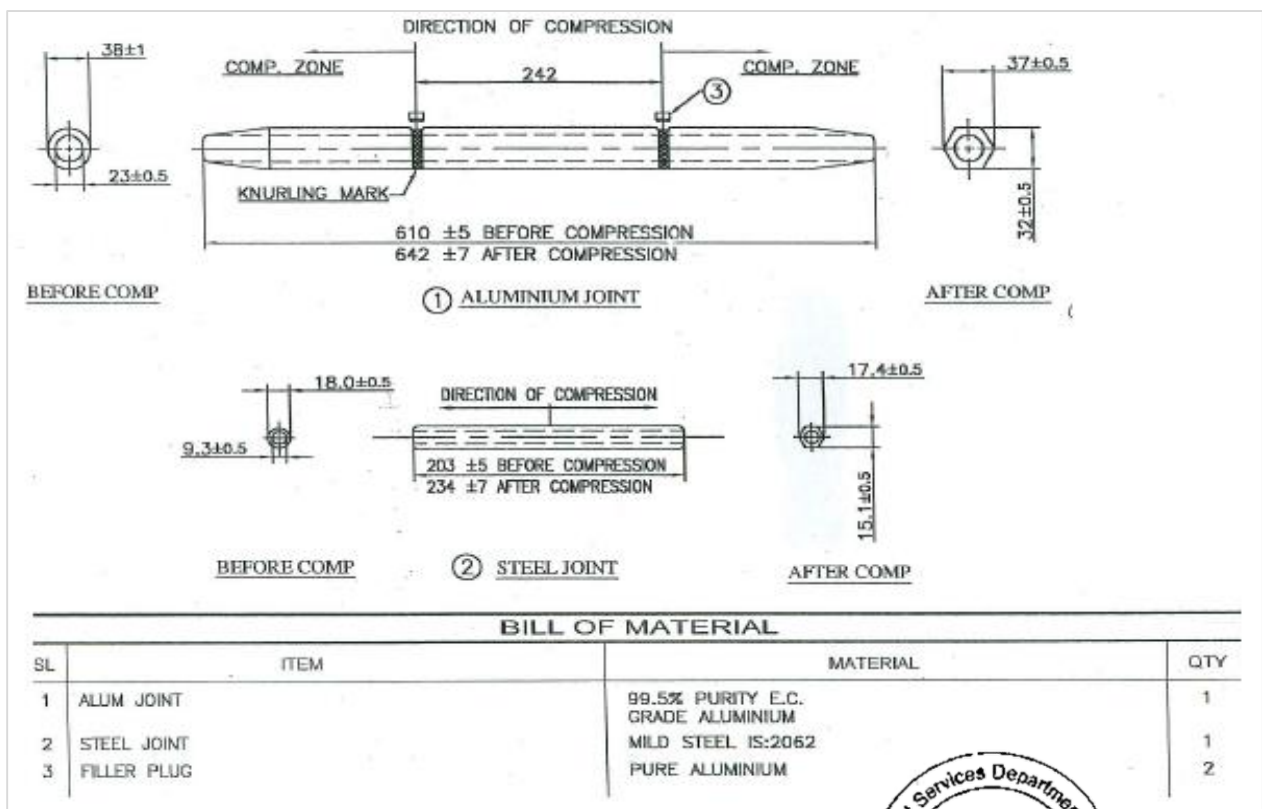
2. Double tension hardware fitting for 132kV ACSR Panther conductors:



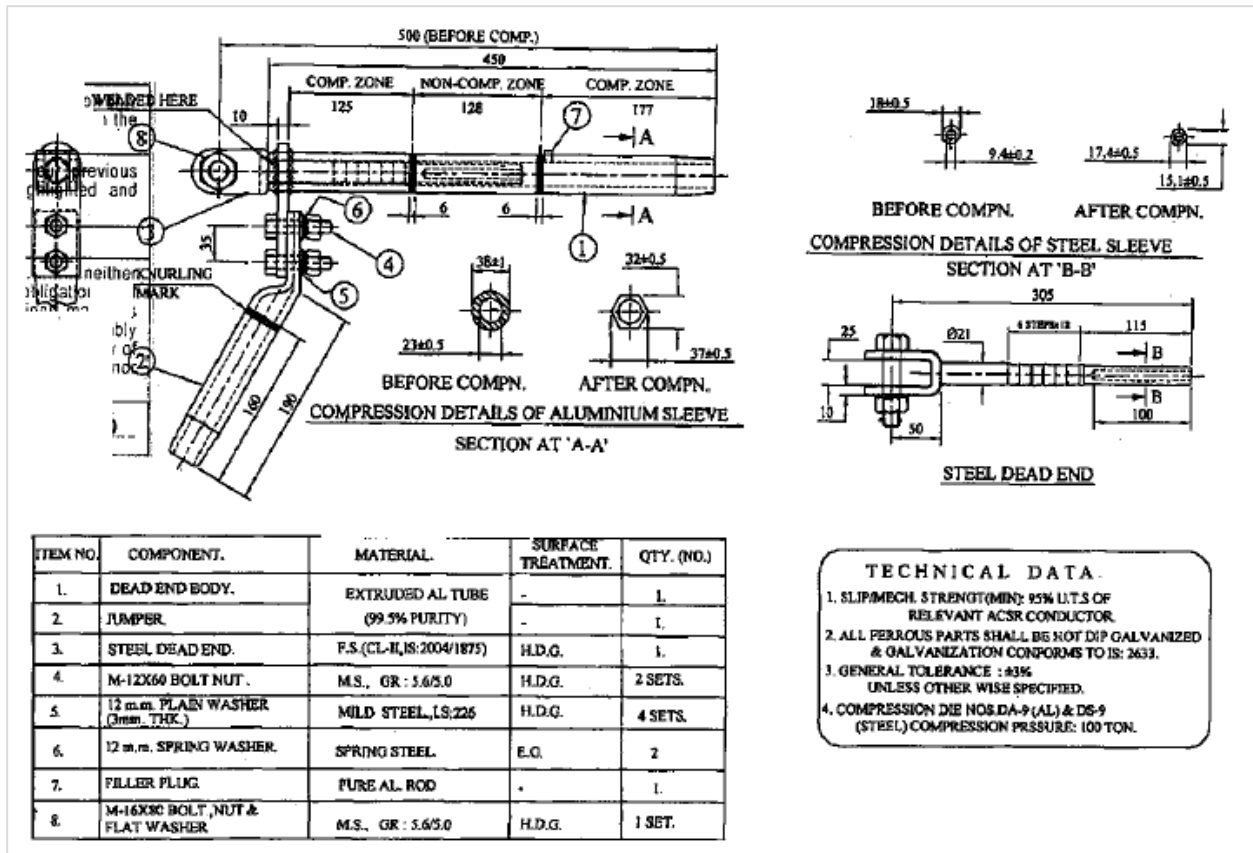
3. Repair sleeves for 132kV ACSR Panther conductors:



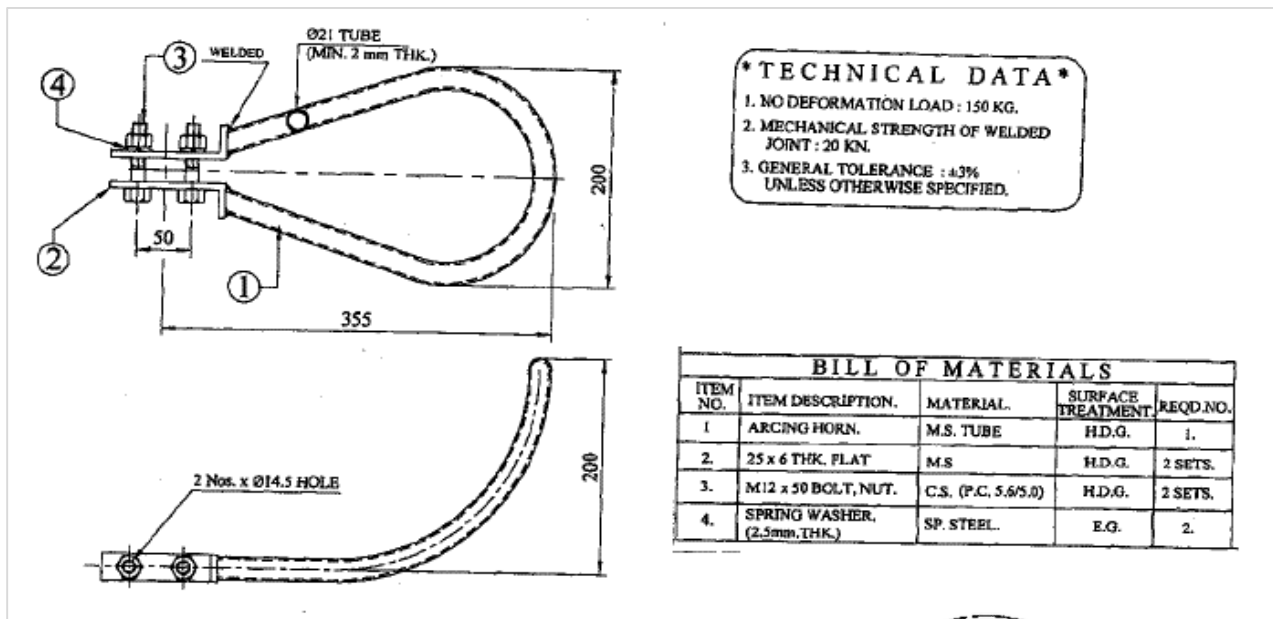
4. Mid-span joint for 132kV ACSR Panther conductors:



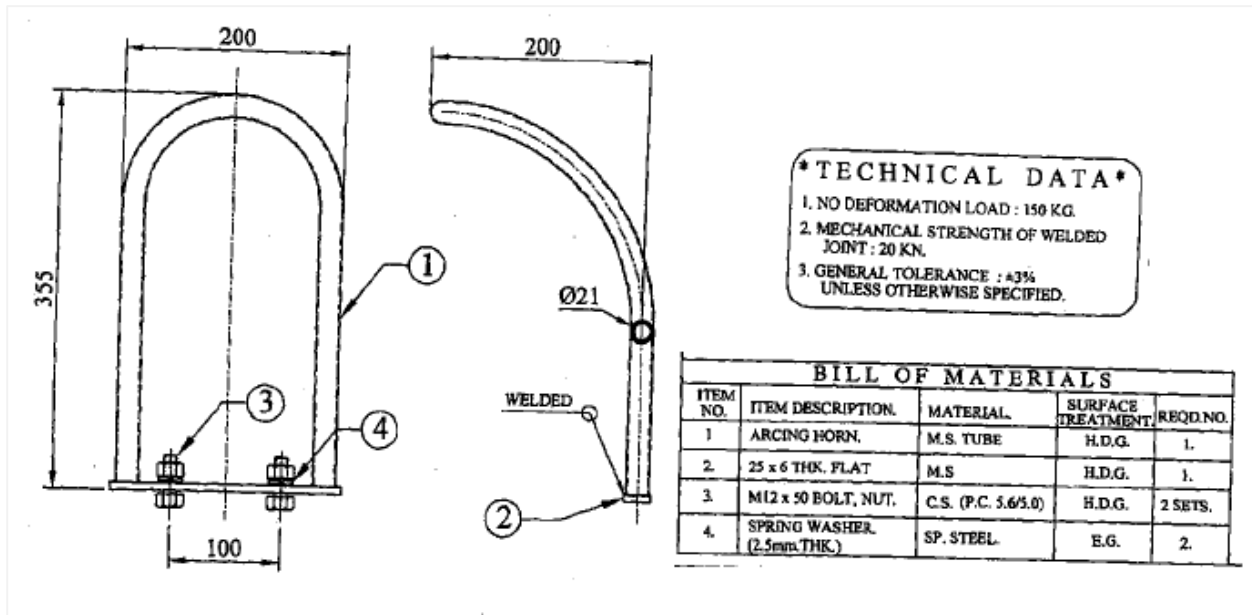
5. Dead end joint (Al & steel) for 132kV ACSR Panther conductors:



6. Single tension arcing horn for 132kV ACSR Panther conductors:



7. Double tension arcing horn for 132kV ACSR Panther conductors:



8. Jumper corn (only) for 132kV ACSR Panther conductors:

