कदम कदम मिलाना है ग्राहक सफल बनाना है

ENQUIRY

TWO PART BID

E-TENDER

भारत हैवी इलेक्ट्रिकल्स लिमिटेड, पिपलानी, भोपाल- ४६२०२२ (भारत)

सामग्री प्रबंधन विभाग

BHARAT HEAVY ELECTRICALS LIMITED, PIPLANI, BHOPAL-462022 (INDIA) **MATERIALS MANAGEMENT DIVISION**

TIN NO- 23573000001 ECC NO- AAACB4146PXM009 MPCT NO- HEL/05/01/0001/S15/11/79 PHONE NO: 91-755-2500100

FAX: 91-755-2500023 www.bhel.com **ENQUIRY NO**

E5953014

ENQUIRY DATE ENQUIRY DUE DATE 12/07/25

22/07/25

SUPP NAME AND ADDRESS	SUPP CODE	REV CD	REV NO	REV DATE	NO OF CA	TY2 NO OF CATY3	ENQ NO OF ITEMS	INDENT NO
	0	1	0	NA	1	4	1	121341088
	GUARANTEE C	CERTIFICATE	Y	SUPPLY CONDIT	ION	SUPPLIER'S IDENTIFICA	TION MARK SHOULD B	E
	TEST CERTIFIC	CATE	Y			ON EACH PACKING.		
	INSTRUCTION	BOOKLET	N	TECHNICAL CO	NDITION	AS PER DRG.		
	SAMPLE		N					
	GATE PASS		Y	INSPECTION CO	NDITION	BY BHEL AUTHORISED	TPIA AT VENDORS WOR	K.

LIABLE TO BE REJECTED.

SL	MATERIAL	DESC	UNIT	ITEM	QTY	LOT	LOT	DEST	DELIVERY	
NO	CODE			QTY	VR%	NO	QTY		DATE	
1	BP9094675927	TA 9901AZ POLE END PIECE TO DRG.NO.24303276005 V00 REV. 06. RUST	NO	1200.000	30	1	300.000	213	21/08/25	
	PREVENTIVE SHOULD BE APPLIED ALL OVER THE JOB.						2	300.000	213	21/09/25
						3	300.000	213	21/10/25	
						4	300.000	213	21/11/25	

AS PER E-TENDER ON NIC REMARK

DRAWING	Y	PURCH SPEC	N	CATALOUGE	N	Quality Surveillance Pl $_{\epsilon}$ Y	TWO PART BID	Y
---------	---	------------	---	-----------	---	---	--------------	---

NOTE:BHEL,BHOPAL'S Standard Terms & Conditions BP200102 (Latest Revision) form a part of this Enquiry. Bidders may obtain from us copies of these terms and conditions if not already available.

Note: During Bid Evaluation, No loading of price with regard to preferential payment of within 45 days will be made on vendore falling under MSMED ACT - OCT 06

Please submit your lowest quotation in sealed envelop essentially superscribed with ENQUIRY NO, DUE DATE AND PARTY'S NAME so as to reach at TENDER ROOM, GROUND FLOOR, ADM BUILDING, BHEL, PIPLANI BHOPAL-462022 by 11.00 am of due date.

Documents Enclosed

1. This is only a request for Quotation & not an order.

2.Small Scale industries should indicate SSI Regn. No. in Ouotation/invoice.

3. Purchase specification. 1.Drawing.

0755-2505880

DESG: DY.MANAGER

NAME: SHRI MANENDRA SINGH

SPECIAL REMARK: Bid to be submitted through e-procurement. Refer eproc link on BHEL Bhopal B2B site.

3.In case you are not making an offer against this Enquiry, we request you to post a regret letter.

2.Catalogue. 4.Quality Surveillance Plan.

manendra1@bhel.in

SIGN & SEAL

4.Indian vendors to please indicate GSTIN on their quotation.



HEAVY ELECTRICAL PLANT, BHOPAL BHARAT HEAVY ELECTRICALS LIMITED

BHEL ENQUIRY NO. E5953014

DUE ON 22-07-2025

NIT TERMS & CONDITIONS:

SL. NO.	DESCRIPTION	DETAILS
1.	RATE CONTRACT TERMS	We intend to enter into a Rate Contract (RC) for ordering up to 12 months from RC freeze date, i.e. RC is to be kept valid for ordering up to 12 months from RC freeze date. Purchase Ordering shall be done as per BHEL requirement against the finalised rate contract & within its validity. Dispatches to be made against our purchase order (computerized) only, which will be issued against this Rate Contract. BHEL reserves the right to cancel/ short close the Rate Contract for unordered qty at any point of time even before the expiry of RC validity without assigning any reason whatsoever it may be.
2.	ITEM DESCRIPTION	TA 9901AZ POLE END PIECE TO DRG.NO.24303276005 V00 REV. 06. RUST PREVENTIVE SHOULD BE APPLIED ALL OVER THE JOB.
3.	QUANTITY	1200 Nos ± 30%
4.	QUANTITY VARIATION	± 30% for each item.
5.	DELIVERY SCHEDULE REQUIREMENT	THE FIRST LOT OF 300 NO. SCHEDULED DELIVERY DATE SHALL BE WITHIN 60 DAYS FROM THE PO DATE AND THEREAFTER FOR EACH SUBSEQUENT LOT OF 300 NO. SCHEDULED DELIVERY DATE SHALL BE WITHIN 30 DAYS FROM THE SCHEDULED DELIVERY DATE OF THE PREVIOUS LOT. EARLY DELIVERY ACCEPTABLE.
6.	DELIVERY TERMS	FOR Destination (BHEL Bhopal)
7.	DELIVERY INSTRUCTION	SUPPLIER'S IDENTIFICATION MARK SHOULD BE ON EACH PACKING.
8.	PAYMENT TERMS	As per attached BHEL GTC of ENQUIRY (BP200102B, Cl. No. 16) i.e. 100% payment in 90 days of receipt (45 days for Micro & Small and 60 days for Medium enterprises as registered in Udyam Certificate as per relevant MSME act in force) and subject to acceptance of material and relevant documents at BHEL. Any deviation from the above payment terms, if accepted (by BHEL), shall be loaded @ SBI base rate + 6% for the purpose of bid evaluation.
9.	SPLITTING OF ORDER	Not Applicable.
10.	TECHNICAL PQR (T-PQR)	Technical Pre-Qualification Requirements (T-PQR) for procurement of the items is attached with the NIT. Compliance of all the points in T-PQR is mandatory. In absence of compliance of above and non-submission of documents required against the T-PQR, the Vendor's offer is liable to be rejected. Duly filled T-PQR with desired documents shall be submitted by the Vendor along with the offer. Information/ compliance/ documents submitted by vendor shall be authentic in all aspects. In case any deviation/ false information/ forged documents are observed / revealed later on, BHEL is free to initiate appropriate punitive proceeding against the Vendor as per Prevalent Processes and Guidelines of Company.
11	FINANCIAL PQR	Not Applicable.
11.	(F-PQR)	
		Page 1 of 5



HEAVY ELECTRICAL PLANT, BHOPAL

BHARAT HEAVY ELECTRICALS LIMITED

BHEL ENQUIRY NO. E5953014

DUE ON 22-07-2025

12.	QAP	Applicable as attached with the tender.
13.	BID PARTS	Offer shall be submitted by the bidders in Two Parts, i.e. Part-I Technical cum Commercial bid & Part-II Price bid.
		As per attached BHEL GTC of ENQUIRY (BP200102B, Cl. No. 9)
14.	PENALTY / LD	i.e. 0.5% of the undelivered portion per week of delay or part thereof, subject to a maximum of 10% of the undelivered order value owing to delayed delivery.
15.	PRICE BASIS	Firm Price basis
16.	PRICING TERMS	As per attached BHEL GTC of ENQUIRY (BP200102B, Cl. No. 12)
17.	PRICE VALIDITY	As per attached BHEL GTC of ENQUIRY (BP200102B, Cl. No. 13) i.e. Offer shall be valid for a period of 90 days from the date of Techno- commercial (Part-I) bid opening date.
18.	TAXES & DUTIES	As per attached BHEL GTC of ENQUIRY (BP200102B, Cl. No. 14)
19.	TECHNICAL CONDITION	As per attached PQR, DRG, SPEC & QAP.
20.	SAMPLE	As per attached Spec
21.	INSPECTION CONDITION	BY BHEL AUTHORISED TPIA AT VENDORS WORK.
22.	TEST CERTIFICATE	All Material TC to be supplied along with material as per Spec. and TC should incorporate Spec.
23.	GUARANTEE / WARRANTY	As per BHEL GTC of ENQUIRY (BP200102B, Cl. No. 18)
24.	GUARANTEE/ WARRANTEE CERTIFICATE	GUARANTEE/ WARRANTEE Certificate to be supplied along with each lot of the material.
25.	EVALUATION CRITERIA	Overall L1 basis
26.	BID SECURITY/ Earnest Money Deposit (EMD)	Not Applicable
27.	PERFORMANCE SECURITY (PBG)	Not Applicable
28.	REVERSE AUCTION	Applicable. It is declared upfront that this enquiry shall be subject to Reverse Auction (RA). Bidders may kindly note the Reverse Auction (RA) field as mentioned and asked for in enquiry template & ensure to proceed with choosing "YES" against same when asked during submission of their offer to give their acceptance for participation in RA. BHEL shall be resorting to Reverse Auction (RA) (guidelines are available on
		https://www.bhel.com/guidelines-reverse-auction-2024) for this tender. RA shall be conducted among Techno-Commercially qualified bidders, inline to above guidelines. Price bid of all Techno-Commercially qualified bidders shall be opened for purpose of RA
		and same shall be considered as initial bids of bidders in RA. In case any bidder(s) do(es)



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		not participate in reverse auction, their sealed envelope price bid along with applicable loading, if any, shall be considered for ranking.
		Initial ratio of price quoted in price bid (Price BoQ) for tendered item is required to be
		maintained by supplier after reverse auction while providing price break up.
		Applicable as per attached BHEL GTC of ENQUIRY (BP200102B, Cl. No. 29)
29.	MSE PREFERENCE	Tendered qty is not divisible, hence 100% qty for the Purchase preference shall be eligible.
		Applicable as per attached BHEL GTC of ENQUIRY (BP200102B, Cl. No. 33). Tendered qty is not divisible, hence 100% qty for the Purchase preference shall be eligible.
		For this procurement, the local content to categorize a supplier as a Class I local supplier/ Class II local Supplier/ Non-local supplier and purchase preference to Class I local supplier, is as defined in Public Procurement (Preference to Make in India), Order 2017 dated 19.07.2024 issued by DPIIT. In case of subsequent orders issued by the nodal ministry, changing the definition of local content for the items of the NIT, the same shall be applicable even if issued after issue of this NIT, but before opening of Part-II bids against this NIT
		The local content to categorize a supplier as a Class-I local supplier / Class-II local supplier / Non-Local supplier and purchase preference to Class-I local supplier, is as defined in above circular issued by DPIIT/ Nodal Ministry.
30.	PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA)	Bidders to also inform the Actual Percentage of the Local Content and the Complete Address of the Location of Local Value Addition as per the attached MII format, failing which no purchase preference shall be granted.
	MAKE IN INDIA	In case the bid value is more than Rs. 10 Crore, the declaration relating to the Actual Percentage of the Local Content and the Complete Address of the Location of Local Value Addition shall be Certified by the Statutory Auditor or Cost Auditor, if the OEM is a Company and by a Practicing Cost Accountant or a Chartered Accountant for OEM other than Companies as per the above circular.
		For contracts valuing more than Rs 10 Crores, local content (in cases of self-certification submitted by bidders at the time of tendering) will be re-verified during execution of contract by Cost/ Chartered Accountant/ Statutory Auditor/Cost Auditor (as applicable) and in case of defaults, penalty upto 10% of the contract value shall be imposed. However, contract once awarded shall not be terminated on this account.
		Bidders or successors can be debarred for false declarations for up to 2 years. Debarred suppliers not eligible for preference in any other procuring entity.
31.	INTEGRITY PACT (IP)	Not Applicable
32.	RESTRICTION UNDER RULE 144 (xi) GFR	As per attached BHEL GTC of ENQUIRY (BP200102B, Cl. No. 34)
22	CONFLICT OF	A bidder shall not have conflict of interest with other bidders. Such conflict of interest can
33.	INTEREST	lead to anti-competitive practices to the detriment of Procuring Entity's interests.



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	AMONG	Bidders having a conflict of interest shall not be eligible to participate in the tender					
	BIDDERS/	process.					
	AGENTS AND						
	THEIR	Treatment of cases regarding conflict of interest: -					
	DECLARATION	The bidder notes that a conflict of interest would said to have occurred in the tender					
	DECLARATION	The bidder notes that a conflict of interest would said to have occurred in the tender process and execution of the resultant contract, in case of any of the following situations: i) If its personnel have a close personal, financial, or business relationship with any personnel of BHEL who are directly or indirectly related to the procurement or execution process of the contract, which can affect the decision of BHEL directly or indirectly; ii) The bidder (or his allied firm) provided services for the need assessment/ procurement planning of the Tender process in which it is participating; iii) Procurement of goods directly from the manufacturers /suppliers shall be preferred. However, if the OEM/ Principal insists on engaging the services of an agent, such agent shall not be allowed to represent more than one manufacturer/ supplier in the same tender. Moreover, either the agent could bid on behalf of the manufacturer/ supplier or the manufacturer/ supplier could bid directly but not both. In case bids are received from both the manufacturer/ supplier and the agent, bid received from the agent shall be ignored. However, this shall not debar more than one Authorised distributor (with/ or without the OEM) from quoting equipment manufactured by an Original Equipment Manufacturer (OEM) in procurements under a Proprietary Article Certificate. iv) A bidder participates in more than one bid in this tender process. Participation in any capacity by a Bidder (including the participation of a Bidder as a partner/ JV member or sub-contractor in another bid or vice-versa) in more than one bid shall result in the disqualification of all bids in which he is a party. However, this does not limit the participation of an entity as a sub-contractor in more than one bid if he is not bidding independently in his own name or as a member of a JV.					
		The Bidder declares that they have read and understood the above aspects, and the bidder confirms that such conflict of interest does not exist and undertakes that they will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s), in this regard. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process. In case, the Bidder is found having indulged in above activities, the same will be considered as a violation of the tender conditions, and suitable action shall be taken by BHEL as per extant policies/guidelines.					
34.	ANNEXURE-IX	The Bidder/Supplier/Contractor will, when presenting his bid, declare whether other Family Firms or Sister Concern Affiliates/Subsidiary firms are participating in the same tender, so as to eliminate the possibility of cartel formation. Format for declaration is available in the NIT documents for this enquiry (Annexure-IX). Same is to be submitted with the offer.					



HEAVY ELECTRICAL PLANT, BHOPAL

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35.	SPECIAL CONDITIONS	Bidders who fall under MSE (Micro & Small Enterprises only) and fail to upload 'UDYAM Registration Certificate (URC)' shall automatically be considered as Non-MSE supplier for this tender. Further, it is to be noted that MSE benefits are not being extended to Agent/ Dealer/ Trader/ Distributor (i.e. Other than manufacturer). Supplier has to also provide supporting document(s) such as Agreement Between OEM & Bidder(s) etc. Identification must. Soon after rejection of material, it is to be ensured by supplier that material should be taken back maximum within two weeks after communication for rectification/ replacement & supply back the rectified/ fresh material to BHEL Bhopal within 30 days from rejection. In the event of non-lifting of rejected material by supplier, BHEL will not be responsible for loss of such items to the supplier in any case. Offers of suppliers who are in 'HOLD/BANNED' status in BHEL Bhopal PMD shall not be considered. Unregistered vendors to submit documents required for registration to BHEL Portal Online (https://bhel.com/supplier-registration).
36.	OTHER TERMS & CONDITIONS	Other Terms & Conditions as per attached BHEL GTC of ENQUIRY (BP200102B). Any deviation of NIT, BHEL GTC of ENQUIRY (BP200102B) and BHEL PO Terms, where vendor response is not affirmative to be clearly indicated, else BHEL will consider that all above Terms & Conditions are acceptable to vendors.
37.	GEM REGISTRATION	As you are kindly aware that Government e-Marketplace (GeM) is a one stop portal to facilitate Online Procurement of Goods & Services required by various Government Departments/ Organizations/ PSUs. BHEL being a PSU, would like that its suppliers/ contractors also have visibility on this portal so that GeM can be used for procurement by BHEL. Hence, you are requested to get yourselves registered on GeM.
38.	TENDER FEE	Not applicable
39.	BID SUBMISSION WITHIN DUE DATE & TIME	No request for extension of tender due date will be entertained at the time of tender opening and after due date under any circumstances. Hence, all bidders are requested to submit their bid well within due date and time only. BHEL reserves the right for extension of tender based on the situation without assigning any reason whatsoever it may be.
40.	DOCUMENTS TO BE FURNISHED ALONG WITH YOUR QUOTATION	Signed and Sealed copy of: - NIT - BHEL GTC of ENQUIRY (BP200102B) - BHEL PO Terms Duly Filled, Signed and Sealed copy of: - T-PQR along with all supporting documents - Annexure-IX in Company Letterhead - Filled & Signed Techno-Commercial Annexure - Make in India (MII) certificate in attached format Others: - UDYAM Registration Certificate (as applicable for MSME bidders only)

IT IS HEREBY MENTIONED THAT THIS IS E-TENDER SO OFFER SUBMITTED THROUGH E-PROCUREMENT PORTAL (www.eprocurebhel.co.in) SHALL ONLY BE CONSIDERED.

 $\underline{\text{Techno-Commercial Annexure}}$ (To be filled by supplier inline with NIT requirement and submit with offer)

Tende	r No.	E5953014 due on 22/07/2025		
		TA 9901AZ POLE END PIECE TO DRG.N	O.24303276005 V00 REV. 06.	
		RUST PREVENTIVE SHOULD BE APPLIE	D ALL OVER THE JOB.	
Descri	ption :	TENDER QTY.: - 1200 Nos ± 30%		
		Delivery required as per NIT.		
Sr. No.	ELEMENTS	Standards	To be offered/confirmed by supplier	Remarks, if any
1	Quotation reference no. & date	As per supplier		
_	HSN / SAC code	As per supplier		
	Quotation currency	In INR		
4	Contact person	As per supplier		
_	Phone / Mobile	As per supplier		
6	E-Mail	As per supplier		
7	Order to be placed on (Also provide supplier code at BHEL Bhopal, If registered)	As per supplier		
8	Address	As per supplier		
9	Please specify delivery in weeks/ days (Specify item wise, lot wise as per RFQ)	As per NIT/ Accepted with deviation (If select Accepted with deviation, please mention the deviation)		
10	Rate quoted on "Firm" price basis	Yes		
11	Quoted for all the items and full quantity of tender enquiry	Yes / No. (If "No" please mention item number with Qty of regreted items)		
12	Technical specifications	Accepted as per NIT / Accepted with deviation (If select Accepted with deviation, please mention the deviation)		
13	Inspection	As per NIT/ Accepted with deviation (If select Accepted with deviation, please mention the deviation)		
14	Test certificate & Gurantee certificate as per NIT and specification will be submitted along with each consignment	Yes (In case of "No" your offer may be rejected).		
15	Brand name, if any.	As per supplier		
16	Supply from	As per supplier		
17	Terms of delivery ("FOR DESTINATION" means freight & insurance upto destination in supplier's scope (Destination: CRX Divn, BHEL Bhopal)	Accepted/ Accepted with deviation (If select Accepted with deviation, please mention the deviation)		
18	Transit insurance (In supplier's scope)	As per NIT/ Accepted with deviation (If select Accepted with deviation, please mention the deviation)		
19	CGST RATE (IN %)	As per supplier		
	SGST RATE (IN %)	As per supplier		
21	IGST RATE (IN %)	As per supplier		
22	UGST RATE (IN %)	As per supplier		
	Are you manufacturer of quoted item (s).	Yes / No		
	Are you registered under MSMED ACT 2006 as small or micro. NOTE: - Firms registered under medium scale shall not be considered eligible for MSE benefits.	Yes / No (If select Yes, please enclosed valid UDYAM certificate)		

 $\underline{\text{Techno-Commercial Annexure}}$ (To be filled by supplier inline with NIT requirement and submit with offer)

Tende	er No.	E5953014 due on 22/07/2025		
Descr	iption :	TA 9901AZ POLE END PIECE TO DRG.N RUST PREVENTIVE SHOULD BE APPLIE TENDER QTY.:- 1200 Nos ± 30%		
Sr.		Delivery required as per NIT.		
No.	ELEMENTS	Standards	To be offered/confirmed by supplier	Remarks, if any
25		As per NIT/ Accepted with deviation (If select Accepted with deviation, please mention the deviation)		
26	SELF CERTIFICATION OF MINIMUM LOCAL CONTENT, IF MORE THAN 50% VALUE ADDITION IS IN INDIA. (Note- in case of tenders worth more than Rs. 10 crores, Suppliers shall necessarily submit certificate from statutory auditor or cost auditor or cost accountant or CA) Please also specify the amount of local content in India. EXAMPLE :if 100% INDIGENOUS (MADE IN INDIA) MARK "Y"/100%	As per supplier		
27	Details of location of value addition / manufacturing	As per supplier		
28	Other Charges (If any)	Applicable / Not Applicable. (If applicable please mention percentage (%) / Value (along with type of charges).		
29	Penalty for delayed performance as per BP200102B & NIT	Yes / No (In case of "No", your offer will be loaded suitably)		
30	Confirmation that documents pertaining to technical PQR has been submitted	Yes / No		
31	Acceptance to "REVERSE AUCTION" if conducted (As per BHEL's RA policy)	Yes / No		
32	lattached) regarding whether other family	(Yes / No) If No please specify the reason.		
33	General terms and conditions of enquiry (Form No. BP-200102B) and BHEL PO Terms & Conditions is Acceptable.	Yes (In case of "No" your offer may be rejected).		
34	Quotation Validity will be 90 days from the date of techno-commercial bid opening.	Yes		
35	Tender fees submitted	Yes / Not Applicable	Not Applicable	

<u>Duly filled Technical Pre-Qualification Requirements to be submitted along</u> with the offer by vendor

For uploading along with the enquiry

Ref No: TME/PQR/Pole end piece_TA9901/TA9906 Rev.01 Dated: 21/06/2025

Technical Pre-Qualification Requirements (PQR)

<u>Vendor should comply with the following clauses in order to qualify for supply of tendered</u> item (duly filled PQR shall be submitted along with the offer by vendor):

CI.	Description	Vendor	to comment
No.		Complied / Not complied (Please tick)	Supporting relevant document to be submitted along with offer
1.	Vendor shall supply item as per drawing no. & description mentioned in the enquiry.	Yes/No	Not Required
2.	Vendor should be a machinist with in-house machining facility and not a trader.	Machinist with in-house facility/ Trader	Not Required
3.	Vendor should have experience of successfully supplying of component involving milling operation of minimum 200 mm, in preceding 5-years from enquiry opening date. Vendor to ensure that documents submitted against b) & c) shall correlate with the submitted P.O. copy.	Yes/No	a. PO copy.b. Drawing of supplied item.c. Supply proof i.e. invoice.
4.	For verification of information furnished by vendor, additional documents proofs etc. may be required by BHEL. Vendor to confirm providing the same.	Yes/No	Not Required

Notes:

- 1. Compliance of all the points in above T-PQR is mandatory. In absence of compliance of above, vendor's offer is liable to be rejected.
- 2. Information / compliance / documents submitted by vendor shall be authentic in all aspects. In case any deviation / false information / forged documents are observed, BHEL is free to initiate appropriate punitive proceeding against the supplier.

Important: This document is to be filled and submitted along with the offer. This document must be signed by authorized representative of the vendor and should contain the name of representative & seal of the company.

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(Sign and Seal of Authorized representative of vendor)

12970610//2002<mark>35/HHHP-TAM</mark>233/900

(4)	बीख देखी वर्गाहर	PRODUCT STANDARD				TM 02349				
1	TME D		IVISION ,BHOPAL			PAGE	01	OF	02	
	TME/2011			-1500						
	REQUIREMENTS: (Equivalent to EMS 9)									
	1.	Grade 65-45-12, as herein amended.								
	2.	Mechanical Properties :								
RICALS LIMIT		Tensile Strength, psi, min								
AVY ELECT		Note: The above properties are required in the casting and constitute the primary basis for acceptance or rejection. If a test bar of proper proportions cannot be obtained from the casting, the microstructure and hardness of the casting shall serve as a basis for acceptance or rejection (see section –3).								
COPYRIGHT AND CONFIDENTIAL The Information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED It must not be used directly or indirectly in any way detrimental to the interest of the company		If a supplier chooses to use separately cast test coupons for foundry control, it shall be his responsibility to correlate the properties of the coupon with those of the casting and be prepared to demonstrate such correlation upon request. The results obtained from test coupons are not the basis final acceptance of actual castings.								
any any	3.									
PYRIGHT A acument is the printity or indirectly in		Graphite Form and Distribution: To be 901, minimum, spheroidal and semi-spheroidal graphite, ASTM A247 types I and II, randomly distributed. Matrix Structure: predominately ferritic. No primary carbides allowable.								
direct di	4.	Welding: No welding permitted.								
formation on the	5.	Quality: Castings shall be free from dross, cracks, gas holes, unfused inserts, flaws and excessive shrinkage. Surfaces top be free burnt-on sand and shall be reasonably smooth.								
he in	6.	Test Report :								
F-	The vendor shall furnish test reports showing the mechanical properties of the materi supplied and indicating whether the properties were obtained from a casting separately cast test coupons.									
			Distribution	Qty.	Appro	ved :	N	Por	20102	
	Revisi	on: 00					7	1	dalla	
10	Date :	04/09/2001			1.	Ste-	- \	W.C.	- 4/9	

Date



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PRODUCT STANDARD TME DIVISION ,BHOPAL

TM 02349

02 OF PAGE

02

GENERAL INFORMATION:

This specification covers a medium strength ferritic ductile iron intended for general usage. It may be supplied as cast or as heat, treated, at the vendor's option, provided that all requirements are met.

In very general terms the above specification should be considered for ferrous casting applications which require beter castability and wear resistance than low carbon steel and greater ductility, strength and elastic modulus than gray iron. It should not be specified for welding application. For general requirements refer BHEL specification AA19721.

DRAFTING INFORMATION:

Application of this material to drawings should be done only with the approval of Materials Engineering Section. Wherever use of this material is specified, it shall be designated as :

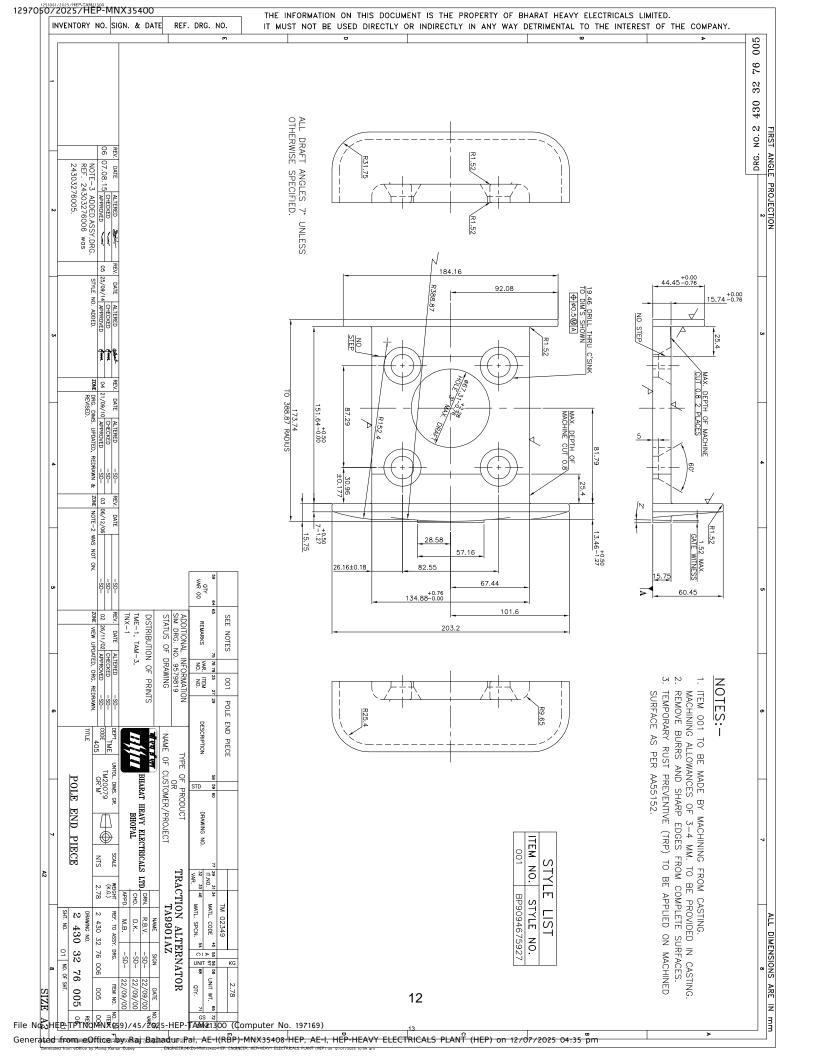
MATERIAL: NODULAR IRON

or

MATERIAL: NOD, IRON

Note: These specifications were developed without considering whether patents may or may not be involved. In all cases, therefore, the supplier shall be required to assume patent liability.

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BHARAT HEAVY ELECTRICALS LIMITED, BHOPAL

QUALITY ASSURANCE PLAN FOR MAINPOLE END PLATE MCD TO BHEL ORDERING SPECIFICATION/DRAWING **AS PER PO**

Reference Document- PO DRAWING/SPECIFICATION QUALITY PLAN NO. - QAP/QTM/VENDORQAP/2021-22/MAIN POLE END PLATE MCD DTD 12.07.2021 REV 00

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	μ	

5)	4	3)	2)	_		NO No.
Packing to avoid transit damage	Identification vendor name, PO & job serial no.	Visual	Dimension	Raw material a) Mechanical properties b)Microstructure		COMPONENT
Visual	Visual	Burr. Sharp edges, surface finish	Dimension	All tests		CHARACIERISTICS
Visual	Visual	visual	TC verified & Measurement	TC verification		CHECK
100%	100%	100%	100%	100%	TP	OF C
20%	10%	10%	20%	100%	TPIA	OF CHECK
As per drawing & specification	As per drawing & specification	As per drawing & specification	As per drawing & specification	TM02349		REFERENCE DOCUMENT
As per drawing & specification	As per drawing & Specification	As per drawing & Specification	As per drawing & Specification	As per Specification		ACCEPTANCE NORMS
Packing list for each kit box	Supplier record	Supplier record	Supplier record	MTC		FORMAT OF RECORD
внег/тріл	внец/тріа	BHEL/TPJA	BHEL/TPIA	внег/тріа		AGENCY
Packing to be such that no damages should occur during transit. 1 kit items should be placed in on 1 box	Witness	Witness	Witness	NABL accredited TEST LAB TC. Supplier to get the raw material correlated with material TC		REMARKS

Prepared By Prepar

Approved By

राहुल टाप्पो /RAHUL TO

प्रबंधक / Manage

व्यू टी एमः विभाग / QTM! वी. क्वाई. एलः, भोषाल (BHE

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