

2X500 MW TUTICORIN FGD

TECHNICAL SPECIFICATION FOR MS ROD FOR BELOW GROUND EARTHING

SPECIFICATION NO.: PE-TS-483-509-E001 REV. - 00



**BHARAT HEAVY ELECTRICALS LIMITED
POWER SECTOR
PROJECT ENGINEERING MANAGEMENT
NOIDA – 201301**



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MS ROD FOR BELOW GROUND EARTHING**

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SPECIFICATION NO.
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REV NO.: 00 DATE: 26.04.2022

SHEET : 2

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 upto & 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): -

- a) **IS 2062, Grade E250 Sub-Quality A:** Hot Rolled Low, Medium and High Tensile Structural Steel.
- b) **ASTM A 510M Grade SAE 1010/1018/1020:** Standard Specification for general requirements of wire rods and coarse round wire, carbon steel.
- c) **IS 1875, Designation 15C8:** 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 $\pm 3\%$ 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: -

a) Routine Tests:

(i) Tests for Chemical Composition

(ii) 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.



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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

2X500 MW TUTICORIN FGD**BOQ CUM PRICE SCHEDULE**

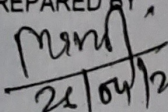
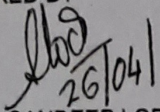
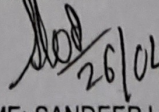
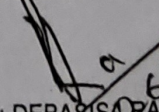
S.no	Description	Quantity (MT)	Unit Price (Rs./MT)	Total Price (Rs./MT)	Remarks
1	MS ROD 40MM Dia	30			

	2X500 MW TUTICORIN FGD PRE-QUALIFICATION REQUIREMENTS FOR MS ROD	PQR NO. PE-PQ-483-509-E001
		REVISION NO.00 DATE 26.04.2022
		SHEET NO. 1 OF 1

SCOPE: Supply : YES; Erection & Commissioning : NO;	
1	Vendor should have in-house manufacturing facility of MS rod / bar greater than 30mm dia (as per IS: 2062 Grade designation E250 quality A or as per ASTM A 510M Grade No. 1010 (SAE No.1010)/1018 (SAE No.1018)/1020 (SAE No.1020) or as per IS 1875 designation 15CB class 1A.
2	Vendor should be a manufacturer of MS Rod / Bar. In case bidder is not the manufacturer, their offer shall be evaluated as per Note no. 1 of PQR.
3	Vendor should have capability of manufacturing MS Rod /Bar of about 100 MT per month.
4	Vendor should have in-house capability to carry out all applicable tests as per relevant standards.
5	Manufactured & supplied at least 30 MT of MS rod in one or more orders and at least 10 MT in a single order.
6	Minimum two (2) nos. purchase orders for MS rod be submitted which should not be more than five (5) years old from date of techno-commercial bid opening for establishing continuity in business.

NOTES-

- In case Bidder is authorised dealers/ authorised Stockist, then credentials of MS Rod / bar manufacturer (OEM) can also be considered for meeting PQR points 1 to 5 except for PQR criteria at Sl. No.6 for which bidder's credentials shall be evaluated. Bidder to furnish the authorisation letter from the OEM along with the scope matrix (supply, logistics, testing, inspection, etc) along with the offer. For scope matrix technical specification shall be referred to. Bidder to note arrangement of the bidding w.r.t OEM, once offered to BHEL as part of bidding documents cannot be changed till the completion of execution of the project.
- SAIL/RINL need not furnish documents in support of above PQR criteria.
- Consideration of offer shall be subject to customer's approval of bidders, if applicable.
- Bidder to submit all supporting documents in English. If documents submitted by bidder are in language other than English, a self-attested English translated document should also be submitted.
- Notwithstanding anything stated above, BHEL reserves the right to assess the capabilities and capacity of the bidder to perform the contract, should the circumstances warrant such assessment in the overall interest of BHEL.
- After satisfactory fulfilment of all the above criteria/ requirement, offer shall be considered for further evaluation as per NIT and all the other terms of the tender.

PREPARED BY  26/04/2022 NAME: MANOJ KUMAR MEENA DESIGNATION: DY. MGR	CHECKED BY  26/04/22 NAME: SANDEEP LODH DESIGNATION: Sr. DGM	REVIEWED BY  26/04/22 NAME: SANDEEP LODH DESIGNATION: Sr. DGM	APPROVED BY  26/04/22 NAME: DEBASISH RATH DESIGNATION: DH- ELECTRICAL
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