

SUB: Procurement of Grooving Tools:

NIT-Notice Inviting Tender

| Salient Details of Notice Inviting Tender (NIT) | | |
|--|--|--|
| Sl. No. | Issue | Description |
| 1. | Item details | As per Annexure item details |
| 2. | Issue of Tender Documents | From BHEL eProcurement website https://eprocurebhel.co.in/nicgep/app (Tender documents will be available for downloading from BHEL e-Procurement website till due date of submission) |
| 3. | Due Date Of Offer Submission | Date: Time: 30.05.2022 13:45 hrs https://eprocurebhel.co.in/nicgep/app <i>Offer to be submitted in online only through e-procurement Portal.</i> (Bidders are requested to visit website to view corrigendum/ addenda/ amendments/ extension/ modification etc. before submitting offer). |
| 4. | Opening of Tender (Techno-Commercial Bid) | Date: 30.05.2022 Time: 14.00 Hrs Notes: <i>This tender being an e-tender, it shall be opened online only through the E-Procurement Portal. Participating bidders may witness the Opening online only.</i> |
| 5. | Cost of Tender | Not applicable |
| 6. | EMD (Earnest Money Deposit) | Nil |
| 7. | Schedule Of Pre-Bid Discussion | Not Applicable |
| 8. | Last Date of Seeking Clarification | Date: 29.05.2022 Time:17.00 Hrs <i>Along with soft version also, addressing to undersigned & to others as per contact address given below.</i> <i>Bidders may consider to seek clarifications on the e-tender portal---</i> https://eprocurebhel.co.in/nicgep/app |
| 9. | Integrity Pact & Details of Independent External Monitor (IEM) | Not Applicable |
| 10. | Make in India | (i). For this procurement, Public procurement (preference to Make in India), Order 2017 dated 04.06.2020 shall not be applicable. |
| 11. | Restrictions under | All provisions of order no F.No.6/18/2019-PPD of |

| | | |
|-----|--|---|
| | <p>rule 144 (xi) of General Financial Rule (GFRs) 2017</p> | <p>department of Expenditure(DoE) shall be applicable for this tender enquiry (Order copy is available at https://doe.gov.in/procurement-policy-divisions).</p> <p>Accordingly, any bidder from a country which shares a land border with India (except the countries to which the GoI has extended lines of credit or in which the GoI is engaged in development projects for which list is available at https://www.mea.gov.in/) will be eligible to bid in this tender only if the bidder is registered with the Competent Authority as specified in Annex I of the said Order of DoE.</p> <p>Updated list of the countries to which lines of credit have been extended or in which development projects are undertaken are available on the Ministry of External affairs website (https://www.mea.gov.in/).</p> <p>For the purpose of this order, definition of Bidder from a country which shares a land border with India shall be same as defined in the Annex III of the said order.</p> <p>Registration with the competent authority as stipulated in the said order is responsibility of bidder.</p> <p><u>Bidder has to submit a certificate certifying following along with offer:</u></p> <p><i>“I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that bidder (..... Name of Bidder) is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that bidder (..... Name of bidder) fulfils all requirements in this regard and is eligible to be considered”</i></p> <p>If the bidder is from such country which shares a land border with India evidence of valid registration by the Competent Authority shall also be attached along with offer.</p> |
| 12. | E-Invoice | <p>Vendor Contract clause regarding GST ITC and provision for E-invoices w.e.f. 01.04.2021</p> <p>E-invoicing under GST is being implemented w.e.f. 01.04.2021 for all the taxable persons having turnover more than Rs. 50 Cr. It has been specified by the Govt. that it is mandatory to mention a valid unique Invoice Reference No. (IRN) and QR code as generated from Govt. portal on a Tax Invoice. Based on such information, GST ITC as claimed by BHEL in GST Returns shall be matched with the</p> |

| | | |
|-----|-----------------|--|
| | | <p>corresponding details uploaded by supplier in E-invoicing System.</p> <p>In case the vendor /contractor delays or fails to provide all the documents as per the Purchase order / Work Order at the time of submitting Tax invoice to BHEL, any subsequent financial loss to BHEL on account of vendor/contractor shall be to vendor's / contractor's account. BHEL has further right to take necessary steps to protect its interest at the time of release of payment. This further requires inclusion of IRN and QR code on tax invoice as announced by Govt. of India w.e.f. 01.04.2021.</p> |
| 13. | Reverse Auction | Not applicable |
| 14. | Latest Updates | <p>Latest updates on the important dates, Amendments, Correspondences, Corrigenda, Clarifications, Changes, Errata, Modifications, Revisions, etc to Tender Specifications will be hosted in BHEL e-tender portal https://eprocurebhel.co.in/nicgep/app and not in the newspapers. Bidders to keep themselves updated with all such information</p> |

Please submit your offer only for the above requirement subject to our **GENERAL INSTRUCTIONS AND STANDARD TERMS & CONDITIONS (GISTC: Version June-21, Rev: 06)**. Please visit our site www.hwr.bhel.com for General Instructions and Standard Terms & Conditions (GISTC) for Tender Enquiries. All the bidders/vendors must ensure compliance of these GISTC. GISTC can also be referred by login to B2B Portal for Registered Vendors.

Tender Fee & EMD –Not Applicable

E-Procurement Portal Inputs

Procedure for Submission of Offer for E – Tender-Procedure for Submission of Tender is available in the “Bidder Manual for BHEL Bidders” at E-tender portal <https://eprocurebhel.co.in/nicgep/app>. Terms and conditions mentioned therein shall form integral part of the NIT and bidders shall abide by the same.

1. Hardware and Software requirements for participating in e-tender

Please refer the website for the minimum system requirements and setting document for Bidders under the link: <https://eprocurebhel.co.in/nicgep/app>

2. Digital Signature

To know the procedure for obtaining Digital Signature Certificate (DSC), suppliers who are not having the DSC are advised to visit our website [http://www.bhel.com/home.php/Tender Notifications/Sample Checklist](http://www.bhel.com/home.php/Tender%20Notifications/Sample%20Checklist).

3. NIC portal Helpdesk Contacts

For any technical related queries please call at 24 x 7 Help Desk Number

0120-4001 002

0120-4200 462

0120-4001 005

0120-6277 787

International bidders are requested to prefix 91 as country code

Email Support

Address: A) For any Issues or Clarifications relating to the published tenders, bidders are requested to contact the respective Tender Inviting Authority

Technical - support-eproc@nic.in

4. Note

Offers/tenders submitted in the E-tender portal shall only be considered for further evaluation. Offers sent by FAX / E-mail / any mode other than E-tender would not be entertained.

The Tenderers must submit their Tenders, as detailed below:

SPECIAL NOTE: All documents to be submitted should be uploaded in respective places in the E-Tender portal as per the list mentioned given in this NIT. BHEL shall not be responsible for in-complete documents.

For new vendors not registered with us **(Applicable only for open tender)**, kindly furnish copy of following documents:

- Company Name and Address Proof.
- GST Number (Scan Copy of Acknowledgement)
- PAN Copy
- MSME Certificate (UAN, Udyam if Any)

Commercial Term & Condition Compliance

| | | | |
|--------------------------------|--|------|--|
| Tender Reference No. | L/6451/2022/0142/D1 Due date: 30.05.2022 | | |
| Item Description | Grooving Tools | | |
| Vendor Name | | | |
| Quotation Reference no. | | Date | |

| <u>Sl. No.</u> | <u>Techno-Commercial terms</u> | <u>Vendor Confirmation</u> |
|-----------------------|--|-----------------------------------|
| 1. | Please specify whether you are manufacturer or Trader of the item. | |
| 2. | Material will be supplied as per BHEL Specification mentioned in enquiry. Manufacturing, Testing and Certification will be as per ordering specification, if not accepted, then mention deviation. | |

| | | |
|-----|--|--|
| 3. | Delivery Terms (BHEL Standard term: FOR Destination means CPS/HEEP/ BHEL Haridwar) | |
| 4. | Despatch mode(BHEL Standard term: Through BHEL approved transporter only) | |
| 5. | Origin of Despatch | |
| 6. | Freight Charges ➤ Loading shall be done as per extent rules of BHEL-Haridwar, if Freight is mentioned as 'To Pay' | |
| 7. | Packing Charges ➤ Loading shall be done as per extent rules of BHEL-Haridwar, if Packing charges is 'Extra' | |
| 8. | Forwarding Charges ➤ Loading shall be done as per extent rules of BHEL-Haridwar, if Forwarding charges is 'Extra'. | |
| 9. | Delivery Period in weeks/months (Lead Time from PO date) | |
| 10. | Payment term: "100% payment after receipt & acceptance of material at BHEL HEEP Haridwar". ➤ If vendor deviates from BHEL's standard payment term, loading on account of deviation in standard payment term shall be done as per extent rules of BHEL-Haridwar (Refer GISTC) | |
| 11. | Bank Charges ➤ If BHEL's Standard Payment terms accepted then bank charges not applicable, otherwise please mention | |
| 12. | Rate of GST (CGST/SGST/IGST) extra in % (for Indian Bidder only) | |
| 13. | Test certificate (if applicable) as per Specification shall be provided. | |
| 14. | Guarantee Certificate (if applicable) shall be provided | |
| 15. | Liquidated Damages (LD) for Late Deliveries shall be applicable @0.5% per week or part thereof on the value of respective delayed supplies subject to maximum of 10% of the value of respective delayed supplies. If vendor do not mention anything about LD clause in their offer, then it shall be presumed to be acceptable. No further clarification shall be asked in this regard after opening of techno-commercial bid part-1. If vendor don't accept this clause, then loading shall be done as per extent rules of BHEL-Haridwar. | |
| 16. | Quotation Validity ➤ As per NIT, Validity is 90 days from techno-commercial bid opening date. | |
| 17. | Currency | |
| 18. | The evaluation currency for this tender shall be INR. | |

| | | |
|-----|---|--|
| 19. | Are you registered under Micro Small Enterprises (MSE vendor)? if Yes then provide Udyam Certificate (for Indian Bidder only) | |
| 20. | Any other comments (like any other charges, order to be placed on etc.) | |
| 21. | BHEL reserve the right to change the quantity/ Part quantity at the time of ordering. | |
| 22. | Vendor to ensure that their quoted rates are not more than those quoted for any other customer including other BHEL units. | |
| 23. | Vendor to declare that they will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s). 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, suitable action shall be taken by BHEL as per extant policies/ guidelines. | |
| 24. | Vendor to quote best possible delivery in the offer. Early delivery acceptable. | |
| 25. | Price bids shall be opened for only those bidders who qualifies PQR and technical specification & whose techno-commercial bid is acceptable to BHEL. | |
| 26. | PO No. &/or Vendor's Emblem/seal shall be clearly punch marked/Etched on each item. | |
| 27. | Remaining terms and conditions shall be as per General instruction and standard terms & conditions (GISTC) version June 21 rev: 06. | |
| 28. | In case of any difference in conditions quoted above & elsewhere in the offer, terms quoted above shall be treated as final and binding on vendor. | |

DUEDATE

30-05-2022

| SL | MATERIAL CODE ITEM DESCRIPTION | QUANTITY | UNIT | LOTNO | LOT DELIVERY QTY SCHEDULE |
|----|---|----------|------|-------|------------------------------|
| 1 | AAA209000937 DRG: - REV: RADIUS TOOL R60 DRG.NO.-R2090-0093 | 5 | NO | 1 | 5 31/07/22 |
| 2 | AAB218200463 DRG: - REV: PRE MACHINING TOOL DRG.NO.-R2182-0046 REV.-02 | 50 | NO | 1 | 50 30/06/22 |
| 3 | AAA217700446 GROOVING TOOL. DRG.NO.R2177-0044 N.STD:SPT-HSS-SP | 15 | NO | 1 | 15 30/06/22 |
| 4 | AAA217700454 GROOVING TOOL. DRG.NO.R2177-0045. N.STD:SPT-HSS-SP SIZE: - | 30 | NO | 1 | 30 31/07/22 |
| 5 | AAA212600567 GROOVING TOOL. DRG.NO-R2126-0056. | 10 | NO | 1 | 10 31/10/22 |

** IMPORTANT: This enquiry is 2 part tender. Techno-Commercial bid (Part-1) & Price Bids (Part-2) should be submitted in separate envelopes. These two envelopes should be submitted in a common sealed envelope. Techno-Commercial Bid shall contain detailed Technical Specification, Drawings Technical documents, Catalogues, taxes & duties, payment terms, delivery period, Validity of offer, Replica of Price Bid (Copy of price bid without price part) etc. The confirmation to the special terms & conditions must be submitted alongwith Techno-Commercial bid.

Special Instructions:

1. Vendor to quote best possible delivery. Early delivery acceptable.
2. Liquidated Damages (LD) for Late Deliveries shall be applicable @0.5% per week or part thereof on the value of respective delayed supplies subject to maximum of 10% of the value of respective delayed supplies. If vendor do not mention anything about LD clause in their offer, then it shall

| SL | MATERIAL CODE | QUANTITY | UNIT | LOTNO | LOT DELIVERY QTY SCHEDULE |
|----|---------------|----------|------|-------|------------------------------|
|----|---------------|----------|------|-------|------------------------------|

ITEM DESCRIPTION

be presumed to be acceptable. No further clarification shall

be asked in this regard after opening of techno-commercial bid part-1.

3.For this procurement, Public procurement (preference to Make in India), Order 2017 dated 15.06.2017,28.05.2018 ,29.05.2019 & 04.06.2020 and subsequent orders issued by the respective nodal ministry shall not be applicable.

4.Rest terms and condition shall be as per latest General Instructions and Standard Terms & Conditions for bidding against Tender Enquiry (GISTC) For Indian Bidders (Version June-2021, Rev: 06).

5.Due to low case value, RA is not proposed for this tender.

6.PO No. &/or Vendor's Emblem/seal shall be clearly punch marked/Etched on each item.

GURU PRATAP

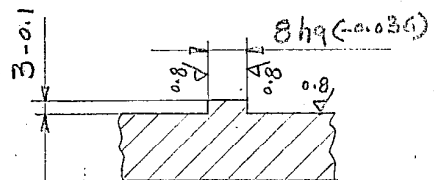
DY. MANAGER

FIRST ANGLE PROJECTION (ALL DIMENSIONS ARE IN mm)

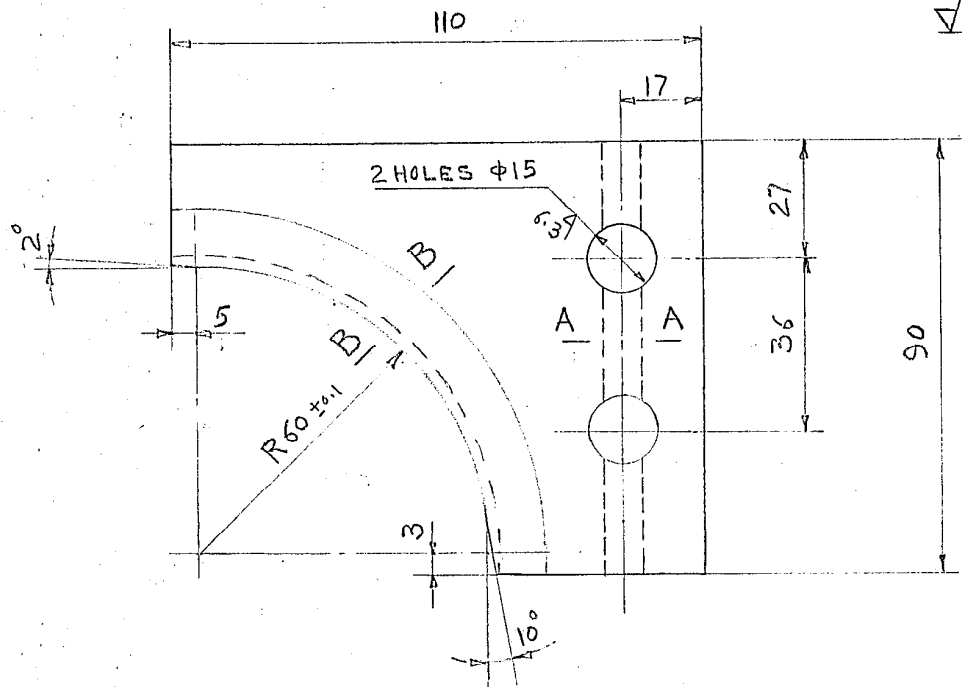
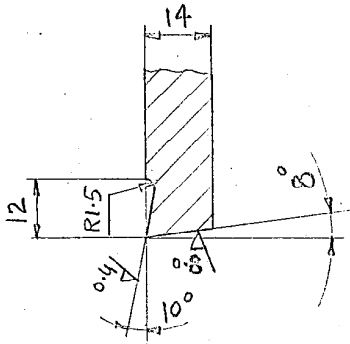
R2090-0093
DRAWING NUMBER

1.5 / THE REST

SECTION A-A



SECTION B-B



It must not be used directly or indirectly in anyway detrimental to the interest of the company.

Ref. Drg. No.

Sign. & Date

Inventory No.

- HARDEN TO HRC 62 ± 65
- TO BE USED WITH MANDREL DRG. NO. R6707-0002 (8350-271)

| MARK | |
|------------|-------|
| R2090-0093 | |
| R60 | H.S.S |

| | | | |
|------------------------------|--|----------------------|-----------------------------------|
| H.S.S | | | |
| 6-5-2-5 | | | |
| MAT. CODE | | WT. KG. | |
| MAT. SPECN | | QTY. | |
| TYPE OF PRODUCT C-200-130 | | W/O. NO. ST-5285 | M/C. TOOL TRANS NO. 169/032021 |
| COMP. DRG. NO. 31303003 | | REF. DRG. NO. - | INVENT. NO. |
| | | M/C. MODEL 1A-660 | |

BHARAT HEAVY ELECTRICALS LTD.
RAMIPUR - HARDWAR.

| S.T.T | NAME | SIGN. |
|-------|---------|-------|
| | JETLYAN | |

| REV | DATE | ALTERED | CHECKED |
|-----|------|---------|---------|
| | | | |

| | | | | | |
|-----------|----------|-----------|-------------|--------------------|----------|
| DEPT. TLX | CODE 125 | SCALE 1:1 | WEIGHT (KG) | REF. TO ASSY. DRG. | ITEM NO. |
|-----------|----------|-----------|-------------|--------------------|----------|

RADIUS TOOL R60
(PLATE TYPE)

Dimensions to be Controlled Within Limits as Shown
Machining Tolerance ± .25 mm Unless Otherwise Shown. Non Machining Tolerance ±

| DRAWN | NAME | SIGN. | DATE |
|----------|---------|-------|------|
| DRN | LAVHIA | | |
| CHECKED | NAME | SIGN. | DATE |
| | M. KHAN | | |
| APPROVED | NAME | SIGN. | DATE |
| | SRGUPTA | | |

| | |
|-----------|----------------------------------|
| CARD CODE | DRAWING NO. R2090-0093 |
| SHEET NO. | NO. OF SHEETS. |

FIRST ANGLE PROJECTION

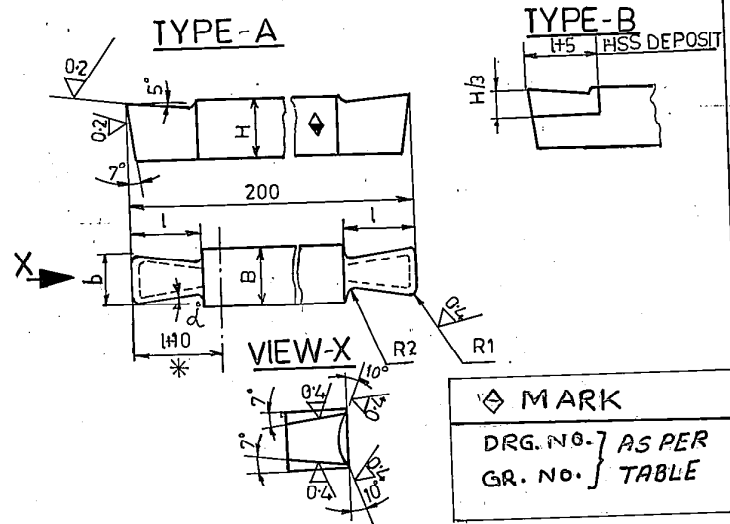
(ALL DIMENSIONS ARE IN mm)

3-2/ ALL OVER EXCEPT OTHERWISE STATED

DRAWING NO. R2126-0053:0061

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| KUN 666 10 BL. WT. GROOVING | DRG NO | H | B | b | l | R | R | α | TYPE | PROFILE TEMP DRG. NO. |
|-----------------------------|-------------|----|----|-----|----|---|-----|--------|------|-----------------------|
| 8 | R 2126-0053 | 10 | 10 | 5.3 | 9 | 1 | 0.8 | 11.5' | A | R8372-0038 |
| 10 | " -0054 | 10 | 10 | 6.3 | 11 | | | 11.8' | | " -0039 |
| 12 | " -0055 | 12 | 12 | 8 | 12 | | | 11.10' | | " -0040 |
| 15 | " -0056 | 16 | 16 | 9 | 15 | | | 11.10' | | " -0041 |
| 21 | " -0057 | 40 | 40 | 14 | 18 | 2 | 1.6 | 11.12' | B | " -0042 |
| 26 | " -0058 | 25 | 25 | 24 | 22 | | | 11.13' | | " -0043 |
| 31 | " -0059 | 30 | 30 | 30 | 31 | | | 11.14' | | " -0044 |
| 36 | " -0059 | 30 | 30 | 30 | 31 | | | 11.14' | | " -0045 |
| 41 | " -0059 | 30 | 30 | 30 | 31 | | | 11.14' | | " -0046 |
| 51 | " -0060 | 30 | 30 | 30 | 31 | | | 13.50' | | " -0047 |
| 46 | " -0061 | 40 | 40 | 44 | 50 | | | 11.16' | | " -0048 |
| 60 | " -0061 | 40 | 40 | 44 | 50 | | | 11.16' | | " -0049 |
| 70 | " -0061 | 40 | 40 | 44 | 50 | | | 11.16' | | " -0050 |



MATERIAL: TYPE A - HSS (10-4-3-10) } HARDNESS OF 1+10 ON BOTH ENDS HRC 62±6.5
 TYPE B-TIP-HSS (10-4-3-1-0) } HARDNESS HRC 62±6.5 SHANK C 40, 0500-007 } HARDNESS HRC 35±3.8

NOTE

- NON CUTTING SHARP EDGES TO BE ROUNDED OFF.
- PROFILE OF TOOL TO BE AS PER RESPECTIVE TEMPLATE.

| VAR. 00 | REMARKS | ITEM NO. | DESCRIPTION | STD | DRAWING NO. | MATERIAL CODE | UNIT WEIGHT |
|---------|---------|----------|-------------|-----|-------------|---------------|-------------|
| 59 | | 75 | | 58 | 60 | 29 31 | 65 |
| | | 25 27 29 | | | | VAR 32 33 46 | 71 |
| | | | | | | 54 55 56 66 | 72 |

GMS NO./GR. SP. NO. STATUS OF DRG. TYPE OF PRODUCT KWU TURBINE OR NAME OF CUSTOMER/ PROJECT

AGREED DEPT. NAME SIGN DATE

BHARAT HEAVY ELECTRICALS LTD.
HARDWAR

DRN G.D.K. -sd-
CHD A.CHARAN -sd-
APD V.P.SINGH -sd-

DEPT. JTE CODE 125 SCALE NTS WEIGHT (Kg.) REF. TO ASSY. DRG.

TITLE: TOOL FOR BALANCING WT. GROOVE

DRAWING NO. R2126-0053:0061

SHEET NO. 01 NO. OF SHEETS 01

RETRACED

TRCD RPS

CHD GDK

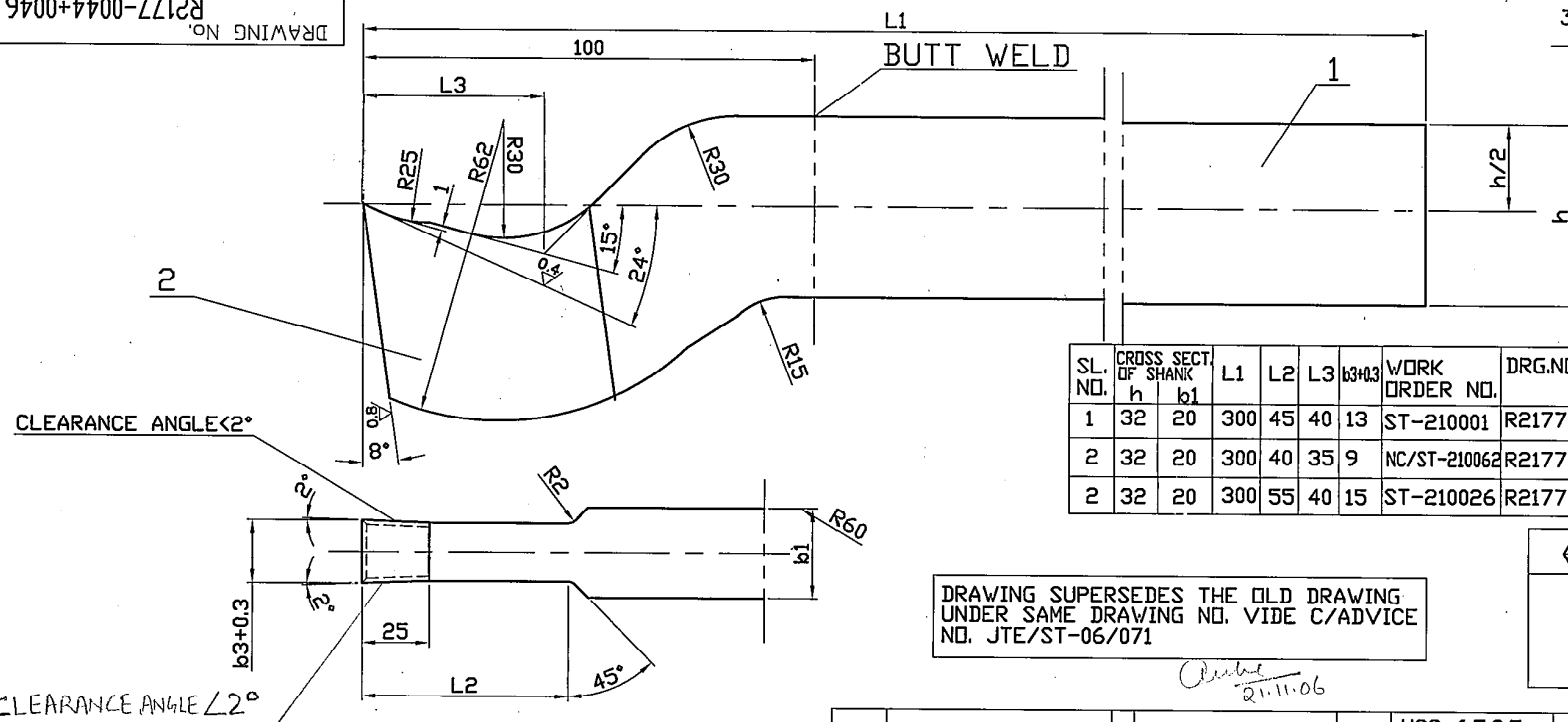
GRADE OF UNTOL. DIM.: -
M/CG- V/Q/M/F AA 0230208
WELDING-A/B/C/D-AA621104
GAS CUTTING-T3'AA0621101

REV. DATE ALTERED CHECKED

MUN 840 47/1 REF. DRG NO. 3-7770 INVENTORY NO. SIGN & DATE

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DRAWING No. R2177-0044+0046



3.2 THE REST

| SL. NO. | CROSS SECT. OF SHANK | L1 | L2 | L3 | b3±0.3 | WORK ORDER NO. | DRG. NO. | Wt. |
|---------|----------------------|-----|----|----|--------|----------------|------------|------|
| 1 | 32 20 | 300 | 45 | 40 | 13 | ST-210001 | R2177-0044 | 1.4 |
| 2 | 32 20 | 300 | 40 | 35 | 9 | NC/ST-210062 | R2177-0045 | ~1.0 |
| 2 | 32 20 | 300 | 55 | 40 | 15 | ST-210026 | R2177-0046 | 1.6 |

DRAWING SUPERSEDES THE OLD DRAWING UNDER SAME DRAWING NO. VIDE C/ADVICE NO. JTE/ST-06/071

MARK
DRG. NO.
b3j HSS

Ambedkar
21.11.06

NOTES:-

- NON CUTTING SHARP EDGES TO BE ROUNDED OFF.
- HARDEN CUTTING PORTION TO HRC 64-68 AS PER P.S. 0912-008.
- ANY STEEL HAVING MINIMUM TENSTILE STRENGTH 70kg/mm²
- CONSERVATION TO BE DONE AS PER TL 30007.

| VAR.00 | REMARKS | ITEM No. | DESCRIPTION | STD | DRAWING No. | VAR. | MATERIAL SPECN. | A | UNIT | UNIT WEIGHT | QTY. |
|--------|---------|----------|-------------|-----|-------------|------|------------------------|---|------|-------------|------|
| --- | --- | 01 | SHANK | - | | | HSS 6:5:2:5 AA10815 | | | 1 | |
| | | | | | | | * | | | 1 | |

3-7319 E INVENTORY No. SIGN. & DATE REF. DRG. No.

| | | | | | | | | | | | |
|--------------------------------|--|---------------|--|-----------------|--|-------------------------------|--|--------------------|--|-------------------------------|--|
| GMS No./GR.SP.No. | | STATUS OF DRG | | TYPE OF PRODUCT | | COMP. DRG. No. | | M/C TOOL TRANS No. | | REF. DRG. No. | |
| 210 MW KWU | | 210 MW KWU | | 210 MW KWU | | DESIGN ORDER No. SEC TABLE | | M/C MODEL No. | | VE4-12-2003 | |
| AGREED DEPT. | | NAME | | SIGN. | | DATE | | No. OF VAR. | | | |
| TECH. MANCHANDA | | -Sd- | | 8.2.79 | | | | DRN RAGHAVA | | -Sd- 10.1.79 | |
| | | | | | | | | CHD KHAN | | -Sd- 31.1.79 | |
| | | | | | | | | APD S.K.GUPTA | | -Sd- 1.3.79 | |
| GRADE OF UNTOL. DIM.:- | | REV. DATE | | ALTERED | | DEPT. JTE | | SCALE | | WEIGHT(Kg) | |
| M/CG- P/M AA0230208 | | | | CHECKED | | 209 | | NTS | | SEE TABLE | |
| WELDING-A/B/C/D AA0621104 | | | | | | | | | | REF. TO ASSY. DRG. | |
| GAS CUTTING-'T3' AA0621101 | | | | | | | | | | ITEM No. OF No. ITEMS | |
| | | | | | | | | | | --- | |
| | | | | | | | | | | DRAWING No. R2177-0044+0046 | |
| | | | | | | | | | | REV | |
| | | | | | | | | | | SHEET No. 01 No. OF SHEETS 01 | |

BHARAT HEAVY ELECTRICALS LTD.
HARDWAR

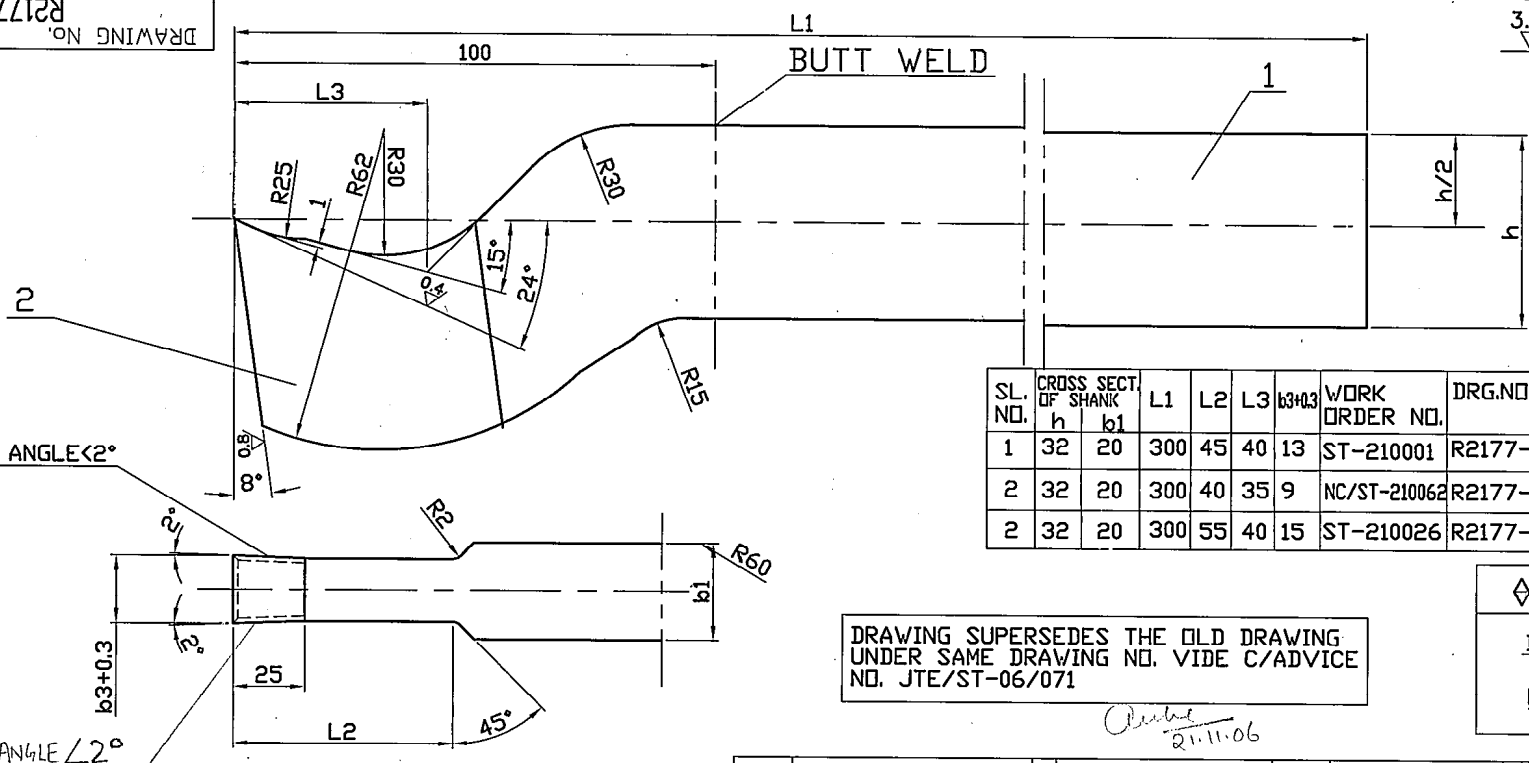
DEPT. JTE
CODE 209

TITLE
ROUGH GROOVING TOOL FOR
BLADE GROOVES

SIZE A 3

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DRAWING No. R2177-0044+0046



3.2 THE REST

| SL. NO. | CROSS SECT. OF SHANK h b1 | L1 | L2 | L3 | b3+0.3 | WORK ORDER NO. | DRG. NO. | Wt. |
|---------|------------------------------|-----|----|----|--------|----------------|------------|------|
| 1 | 32 20 | 300 | 45 | 40 | 13 | ST-210001 | R2177-0044 | 1.4 |
| 2 | 32 20 | 300 | 40 | 35 | 9 | NC/ST-210062 | R2177-0045 | ~1.0 |
| 2 | 32 20 | 300 | 55 | 40 | 15 | ST-210026 | R2177-0046 | 1.6 |

DRAWING SUPERSEDES THE OLD DRAWING UNDER SAME DRAWING NO. VIDE C/ADVICE NO. JTE/ST-06/071

◇ MARK
DRG. NO.
b3; HSS

21.11.06

NOTES:-

- NON CUTTING SHARP EDGES TO BE ROUNDED OFF.
- HARDEN CUTTING PORTION TO HRC 64-68 AS PER P.S. 0912-008.
- ANY STEEL HAVING MINIMUM TENSTILE STRENGTH 70kg/mm²
- CONSERVATION TO BE DONE AS PER TL 30007.

| VAR.00 | REMARKS | ITEM No. | DESCRIPTION | STD | DRAWING No. | MATERIAL CODE | A | UNIT | UNIT WEIGHT | QTY. |
|--------|---------|----------|-----------------|-----|-------------|---------------|---|------|-------------|------|
| | | 01 | SHANK | | | HSS 65i25 | | | | 1 |
| | | 02 | CUTTING PORTION | | | AA10815 | | | | 1 |

3-7319 E INVENTORY No. SIGN.&DATE REF. DRG. No. 21/11/06

| | | | | | | | | | | | |
|---------------------------------------|--|-----------------------------|--|--------------------------------|--|-----------------------------|--|-----------------------------|--|---------------|--|
| GMS No./GR.SP.No. | | STATUS OF DRG | | TYPE OF PRODUCT | | COMP. DRG. No. | | M/C TOOL TRANS No. | | REF. DRG. No. | |
| AGREED DEPT. NAME SIGN. DATE | | TECH. MANCHANDA -Sd- 8.2.79 | | 210 MW KWU | | DESIGN ORDER No. SEE TABLE | | M/C MODEL No. | | VE4-12-2003 | |
| GRADE OF UNTOL. DIM.:- | | | | M/CG- P/M AA0230208 | | | | NAME SIGN. DATE No. OF VAR. | | | |
| WELDING-A/B/C/D AA0621104 | | | | GAS CUTTING-'T3' AA0621101 | | | | DRN RAGHAVA -Sd- 10.1.79 | | | |
| REV DATE ALTERED CHECKED | | | | REV DATE ALTERED CHECKED | | | | CHD KHAN -Sd- 31.1.79 | | | |
| | | | | | | | | APD S.K.GUPTA -Sd- 1.3.79 | | | |
| DEPT. JTE | | SCALE | | WEIGHT(Kg) | | REF.TO ASSY. DRG. | | ITEM No. | | No. OF ITEMS | |
| CODE 209 | | NTS | | SEE TABLE | | DRAWING No. R2177-0044+0046 | | --- | | --- | |
| TITLE | | | | | | SHEET No. 01 | | No. OF SHEETS 01 | | REV | |
| ROUGH GROOVING TOOL FOR BLADE GROOVES | | | | | | | | | | | |

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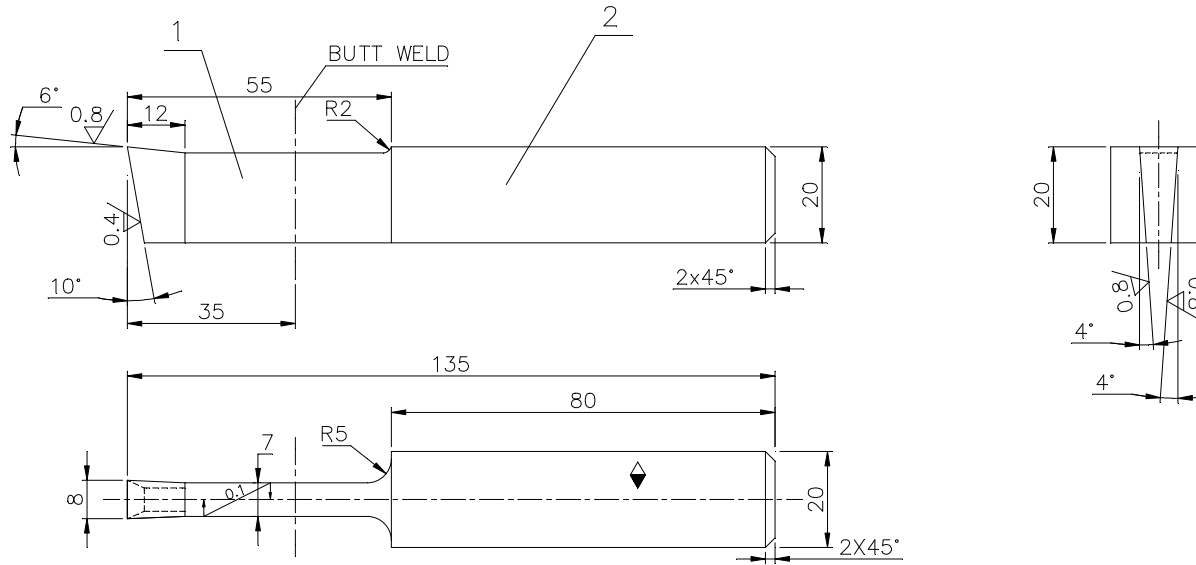
FIRST ANGLE PROJECTION

(ALL DIMENSIONS ARE IN mm)

FORM DG38(B)

1.6/ THE REST

DRAWING No. R2182-0046



REDRAWN FROM ORIGINAL

MARK
R2182-0046
H.S.S.

NOTES: -

- HARDEN THE CUTTING PORTION TO HRC 62±65 AND SHANK TO HRC 35±40.
- NON-CUTTING SHARP EDGES TO BE ROUNDED OFF.

* 3. ANY STEEL HAVING MINIMUM TENSILE STRENGTH 75Kg/MM?

| 002 | SHANK | --- | * | 01 | | |
|----------|-----------------|-----|---------------------|----------------------|--------|-------------|
| 001 | CUTTING PORTION | --- | H.S.S 6: 5: 2: 5 | 01 | | |
| ITEM No. | DESCRIPTION | STD | DRAWING No. | MATERIAL CODE | A UNIT | UNIT WEIGHT |
| | | | | VAR. MATERIAL SPECN. | c | QTY. |


3-11060 INVENTORY No. SIGN.&DATE REF. DRG. No.

| | | | | | | | | | | | | | |
|----------------------------|--|---------------------------|--|----------------------------|--|-------------------------|--|--|--|------------------------|--|--------------------|--|
| GRADE OF UNTOL. DIM.: - | | GMS No./GR.SP.No. | | STATUS OF DRG. | | TYPE OF PRODUCT | | COMP. DRG. No. | | M/C TOOL TRANS No. | | REF. DRG. No. | |
| M/CG-℄/M/F/AA0230208 | | AGREED DEPT. STT | | NAME J.P.GUPTA | | SIGN. -Sd- | | DATE | | 500 MW (KWU) | | 9-102-04-05000 | |
| WELDING-A/B/C/D AA0621104 | | DESIGN ORDER No. STC-1015 | | M/C MODEL No. | | SHAPER721 | | REF. DRG. No. R2182-0025 | | DRN M.P.S. | | SIGN. -Sd- | |
| GAS CUTTING-'T3' AA0621101 | | REV DATE | | ALTERED CHECKED | | SJTERS AJTEAM | | DEPT. TLX | | SCALE | | WEIGHT(Kg) | |
| REV DATE | | 02 17.12.15 | | DRG. REDRAWN FROM ORIGINAL | | IA C/A No. JTE-15-F0116 | | CODE 125 | | 1:1 | | REF. TO ASSY. DRG. | |
| ALTERED CHECKED | | | | | | | | TITLE PRE MACHINING TOOL FOR INSERTION GROOVES | | DRAWING No. R2182-0046 | | REV. | |
| | | | | | | | | | | SHEET No. 01 | | No. OF SHEETS 01 | |

SIZE A 3

Indent no : 2022-0142,
2021-2681,
2021-2838,
2021-2372

| 01.00 | PRE QUALIFYING CONDITIONS | REQUIRED |
|--------------|---|--|
| 01.01 | <p>a). Only those vendors to quote who are Original Equipment Manufacturers of HSS - Single Point Tools. (Authorized channel partner/associates of above OEMs may also quote on their behalf. In such case, valid Authorization Certificate issued by OEM on their letter head is to be furnished with the offer)</p> <p>b.) Vendors to provide satisfactory documentary proof w.r.t experience as mentioned in point 01.01.a This is required from all the vendors for qualification of their offer.</p> | Vendor to accept/agree and provide details |
| 01.02 | Vendor to provide name, designation and contact details (phone number, email address etc.) of the customer for whom such items at Sl. No 01.01 (a) are supplied. | Vendor to accept/agree and provide details |
| 01.03 | BHEL reserves the right to verify the information provided by vendor. In case the information provided by vendor is found to be false/ incorrect, their offers shall be rejected. | Vendor to accept/agree |
| 02.00 | TECHNICAL SPECIFICATIONS | REQUIRED |
| 02.01 | Vendors to confirm that the items quoted shall be as per BHEL drawing only. | Vendor to confirm |


E1/TR
राजेश कुमार
अभियन्ता (दुल रुम)
बी.एच.ई.एल.सीप, हरिद्वार