

PSGSG/22-23/003	Product Specifications ETP Copper rods	Drg.No.	
		Date	14.07.2022
		Product	ETP Copper Rod
S.NO	BHEL Specification		
1.0	General: This specification governs the quality requirements electrolytic tough pitch copper rods and extruded sections for electrical purposes.		
2.0	Application: This material is used in high voltage switchgear applications.		
3.0	Compliance with National /International standards : The material shall comply with the requirements of the following national standard and also meet the requirements of this specification. INDIAN : IS : 191:2007		
4.0	Electrical Conductivity: The electrical conductivity of the material should be >97 % (IACS)		
5.0	CHEMICAL COMPOSITION: The chemical composition of copper shall be as follows: Copper including silver – 99.90, minimum. Oxygen content – 400 ppm, maximum		
6.0	Dimension and tolerance: Dimensions: Diameter of 125 mm and length of 110 mm. Tolerance of length and diameter: +1/-0mm		
7.0	Finish: <ol style="list-style-type: none"> a. The component shall be free from dirt, grease and loose particles. b. Any sharp corners shall be removed. c. Parallelism of rod must be maintained within 0.1 degree and any deviation shall be subjected to rejection in supply. 		
Page 1/2	PSGSG/22-23/003		Signature

PSGSG/22-23/003	Product Specifications ETP Copper rods	Drg.No.	
		Date	14.07.2022
		Product	ETP Copper Rod
S.NO	BHEL Specification		
8.0	Tests & Inspection: <ol style="list-style-type: none"> 1) The supplied material shall be subjected to conductivity measurement. The sample shall exhibit IACS conductivity greater than 97%. 2) The components shall be physically inspected for cracks and blow holes. No blow holes are permitted. 3) Material shall be inspected for dimensional checkups. 4) Results of Chemical composition 		
9.0	Packing: The component shall be packed in polyethylene after machining. The component shall be guaranteed against all material and manufacturing defects for at least one year.		
10.0	Acceptance criteria: <ol style="list-style-type: none"> 1) Dimensional report as per clause no. 6.0. 2) Finish as per clause 7.0 3) Chemical test report as per clause no. 5.0. 4) Electrical conductivity report as per clause no. 4.0. 5) Packing as per clause 9.0 		
Page 2/2	PSGSG/22-23/003		Signature