

**TELANGANA STATE POWER GENERATION
CORPORATION LIMITED**

5x800MW YADADRI TPS

VOLUME -II


***TECHNICAL SPECIFICATION
FOR
MS ROD FOR BELOW GROUND
EARTHING***

**SPECIFICATION NO: PE-TS-417-509-E002
REVISION: 00**



**BHARAT HEAVY ELECTRICALS LIMITED
POWER SECTOR
PROJECT ENGINEERING MANAGEMENT
NOIDA, UP (INDIA) – 201301**

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	DOCUMENT TITLE TECHNICAL SPECIFICATION FOR MS ROD FOR BELOW GROUND EARTHING	SPECIFICATION NO. PE-TS- 417-509-E002	
		VOLUME II	
		REVISION - 0	DATE: 17.01.2022
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STANDARD TECHNICAL REQUIREMENTS

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1.0 INTENT OF THE SPECIFICATION

- 1.1 This specification covers the design, manufacture, inspection & testing, packing at manufacturer's works and delivery to site of **MS ROD FOR BELOW GROUND EARTHING**.
- 1.2 The intent of specification is not to specify all details of design & construction of material. The material shall, however, conform in all aspects to high standard of design, engineering and workmanship and be capable of performing in continuous operation up to & after bidder's guarantee period in manner acceptable to purchaser who will interpret the drawings & specification and shall have power to reject any work or material which in his judgement is not in full accordance with this specification.

2.0 CODES & STANDARDS

- 2.1 The material shall comply with all currently applicable safety codes and statutory regulations of India as well as of the locality where the material is to be installed.
- 2.2 Applicable Standards (Latest amendment to be referred): -
- IS 2062, Grade designation E250 quality A: Hot Rolled Low, Medium and High Tensile Structural Steel.
 - ASTM A 510M Grade No. 1010 (SAE No. 1010) /1018 (SAE No. 1018) /1020 (SAE No.1020): Standard Specification for general requirements of wire rods and coarse round wire, carbon steel.
 - IS 1875, Designation 15C8 Class 1A: Carbon Steel Billets, Blooms, Slabs and bars for forging – Specification.

3.0 TECHNICAL REQUIREMENTS

- 3.1 Straight lengths of MS rods of standard diameter of **40 mm in minimum length of 9 m** shall be supplied.
- 3.2 All finished MS rods for Below Ground Earthing shall be free from sharp edges, corners, burs & unevenness.
- 3.3 Bidder to supply order quantity indicated in the Technical Specification. Overall tolerance on total dispatched quantity shall be restricted to +/- 3% in line with IS 2062.

4.0 QUALITY / INSPECTION

- 4.1 The supplier shall perform all tests necessary to ensure that the material and workmanship conform to the relevant standards and comply with the requirements of this specification.
- 4.2 The tests shall be in accordance with relevant Indian/American standards. The extent of the tests to be performed by the supplier shall include but not be limited to the following: -
- Routine Tests:
 - Tests for Chemical Composition
 - Test for Mechanical Properties.

Necessary Test Certificates shall be submitted to BHEL for review before actual dispatch of material.

5.0 PACKING

The material shall be packed to ensure protection against damage during transit, storage for prolonged periods and handling.

Note- Vendor shall submit the dates for drawing/document submission/BHEL comments/resubmission/approval after approval of documents.



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SCOPE matrix for MS ROD

Sr.no	Activities	Manufacturer	Bidder/ Associate	Remarks
1.	Source of Supply	Material is to be dispatched directly from the place of manufacturer (works / storage yard) of MS Rod to the project sites without any transshipment.	-----	Consignors Name & address on dispatch documents shall be of manufacturer from where the material is dispatched.
2.	Testing/Inspection			
3.	Guarantee/Warranty			
4.	Transportation			

Bidder to furnish duly filled in signed & stamped copy of scope matrix for broad activities