

**KARNATAKA POWER TRANSMISSION CORPORATION LIMITED**

## **SECTION – TUBULAR CONDUCTOR**

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## **1.0     SCOPE**

- 1.1     This specification covers design, material, constructional features and testing at the Manufacturer's works of aluminium alloy and copper tubular bus conductors for outdoor switchyards.
- 1.2     The enclosed Data Sheets A1 and A2 form integral part of this specification.

## **2.0     CODES AND STANDARDS**

The design, material, construction, manufacture, inspection, testing and performance of tubular bus conductors shall conform to the latest editions of applicable standards specified in enclosed Data Sheet A2. In case of withdrawal/revision of any of the stipulated standards by issuing authorities prior to commencement of fabrication, mutual agreement with Purchaser shall be reached for compliance with applicable standard. Nothing in this specification shall be construed to relieve the Manufacturer of his responsibility.

## **3.0     MATERIAL**

Tube material shall be either copper or aluminium alloy and shall comply with properties as specified in Data Sheet A1.

## **4.0     SLEEVES FOR STRAIGHT THROUGH JOINTS**

Length of the jointing sleeves shall be six times the nominal size (diameter) of the tube and the outer diameter of sleeve shall be suitable to fit snugly in the main tube.

## **5.0     TESTING**

Tubular bus conductors shall be subjected to electrical tests as per applicable standards. Test certificates in respect of mechanical tests shall be furnished. The test equipment, meters, instruments, etc. used for testing shall be within valid calibration periods. The calibrating instruments used as standard shall be traceable to national/international standards.

## **6.0     MARKING AND PACKING**

- 6.1 Marking on the material and packing of material shall be as per guidelines covered in applicable standards specified in Data Sheet A2.
- 6.2 Fittings shall be packaged to provide adequate mechanical & corrosion protection of components in transit and for reasonable storage period.

## DATA SHEET – A2

SR NO	BRIEF TITLE	REFERENCE NO OF STANDARDS	
1.0	COPPER TUBES FOR ELECTRICAL PURPOSES	<input type="checkbox"/> IS 282 <input type="checkbox"/> IEC	<input type="checkbox"/> BS 1977 <input type="checkbox"/> ASTM B 188
2.0	WROUGHT ALUMINIUM AND ALUMINIUM ALLOY BARS, RODS, TUBES AND SECTIONS FOR ELECTRICAL PURPOSES	<input type="checkbox"/> IS 5082 <input type="checkbox"/> IEC	<input type="checkbox"/> BS <input type="checkbox"/> ASTM

### NOTE

EQUIPMENT. ACCESSORIES, COMPONENT PARTS, RAW MATERIAL AND TESTS SHALL IN GENERAL CONFORM TO ☐ IS ☐ BS ☐ IEC ☐ ASTM