



**Bharat Heavy Electricals Limited**  
Industrial Valves Plant  
Goindwal Sahib (Punjab)

**Enquiry No.**  
**2122-010E**

**Date:**  
**08.05.2021**

**NOTICE INVITING TENDER (NIT)**

Dear Sir / Madam,

BHEL Goindwal Sahib (Punjab) invites offers from interested bidders / suppliers for submission of their offer through e-procurement mode at <https://eprocurebhel.co.in/>. Offers in any other mode will not be accepted. In case of any difficulty faced while registering on BHEL's e-Procurement portal developed by NIC, queries may be addressed to 0120-4001002, 0120-4001005 and 0120-6277787; email: [support-eproc@nic.in](mailto:support-eproc@nic.in). These details are also available on 'Contact Us' page of the portal.

|                                                    |                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tender Enquiry No.</b>                          | 2122-010E                                                                                                                                                                                                                                                                                                                                         |
| <b>Form of Contract</b>                            | Supply                                                                                                                                                                                                                                                                                                                                            |
| <b>Tender / Item Description</b>                   | Machined Aluminium Castings                                                                                                                                                                                                                                                                                                                       |
| <b>Location(s) of Supply / Work</b>                | BHEL, Industrial Valve Plant, Goindwal Sahib, Dist. Tarn Taran -143422 (Punjab)                                                                                                                                                                                                                                                                   |
| <b>Earnest Money Deposit (EMD)</b>                 | Not Applicable                                                                                                                                                                                                                                                                                                                                    |
| <b>Tender Download / Bid Submission Start Date</b> | <b>08.05.2021 (12:00 PM IST)</b>                                                                                                                                                                                                                                                                                                                  |
| <b>Tender Download / Bid Submission End Date</b>   | <b>19.05.2021 (12:00 PM IST)</b>                                                                                                                                                                                                                                                                                                                  |
| <b>Tender / Bid Opening Date</b>                   | <b>19.05.2021 (03:30 PM IST)</b>                                                                                                                                                                                                                                                                                                                  |
| <b>Quotation Parts</b>                             | Two Part Bid                                                                                                                                                                                                                                                                                                                                      |
| <b>Integrity Pact (IP)</b>                         | Not applicable                                                                                                                                                                                                                                                                                                                                    |
| <b>Contact Person Details</b>                      | Sh. Sumeet Bansal, Sr. Manager<br>01859-224 628, <a href="mailto:sbansal@bhel.in">sbansal@bhel.in</a><br><br>Sh. Achin Goyal, Sr. Engineer<br>01859-224 617, <a href="mailto:achingoyal@bhel.in">achingoyal@bhel.in</a><br><br>Sh. Raghuvinder Kumar, Dy. Engineer<br>01859-224 683, <a href="mailto:raghuvinder@bhel.in">raghuvinder@bhel.in</a> |



## SPECIAL TERMS AND CONDITIONS

Tender enquiry no. 2122-010E Dated 08.05.2021 Due date 19.05.2021

Tender Description: Supply of Machined Aluminium Castings

|                                             |                                                   |
|---------------------------------------------|---------------------------------------------------|
| Tender Enquiry no.                          | 2122-010E                                         |
| Enquiry date                                | 08.05.2021                                        |
| Tender Download / Bid Submission Start Date | 08.05.2021 (12:00 PM IST)                         |
| Tender Download / Bid Submission End Date   | 19.05.2021 (12:00 PM IST)                         |
| Tender / Bid Opening Date                   | 19.05.2021 (03:30 PM IST)                         |
| Quotation Parts                             | Two-part Bid                                      |
| Tender evaluation                           | Item Wise                                         |
| Item Description                            | Machined Aluminium Castings                       |
| Item Specification                          | As mentioned below in tender term S1              |
| Delivery schedule                           | As mentioned below in tender term S4              |
| Validity of offer (In days)                 | 60 days from the date of Part-I opening of tender |
| Quantity variation                          | +/- 10% of tender quantity                        |

| Documents required along with supply of material |                                |
|--------------------------------------------------|--------------------------------|
| 1. Test Certificate / Compliance certificate     | <u>Required</u>                |
| 2. Guarantee certificate                         | <u>Required</u>                |
| 3. Third Party Inspection Report                 | <u>Required in case of TPI</u> |

## PRE-QUALIFICATION CRITERIA

As per Annexure-I attached.

## SPECIAL TERMS

### S1. SCOPE OF SUPPLY

In addition to the clause no. 2 in “General Contract Conditions of tender”, All the items are to be supplied as per below mentioned specifications:

| Sl. no. | Material Code | Description                          | Quantity (nos.) | Machining drawing no. | Casting drawing no. | Material Specification |
|---------|---------------|--------------------------------------|-----------------|-----------------------|---------------------|------------------------|
| 10      | 842020111100  | RACK<br>GEAR<br>HOUSING-<br>O0000400 | 630             | 0-20-201-00004/17     | 0-20-201-00021/04   | LM-9 WP                |
| 20      | 842020113200  | GEAR<br>HOUSING-<br>O0004800         | 480             | 0-20-201-00048/08     | 0-20-201-00020/04   | LM-9 WP                |



## SPECIAL TERMS AND CONDITIONS

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Tender Description: Supply of Machined Aluminium Castings

### **S2. PRICE BASIS**

Rates quoted should be on F.O.R. BHEL Goindwal basis. The offers quoted on other than F.O.R Goindwal basis will be rejected.

### **S3. LOADING CRITERIA CUM COUNTER OFFER**

Counter-offer will be given as below:

1. Tender quantity shall be divided in the proportion 65:35 (65% for L1 and 35% for MSE's) **in case the L1 vendor is not a MSE subject to following conditions:**
  - a. In tender, participating MSEs quoting price within price band of L1+15% shall also be offered 35% quantity of tender quantity at L1 price in a situation where L1 price is from someone other than a MSEs. In case of more than one such MSEs, the supply shall be shared equally. If there are more than one MSE in the price band of L1+ 15% to whom the offer has been sent and some of them reject the offer, then the remaining quantity shall be distributed equally to the MSEs accepting L1 prices.
  - b. 6.25% of the tender quantity (from 35% quantity) shall be offered to the MSEs shall be reserved for MSEs owned by SC/STs. In case of more than one such MSEs, the supply shall be shared equally. In event of failure of such MSEs to participate in tender process or meet tender requirements and L1 price, 6.25% quantity for MSEs owned by SC/ST entrepreneurs shall be met from other MSEs.
  - c. 3% from within the 35% quantity offered to the MSEs shall be reserved for women owned MSEs. In case of more than one such MSEs, the supply shall be shared equally. In event of failure of such MSEs to participate in tender process or meet tender requirements and L1 price, 3% quantity for MSEs owned by women entrepreneurs shall be met from other MSEs.
  - d. In case any MSEs vendor does not accept the counter offer, the above mentioned 35% quantity shall be given to L1.
  - e. If there is no MSEs in the Price band of L1+15% then the 35% quantity shall be given to L1 vendor.
  - f. If other suppliers (other than L1) are not under MSEs then 100% quantity shall be given to L1 supplier.
2. **In case if the L1 vendor is MSE** then quantity shall be provided as 55.75% for L1, 35% for L2, 6.25% tender quantity shall be offered to the MSEs owned by SC/ST's and 3% tender quantity shall be offered to the MSEs owned by women in the price band of L1+15%. In event of failure of such MSEs to participate in tender process or meet tender requirements and L1 price, 6.25% sub-target for procurement earmarked for MSEs owned by SC/ST's entrepreneurs and 3% sub-target for procurement earmarked for MSEs owned by women entrepreneurs shall be met from L1 vendor.
3. **In case the L1 vendor is a MSE owned by a SC/ST's & women entrepreneur** then the 65% quantity shall be loaded on L1 bidder & balance 35% quantity shall be counter-offered to L2 bidder.

In case of non- acceptance of counter offer by any vendor after above applicable provisions the whole quantity shall be given to L1 vendor.

All above mentioned preferences shall be given to MSEs and SC/STs only on the submission of documentary evidence.



## SPECIAL TERMS AND CONDITIONS

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Tender Description: Supply of Machined Aluminium Castings

**BHEL will not give counter offer to highest bidder in any case (except MSE Vendors whose rates falling in the range of L1 +15%).**

### **S4. DELIVERY SCHEDULE**

Delivery schedule shall be as mentioned below:

| Lot no. | Delivery schedule                                   |
|---------|-----------------------------------------------------|
| Lot-I   | 50% quantity within first 03 months from date of PO |
| Lot-II  | Balance 50% quantity within next 03 months          |

**Note:** In case purchase order is placed on vendor who has not supplied these items previously to BHEL, then 45 days will be given for development; in which vendor has to supply minimum 10 nos. (from each ordered item) for getting sample approval from BHEL. Balance ordered quantity to be supplied by the vendor as per delivery schedule mentioned above. Delivery schedule mentioned above is inclusive of development time. In case the vendor does not complete development process (i.e. sample approval for 10 nos.) in the stipulated time, entire order quantity will be treated as cancelled immediately unless time extension for development is granted by BHEL. The vendor who is unable to complete the development in stipulated time will be resorted to risk purchase for entire quantity.

### **S5. RESTRICTIONS UNDER RULE 144(XI) OF THE GENERAL FINANCIAL RULES (GFRs), 2017**

All provisions of Order No. F.No.6/18/2019-PPD of Department of Expenditure (DoE) shall be applicable for this tender enquiry (Order copy is available at <https://doe.gov.in/procurementpolicy-divisions>). Accordingly, any bidder from a country which shares a land border with India (except the countries to which the Govt. of India has extended lines of credit or in which the Govt. of India 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.

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/>)

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.

Registration with the competent authority as stipulated in the said order is responsibility of bidder.  
**Bidder has to submit a certificate certifying following along with offer:**

"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"



## SPECIAL TERMS AND CONDITIONS

**Tender enquiry no. 2122-010E Dated 08.05.2021 Due date 19.05.2021**

**Tender Description:** Supply of Machined Aluminium Castings

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.”

### **S6. REVERSE AUCTION**

BHEL shall be resorting to Reverse Auction (RA) (Guidelines as available on [www.bhel.com](http://www.bhel.com)) for this tender. RA shall be conducted among the techno-commercially qualified bidders as per RA guidelines.

Price bids of all techno-commercially qualified bidders shall be opened and same shall be considered for RA. In case any bidder(s) do(es) not participate in online Reverse Auction, their sealed envelope price bid along with applicable loading, if any, shall be considered for ranking.

### **S7. RISK PURCHASE**

BHEL at its option will be entitled for withdraw of portion of balance supply or terminate the contract and to purchase elsewhere at the risk and cost of the supplier either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the time stipulated as per contract delivery terms. The supplier shall be liable for losses, which BHEL may sustain by way of such risk purchases.

The value shall be calculated as follows:

Risk & Cost Amount=  $[(A-B) + (A \times H/100)]$

Where,

**A**= Value of Balance scope of Supply (\*) as per rates of new contract

**B**= Value of Balance scope of Supply (\*) as per rates of old contract being paid to the supplier at the time of termination of contract i.e. inclusive of PVC, if any.

**H** = Overhead Factor shall be taken as 5

In case (A-B) is less than 0 (zero), value of (A-B) shall be taken as 0 (zero).

\* **Balance Scope of Supply:** Difference of Contract Quantities and Executed Quantities as on the date of issue of Letter for 'Termination of Contract', shall be taken as balance scope of Supply for calculating risk & cost amount.

Contract quantities are the quantities as per original contract. If, Contract has been amended, quantities as per amended Contract shall be considered as Contract Quantities.

### **S8. MAKE IN INDIA**

This procurement shall be governed by notification no. P-45021/2/2017-PP (BE-II) dated 16.09.2020 of Government of India issued by DPIIT and subsequent circulars issued afterwards. Accordingly, the minimum local content, the margin of purchase preference and the procedure for purchase preference to make in India shall be adhered.



## **SPECIAL TERMS AND CONDITIONS**

**Tender enquiry no.** 2122-010E Dated 08.05.2021 **Due date** 19.05.2021

**Tender Description:** Supply of Machined Aluminium Castings

### **S9. CONTRACTOR / SUPPLIER NOT ELIGIBLE TO QUOTE IN THIS TENDER**

M/s. G M Enterprises, Address- Plot no. E52 / C-129, NRB Road, MIDC Chikalthana Aurangabad - 431210, Maharashtra (PAN No. AAKPW6981A) is the sole proprietorship firm and is not eligible to participate in this tender enquiry. Any Sole Proprietorship Firm owned by same Sole Proprietor shall also not be eligible to participate in this tender enquiry.

**These Special terms & conditions and GCC collectively are the part of tender terms and conditions.**



## General Contract Conditions (GCC) of MM Tenders

**BHARAT HEAVY ELECTRICALS LIMITED**

Industrial Valve Plant: 433, Industrial Complex,  
Goindwal Sahib, Dist. Tarn Taran,  
Punjab-143422 (INDIA)

### TABLE OF CONTENTS

|                                                                                    |    |
|------------------------------------------------------------------------------------|----|
| 1. INSTRUCTION TO BIDDER.....                                                      | 2  |
| 2. SCOPE OF SUPPLY .....                                                           | 2  |
| 3. PRICE BASIS.....                                                                | 3  |
| 4. DISCREPANCY IN WORDS AND FIGURES.....                                           | 3  |
| 5. EVALUATION IN CASE OF MORE THAN ONE L-1 BIDDER .....                            | 3  |
| 6. REVERSE AUCTION.....                                                            | 4  |
| 7. VALIDITY OF OFFERS.....                                                         | 4  |
| 8. SUPPLIED MATERIAL ADJUSTMENT .....                                              | 4  |
| 9. DELIVERY SCHEDULE.....                                                          | 4  |
| 10. LIQUIDATED DAMAGES (LD) FOR LATE DELIVERY .....                                | 4  |
| 11. PAYMENT TERMS.....                                                             | 5  |
| 12. TAXES & DUTIES .....                                                           | 5  |
| 13. LIABILITY UNDER REVERSE CHARGE (RCM) .....                                     | 6  |
| 14. ACCESS TO MANUFACTURING PREMISES.....                                          | 6  |
| 15. INSPECTION .....                                                               | 6  |
| 16. GUARANTEE / WARRANTEE AND CORRESPONDING REPAIR /<br>REPLACEMENT OF GOODS ..... | 7  |
| 17. LOI (LETTER OF INTENT).....                                                    | 7  |
| 18. SUB-CONTRACT.....                                                              | 7  |
| 19. RISK PURCHASE .....                                                            | 7  |
| 20. FORCE MAJEURE .....                                                            | 7  |
| 21. CLARIFICATIONS.....                                                            | 8  |
| 22. PREFERENCES FOR MICRO AND SMALL ENTERPRISES (MSEs) .....                       | 8  |
| 23. PREFERENCE TO MAKE IN INDIA.....                                               | 9  |
| 24. DISPUTES.....                                                                  | 9  |
| 25. JURISDICTION .....                                                             | 9  |
| 26. BANNED FIRMS.....                                                              | 9  |
| 27. FRAUD PREVENTION POLICY .....                                                  | 9  |
| 28. PREVENTIVE CHECKS TO ELIMINATE SUSPECTED CARTEL FORMATION .                    | 10 |
| 29. SUSPENSION OF BUSINESS DEALINGS WITH DEFAULTERS .....                          | 10 |
| 30. GENERAL.....                                                                   | 11 |



## 1. INSTRUCTION TO BIDDER

Quotations shall be submitted before due date and time. Late offers are liable to be rejected, so please ensure to submit bid well within due date and time. Techno-commercial part will be opened on due date.

**Based on evaluation of techno-commercial offers, Price bids of bidders who qualify from techno-commercial evaluation shall be opened. BHEL may decide to open the Price bid same day at 1700 hrs. If not opened on the same day, all qualifying bidders shall be notified for date of opening of Price bids by email/fax/post/courier/E-procurement system generated email.**

### 1.1 Instruction To Bidder (In case of Non-E-Procurement / Paper/ Manual/ Hard Copy based tenders)

Sealed Tenders can be dropped in the tender box labeled as 'Tender box for MM contracts'. This tender box is located at the entrance of Admin block BHEL Goindwal. Fax (01859-222061) / E-Mail ([tendermm\\_ivp@bhel.in](mailto:tendermm_ivp@bhel.in)) offers received in time shall be considered only when such offers are complete in all respects. In case of bulky tenders, please handover quotation to Sh. Rakesh Kumar/ SDGM - Head-MM or Sh. Sumeet Bansal / Sr. Manager - MM [Contact: 01859 224 615 / 628]. Bid can be send to following address:

**BHEL, Industrial Valve Plant,  
#433, Industrial Complex,  
Goindwal Sahib, Distt. Tarn Taran,  
Punjab-143422.**

### 1.2 Instruction to bidder (In case of E-Procurement)

1. Interested bidders / suppliers shall submit their offer through e-procurement mode at <https://eprocurebhel.co.in/>.
2. Offers in any other mode will not be accepted.
3. Procedure for Submission of Tender is available in the "Bidder Manual Kit" at E-tender portal <https://eprocurebhel.co.in/> only.
4. In case of any difficulty faced while registering on BHEL's e-Procurement portal developed by NIC, queries may be addressed to 0120-4001002, 0120-4001005 and 0120-6277787; email: [support-eproc@nic.in](mailto:support-eproc@nic.in). These details are also available on 'Contact Us' page of the portal.
5. Before uploading scanned documents if any, the bidders shall sign on all the statements, documents, certificates uploaded by him, owning responsibility for their correctness / authenticity.
6. **Disclaimer clause:** Neither the Organization (Bharat Heavy Electricals Ltd.) nor the service provider is responsible for any failure of submission of bids due to failure of internet or other connectivity problems or reasons thereof.

## 2. SCOPE OF SUPPLY

Material shall be supplied as per the applicable latest Technical Delivery Conditions (TDC)/ Material Standard requirements/BPS/Drawing and other requirement as given in the Tender Enquiry. National & International material Standards shall have to be arranged by vendors themselves. Latest applicable revisions of standards/procedures to be referred.

All required tests as called in referred material standard/BHEL/TDC/drawing etc. shall be carried out by vendor at no extra cost. Material Test Certificates (MTC), inspection reports and Compliance/Guarantee Certificate are to be provided along with the supplies.

### 3. PRICE BASIS

1. Order of enquiry item sl. no. shall be maintained in the quotation.
2. The rates quoted shall be firm and fixed. No price variation is proposed and allowed.
3. Rates quoted should be F.O.R. Goindwal basis. If bidder has quoted Ex-works, loading shall be done as per BHEL discretion for tender evaluation.

**Variation in GST or any other statutory levies during contractual delivery period shall be to BHEL's account.**

### 4. DISCREPANCY IN WORDS AND FIGURES

1. If, in the price structure quoted for the required goods/ services/ works, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless in the opinion of the purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price corrected accordingly.
2. If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
3. If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject of (a) and (b) above.
4. If there is such discrepancy in an offer, the same shall be conveyed to the bidder with target date upto which the bidder has to send his acceptance on the above lines and if the bidder does not agree to the decision of the purchaser, the bid is liable to be ignored.
5. Bids should be free from correction, overwriting, using corrective fluid, etc. Any interlineation, cutting, erasure or overwriting shall be valid only if they are attested under full signature(s) of person(s) signing the bid else shall be liable for rejection.
6. All overwriting/cutting, etc will be numbered by bid opening officials and announced during bid opening.

### 5. EVALUATION IN CASE OF MORE THAN ONE L-1 BIDDER

In the course of evaluation, if more than one bidder happens to occupy L1 status, effective L1 will be decided by soliciting discounts from the respective L1 bidders.

In case more than one bidder happens to occupy the L1 status even after soliciting discounts, the L1 bidder shall be decided by a toss / draw of lots, in the presence of the respective L1 bidder(s) or their representative(s).

Ranking will be done accordingly. BHEL's decision in such situations shall be final and binding.

## 6. REVERSE AUCTION

BHEL will declare in NIT to go for Reverse Auction (RA) or not. If RA is applicable in NIT, then following is to be considered:

BHEL shall be resorting to Reverse Auction (Guidelines as available on [www.bhel.com](http://www.bhel.com)) for this tender. RA shall be conducted among all the techno-commercially qualified bidders.

Price bids of all techno-commercially qualified bidders shall be opened and same shall be considered as initial bids of bidders in RA. In case any bidder(s) do(es) not participate in online Reverse Auction, their sealed envelope price bid along with applicable loading, if any, shall be considered for ranking.

## 7. VALIDITY OF OFFERS

The offers shall be kept open for acceptance 'for number of days mentioned in special terms and conditions' from the date of opening of the tender. In case of tender extension, the bid validity shall be considered from the date of tender opening.

## 8. SUPPLIED MATERIAL ADJUSTMENT

Item/s pending in previous PO has to be billed in previous PO only. Otherwise, BHEL will be free to adjust the supplies in previous PO. Any implication of tax will be on supplier's account. For this it is desirable that vendor should reconcile the pending PO statement every month/frequently with BHEL. Vendor can also view these details at Portal (<https://trichy.bhel.com/mm/index.jsp>).

## 9. DELIVERY SCHEDULE

Supplies shall be affected and completed as per schedule mentioned in special terms and conditions. **Further, BHEL may release delivery schedule from time to time based upon our requirement with mutual understanding.** Vendor shall be required to complete the order as per the BHEL schedule requested. Commencement of delivery period shall be reckoned from the date of PO / LOI or any other agreed milestone.

## 10. LIQUIDATED DAMAGES (LD) FOR LATE DELIVERY

Time is the essence of the contract'. As such, delivery of goods specified in the Purchase Orders released under the scope of this contract shall be made within the time limit prescribed therein. Penalty for late delivery will be applicable @0.5% of the undelivered portion per week of the delay or part thereof subject to a maximum of 10% of the undelivered portion.

In case of Ex-works delivery terms for indigenous supplies, the document date (Invoice/Challan date) in Goods Receipt (GR) document shall be reckoned for LD deduction. In case of FOR Delivery terms for Indigenous supplies, the posting date in GR document shall be reckoned for LD deduction.

If any vendor does not accept LD ½% **of the supply for each week of delay subject to a maximum of 5%**, their offer is likely to be rejected by BHEL and the price bid shall not be opened. Bidders accepting for 10% LD shall not be loaded on account of LD. However, bidders who offer any other %

LD [between 5% to 10%] shall be loaded @ % deviation from 10% and their accepted %. e.g. If a bidder accepts for a max of 7% LD only, their offer would be loaded @ 3% ( $10 - 7 = 3$ ).

BHEL reserves the right to receive or not receive the material after the due date of PO. Applicable GST shall also be recovered from suppliers/contractors on LD amount. For this Debit note will be issued by BHEL indicating the respective supply invoice number.

## 11. PAYMENT TERMS

- Due payment against supplies received shall be due after 30 days of receipt and acceptance of material and shall be paid within next 15 days' period. In case of any deviation from standard payment term mentioned, BHEL at its discretion may load on the item price at "Base rate of SBI (as applicable on the date of bid opening; Techno-commercial bid opening) + 6% shall be considered for loading for the period of relaxation sought by bidders.
- Documents to be submitted (if applicable)
  - Tax invoice (Invoice shall be GST compliant and should contains all the required information such as GST No, HSN code etc.)
  - Transporter copy along with material/consignment.
  - Material Test Certificates (MTC) and
  - Compliance Certificate.
- GST registration number is to be submitted by qualified vendor as per GST law.
- It is mandatory to mention proper material codes in the invoices and separate invoices to be raised for different POs.
- BHEL releases payment through EFT mode ONLY. Necessary details may please be submitted by filling required format before release of payment.**

## 12. TAXES & DUTIES

Payment of GST portion will be released to vendor only upon completion of statutory requirement and further subject to following:

- Vendor declaring such invoice in his GSTR-1 and
- Receipt of goods and Tax invoice by BHEL and
- Confirmation of payment of GST thereon by vendor on GSTN portal.
- Above is subject to receipt of goods/service and tax invoice thereof along with vendor declaring invoice in his return and paying GST within timeline prescribed for availing ITC by BHEL.

Following may please be noted for availing Input Tax Credit (ITC) by BHEL:

- Since ITC can be availed only when BHEL is in possession of GST Tax invoice and after receipt of goods. Thus, vendor to ensure timely dispatch of goods and Tax invoice. It may be noted that in case of any delay in receipt of Tax Invoice and/or receipt of goods, the ITC availment by BHEL will get delayed thus entailing additional cash outflow & may even get denied if ITC availment timelines are breached.
- Further ITC can be availed only when vendor has declared such invoice in his outward supply Return GSTR-1 and after GST thereon has been paid by him at the time of filing of monthly Return.

3. If GST credit is delayed/denied to BHEL due to non/delayed receipt of goods and/or tax invoice or expiry of timeline prescribed in GST law for availing such ITC, or any other reasons not attributable to BHEL, GST amount shall be recoverable from vendor along with interest levied/leviable on BHEL.
4. Further, in case vendor delays declaring such invoice in his return and GST credit availed by BHEL is denied or reversed subsequently as per GST law, GST amount paid by BHEL towards such ITC reversal as per GST law shall be recoverable from vendor/contractor along with interest levied/leviable on BHEL.

### **13. LIABILITY UNDER REVERSE CHARGE (RCM)**

Any GST liability arising on BHEL under Reverse Charge (RCM) before actual receipt of goods and/ or Invoice thereof would be subject to recovery of Interest leviable for the period between the date of such liability and actual date of eligibility of ITC based on receipt of goods, receipt of Invoices and other conditions specified in GST Law as applicable.

### **14. ACCESS TO MANUFACTURING PREMISES**

While Purchase Orders placed on the vendor are under execution, authorized representatives of BHEL shall be allowed free access to the manufacturing facilities for the purpose of inspection or monitoring the progress of purchase orders. This access will also be extended to representatives of BHEL's customers accompanying the authorized representative/s of BHEL (which shall be intimated in advance), if our contractual requirements with our customers call for the same.

### **15. INSPECTION**

1. The seller shall give adequate notice, of 1 week or as mutually agreed period, in writing to the Purchaser about the date and place at which the goods will be ready for inspection/ testing, as provided for in the contract.
2. Purchaser or his authorized representative shall be entitled to carry out inspection of material and workmanship/Surveillance Audit at Seller's premises or at his sub-contractor's premises at all reasonable times during execution of contract; Such inspection, examination and testing, if made, shall not absolve the Seller from his obligations under the contract. No additional charges shall be claimed for such inspections. Moreover, all required infrastructure (testing, tools etc) have to be arranged by supplier.
3. Any inspection carried out before supply by vendor/incoming stage at BHEL notwithstanding, if any defect/non-conformity is noted during processing, the same shall be attended/replaced by vendor at no extra cost.
4. BHEL representative from unit or CQ is authorized to carry out audits along with TPIA at vendor's works before clearing the items for dispatch.
5. Necessary tooling including thread gauges etc. have to be arranged by vendor. Only in exceptional cases, based on BHEL discretions item/nature, BHEL may consider request to provide gauges if available with BHEL. But in no case this shall be linked with delivery of material.

## **16. GUARANTEE / WARRANTEE AND CORRESPONDING REPAIR / REPLACEMENT OF GOODS**

Goods shall comply with the specifications for material, workmanship and performance. Vendor shall give a guarantee / warrantee of 18 months from the date of dispatch or 12 months from date of receipt, against manufacturing defects, whichever is earlier. In case of non-acceptance of this term, bid will be rejected.

If the material is rejected due to defective workmanship during inspection or at the time of actual use, within the guarantee / warrantee period, the rejected material shall be replaced by the supplier. Corresponding quantity shall be treated as unsupplied against respective purchase order till replacement is received at BHEL. If the material is found defective and rejected during use for which payment has already been released the rejected quantity shall be supplied free of cost by the vendor within a month of intimation of the rejection by BHEL.

Lifting of rejected material is under Supplier's scope. BHEL will inform related invoice, quantity etc. to supplier. Supplier is expected to give the plan to lift and advance intimation when visiting to lift the material. Material should be lifted within one month from date of intimation. After one month BHEL will not be responsible for rejected material. BHEL may decide to send the rejected material on to Pay basis to supplier. Any leniency/ unresponsiveness/delay on part of supplier may lead to appropriate action by BHEL. Any request to postpone in written may be considered but replacement should not be linked with lifting of material.

## **17. LOI (LETTER OF INTENT)**

BHEL may issue LOI prior to the PO for any reason whatsoever. The LOI in such cases is to be treated as PO for all practical purposes and all the Terms & Conditions of the tender shall be applicable from the date of issue of LOI.

## **18. SUB-CONTRACT**

The purchase order or any part thereof shall not be sub-contracted, assigned or otherwise transferred without previously obtaining the BHEL's consent in writing.

## **19. RISK PURCHASE**

BHEL shall be entitled to terminate the contract/pending POs at any stage and to purchase elsewhere at the risk and cost of the vendor, either the whole of the goods or any part thereof which the supplier has failed to deliver or dispatch within the time stipulated as aforesaid. Vendor shall be liable for the losses, which BHEL may sustain by way of such risk purchase.

## **20. FORCE MAJEURE**

If at any time during the continuance of the contract, the performance in which or in any part by either party of any obligations under the contract are prevented or delayed by reason of any war, hostilities, acts of public enemy, civil commotion, sabotage, fires, explosions, epidemics, quarantine restrictions, or acts of God (hereinafter referred to "an events" then provided the

notice of happening of any such event is given by either party to the other within 21 days of the occurrence thereof, neither party shall by reason of such event be entitled to terminate the contract nor shall either party have any claim for damages against the other in respect of such non-performance and delay in performance and delivery under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist. If the performance in whole or part of any obligation under the contract is prevented or delayed by reason of any such event, claims of extension of time shall be granted for periods considered reasonable by BHEL subject to prior notification by the vendor to BHEL of the particulars of the event and supply to BHEL, if required, of any supporting evidence. Any waiver of time in respect of partial installment shall not be deemed a waiver of time in respect of remaining deliveries.

## 21. CLARIFICATIONS

The correspondence exchanged against the tender from both tenderer and BHEL through email/e-procurement are considered as valid document legally though it is not signed. It is treated as valid confirmations made on behalf of the respective company and very much comes under the legal ambit of the business transaction and hence it is binding on both the parties to the business. Any transaction pertaining to the tender from both the parties of business done round the clock irrespective of the office or business hours of the companies, are valid legally and binding on both the parties. This applies to the extent only in such cases where deadline time for transaction is not specifically declared by either or both the parties to the business.

## 22. PREFERENCES FOR MICRO AND SMALL ENTERPRISES (MSEs)

Preferences as mentioned in “Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012” & “Public Procurement Policy for Micro and Small Enterprises (MSEs) Amendment Order, 2018”, or as per latest guidelines issued by government shall be given to Micro and Small enterprises.

Main points which are mentioned in the above orders are as follows:

- 25% Procurement of the tender value shall be made from MSE (Micro, Small Enterprises) firms.
- 25% of the 25% quantity (i.e. 6.25% of the tender quantity) offered to the MSE's shall be reserved for MSE's owned by SC/STs. Failure to participate by any MSE owned by SC/ST's; this 6.25% quantity shall be procured from other MSEs.
- 3% from within the 25% quantity offered to the MSE's shall be reserved for women owned MSE's. Failure to participate by any MSE owned by women; this 3% quantity shall be procured from other MSEs.
- EMD shall be exempted for MSE's. All these benefits are subject to production of all statutory documents
- In tender, participating Micro and Small Enterprises quoting price within price band of L1+15 per cent shall also be allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price is from someone other than a Micro and Small Enterprise and such Micro and Small Enterprise shall be allowed to supply up to 25 per cent of total

tendered value. In case of more than one such Micro and Small Enterprise, the supply shall be shared proportionately (to tendered quantity).

MSE suppliers can avail the intended benefits only if they submit along with the offer Udyam Registration Certificate or UAM (Udyog Aadhaar Memorandum) or attested copies of EM II certificate having deemed validity (five years from the date of issue of acknowledgement in EM II) or valid NSIC certificate or EM II certificate along with attested copy of a CA certificate (Format enclosed at Annexure-1, where deemed validity of EM II certificate of five years has expired) applicable for the relevant financial year (latest audited). Date to be reckoned for determining the deemed validity will be the date of bid opening (Part 1 in case of two part bid). Non-submission of such documents will lead to consideration of their bid at par with other bidders. No benefit shall be applicable for this enquiry if any deficiency in the above required documents is not submitted before price bid opening. If the tender is to be submitted through e-procurement portal, then the above required documents are to be uploaded on the portal. Documents should be notarized or attested by a Gazetted officer. **Udyam Certificate / UAM need not required to be notarized or attested.**

### **23. PREFERENCE TO MAKE IN INDIA**

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 04.06.2020 issued by DPIT. 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.

### **24. DISPUTES**

In the event of any dispute and/or difference arising between the Vendor and BHEL as to interpretation and/or execution of the contract and/or the respective rights and liabilities of the parties, such disputes and/or differences shall be referred to the sole arbitrator nominated by BHEL. The provisions of the Indian Arbitration Act and the rules there under shall apply to such arbitration. The award passed by the arbitrator shall be final and conclusively binding on all the parties.

### **25. JURISDICTION**

The court of the place from where the purchase order is issued during the contractual period shall alone have jurisdiction to decide any dispute arising out of or in connection with the purchase order.

### **26. BANNED FIRMS**

The offers of the bidders who are on the banned list as also the offer of the bidders, who engage in the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL website [www.bhel.com](http://www.bhel.com).

### **27. FRAUD PREVENTION POLICY**

The Bidder along with its associate / collaborators / sub-contractors / sub-vendors / consultants / service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL website

<http://www.bhel.com> and shall immediately bring to the notice of BHEL management about any fraud or suspected fraud as soon as it comes to their notice.

## **28. PREVENTIVE CHECKS TO ELIMINATE SUSPECTED CARTEL FORMATION**

The Bidder declares 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.

## **29. SUSPENSION OF BUSINESS DEALINGS WITH DEFAULTERS**

The offers of the bidders who are under suspension as also the offers of the bidders, who engage the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL web site [\*\*www.bhel.com\*\*](http://www.bhel.com).

1.0 Integrity commitment, performance of the contract and punitive action thereof:

1.1. Commitment by BHEL:

BHEL commits to take all measures necessary to prevent corruption in connection with the tender process and execution of the contract. BHEL will during the tender process treat all Bidder(s) in a transparent and fair manner, and with equity.

1.2. Commitment by Bidder/ Supplier/ Contractor:

1.2.1. The bidder/ supplier/ contractor commit to take all measures to prevent corruption and will not directly or indirectly influence any decision or benefit which he is not legally entitled to nor will act or omit in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India.

1.2.2. The bidder/ supplier/ contractor will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract and shall adhere to relevant guidelines issued from time to time by Govt. of India/ BHEL.

1.2.3. The bidder/ supplier/ contractor will perform/ execute the contract as per the contract terms & conditions and will not default without any reasonable cause, which causes loss of business/ money/ reputation, to BHEL.

If any bidder/ supplier/ contractor during pre-tendering/ tendering/ post tendering/ award/ execution/ post-execution stage indulges in mal-practices, cheating, bribery, fraud or and other misconduct or formation of cartel so as to influence the bidding process or influence the price or acts or omits in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India, then, action may be taken against such bidder/ supplier/ contractor as per extant guidelines of the company available on [www. bhel.com](http://www.bhel.com) and/or under applicable legal provisions

### 30. GENERAL

1. BHEL will not be bound by any power of attorney granted by the vendors or by changes in the composition of the firm made subsequent to the execution of the contract. They may, however, recognize such power of attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the vendor concerned.
2. BHEL reserves the right to extend the due date of opening, which shall be informed. Validity of offer shall be deemed to be revised accordingly.
3. BHEL reserves the right to accept or reject any part or whole of the tender of a bidder by assigning a valid reason thereof. BHEL reserves the right to cancel the tender without assigning any reason thereof and without any obligation before any commitment.
4. Acceptance of all terms and conditions, in the form of signed copy of T&C or confirmation separately written, shall be submitted along with quotation. If nothing is mentioned, it shall be concluded that terms and conditions are acceptable.
5. BHEL may increase/decrease item/s based on BHEL requirement before price bid opening. Suitable price implication may be asked from suppliers.
6. BHEL may drop item/items from tender at any stage of tender before placing PO. BHEL may also delete PO with consent with supplier within delivery date of PO.
7. After releasing PO, it is assumed that supplier has accepted PO if we do not receive acknowledgement from supplier within 5 days of date of PO.
8. In case of unscheduled holiday on opening day of tender, the next working day will be treated as scheduled prescribed day of opening of tender.
9. On the due date of tender opening, only technical bids will be opened. The opened technical bids will be evaluated by us and clarifications required, if any, will be called for from the bidders on technical and commercial points. If no reply is received from the vendor for the clarification raised by BHEL within the final cut-off date, those vendors offer will be processed with the documents available / submitted against this tender. Offers not meeting the required specification and technical condition will be summarily rejected. The price bids of technically suitable bidders will be opened on a later date with prior intimation to techno-commercially suitable bidders.
10. Ranking L-1, L-2 etc. shall be done for individual item for the techno-commercially acceptable offers on landed cost to BHEL, IVP Goindwal basis and BHEL reserves the right to place order for individual items with different vendors.
11. BHEL reserves the right to negotiate with L1 vendor or re-float the tender for items where, L1 price is not the lowest acceptable price; BHEL reserves the right to increase or decrease the tender quantity.
12. If supplier is mentioning delivery destination within state/ outside state depending upon his location of factory, Free on Road etc. these are assumed as on FOR Goindwal. If supplier is wishing to give delivery on Ex works basis, then he has to clearly mention about it.
13. The bidder has to keep track of any changes by viewing the addendum / Corrigendum's issued by the Purchaser on time-to- time basis in the E-Procurement platform. The Company calling for tenders shall not be responsible for any claims/problems arising out of this.
14. Any term in special tender terms and conditions will supersede the GCC.

## Annexure-I

### Pre-Qualification Requirements (PQR) for Bidders

**Item:** Machined Aluminum Castings for Wall Blower

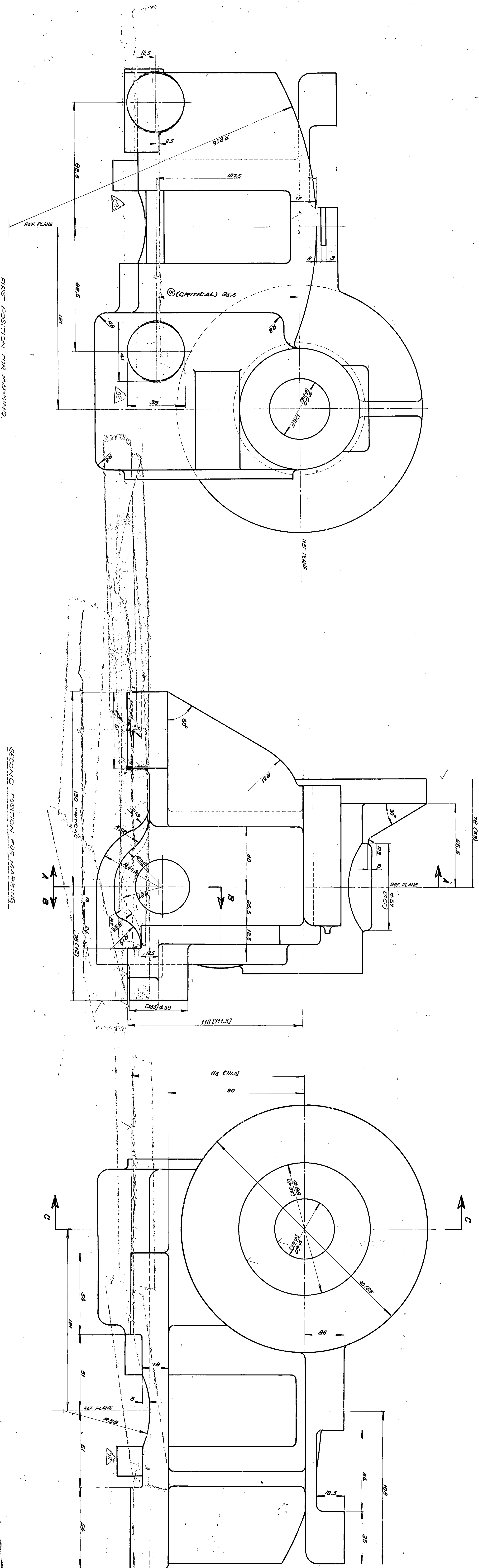
**Bidder must meet the following Technical & Financial criteria as PQR for the tender.** Offers of bidders not meeting these requirements will not be considered for further evaluation.

| Sr. No. | Description of Requirement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Vendor's Confirmation /Comments |                  |                         |                       |                         |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|------------------|-------------------------|-----------------------|-------------------------|-----------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 1.      | <p>Bidder should have experience of manufacturing &amp; supply of machined Aluminium casting of minimum weight 5.0 Kg (Single Component) in last 3 years (PO date should be 01.04.2018 or afterwards). In the support of this, bidders shall furnish the following:</p> <p>a. Experience list of castings as per the following format:</p> <table><tr><th>Sr. No.</th><th>Unit Weight (Kg)</th><th>Qty.</th><th>PO No.</th><th>Customer Name &amp; Address</th><th>Date / Year of supply</th></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> <p>b. Bidder to furnish the copy of PO &amp; corresponding invoice copy as proof of supply of at least one PO from the above experience list. The weight of supplies must be clearly evident in submitted documents (PO / drawing/invoice copy etc.).</p> | Sr. No.                         | Unit Weight (Kg) | Qty.                    | PO No.                | Customer Name & Address | Date / Year of supply |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sr. No. | Unit Weight (Kg)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Qty.                            | PO No.           | Customer Name & Address | Date / Year of supply |                         |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| 2.      | <p>Bidder should have successfully supplied Aluminium Castings against any customer purchase order(s) with minimum cumulative order value of Rs. 15,00,000 (Fifteen Lakh Only). Relevant purchase orders along with tax invoice shall be enclosed as a proof of supply. Purchase Order/s date should be 01.04.2018 or afterwards.</p> <p><b>For MSEs</b>, the required cumulative value of PO value shall be Rs. 7,00,000 (Seven Lakh only). For Claiming MSE benefits, bidder have to provide Udyam Registration Certificate only. No other document shall be considered for availing MSE benefits.</p>                                                                                                                                                                                                                                                                                           |                                 |                  |                         |                       |                         |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3.      | <p>Bidder must confirm that they have suitable in-house manufacturing facilities for enquiry items. Bidder to furnish details of facilities (size, range, capacity etc.) for handling, melting, casting and machining available in-house.</p> <p>In case machining is being outsourced, bidder to provide details of outsourcing vendor with their facilities for machining the enquiry items.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                 |                  |                         |                       |                         |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4.      | <p>Bidder must confirm to supply enquiry items as per enquiry specification and drawing without any deviation.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                 |                  |                         |                       |                         |                       |  |  |  |  |  |  |  |  |  |  |  |  |  |

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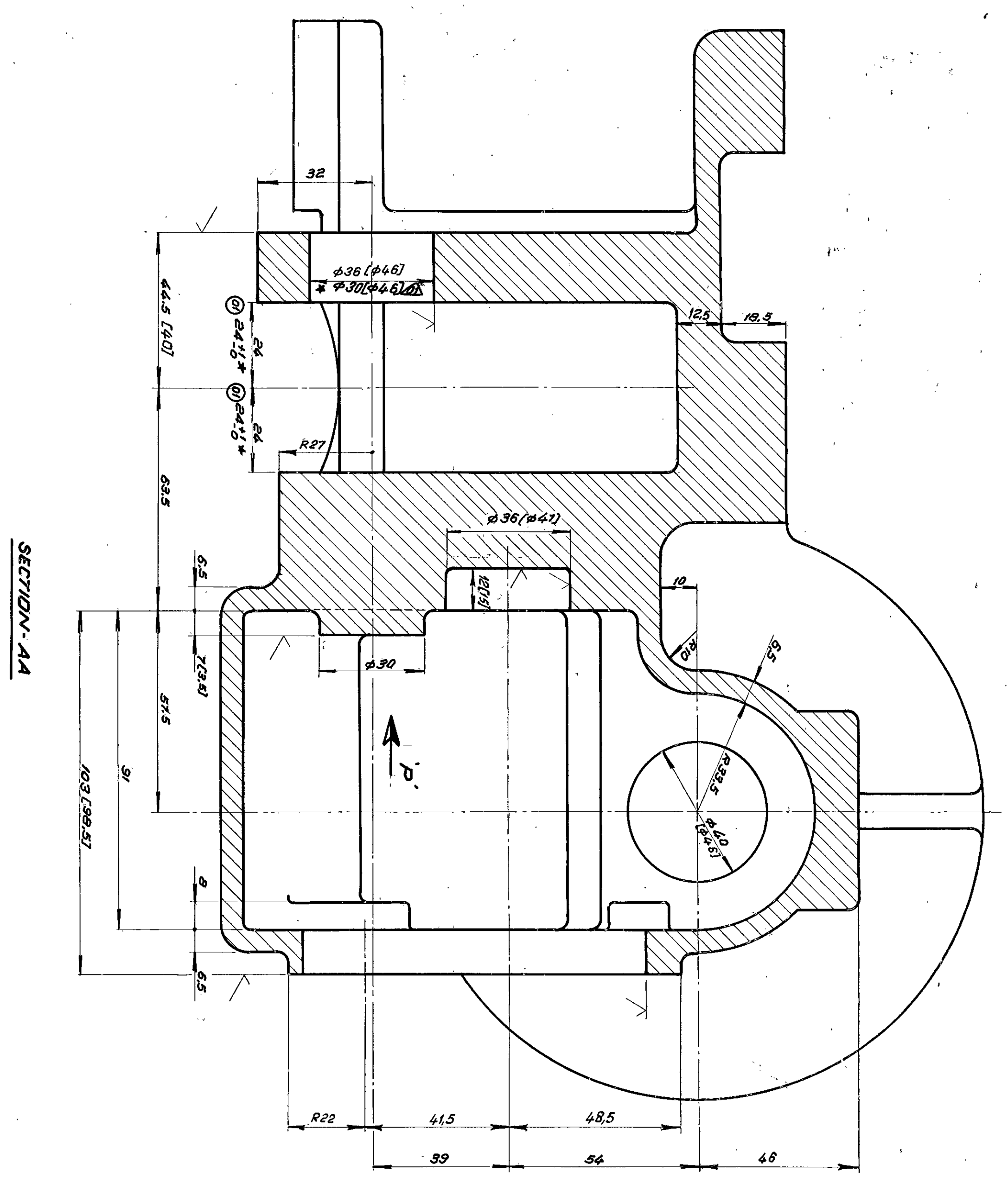
- Start-ups shall be exempted** from the above criteria against sr. no. 1 & 2 without any relaxation in quality standards or technical parameters as per D.O. No. 5(4)/2016-BE-I dated 15.02.2017. For claiming Start-Up exemption, vendors have to submit DPIIT (Dept. of Promotion of Industry and Internal Trade)/DIPP (Department for Industrial Policy and Promotion) recognition certificates
- All the documents shall be submitted in consolidated manner documents and should be in English language.

**Bidder's seal & sign**

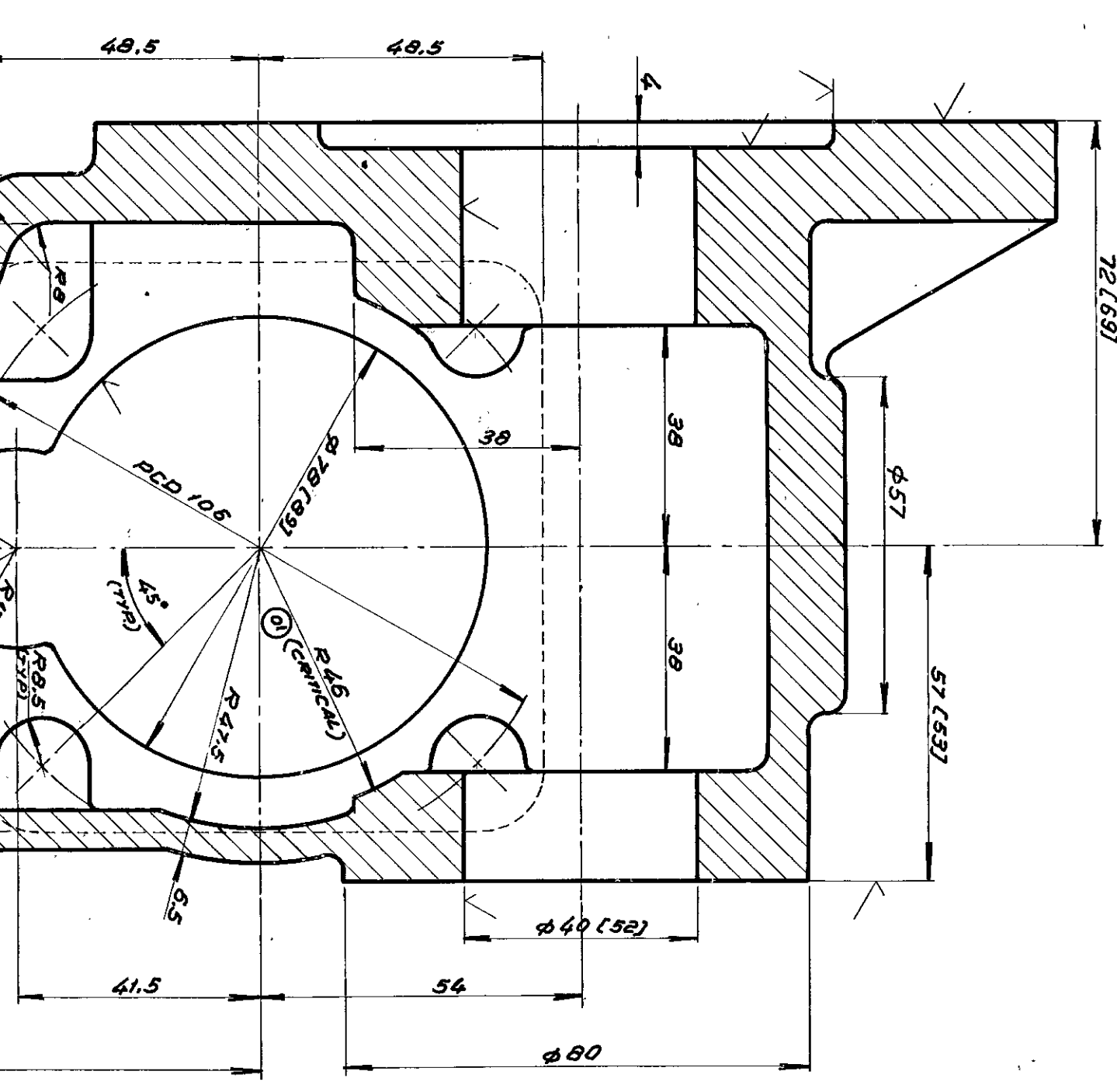
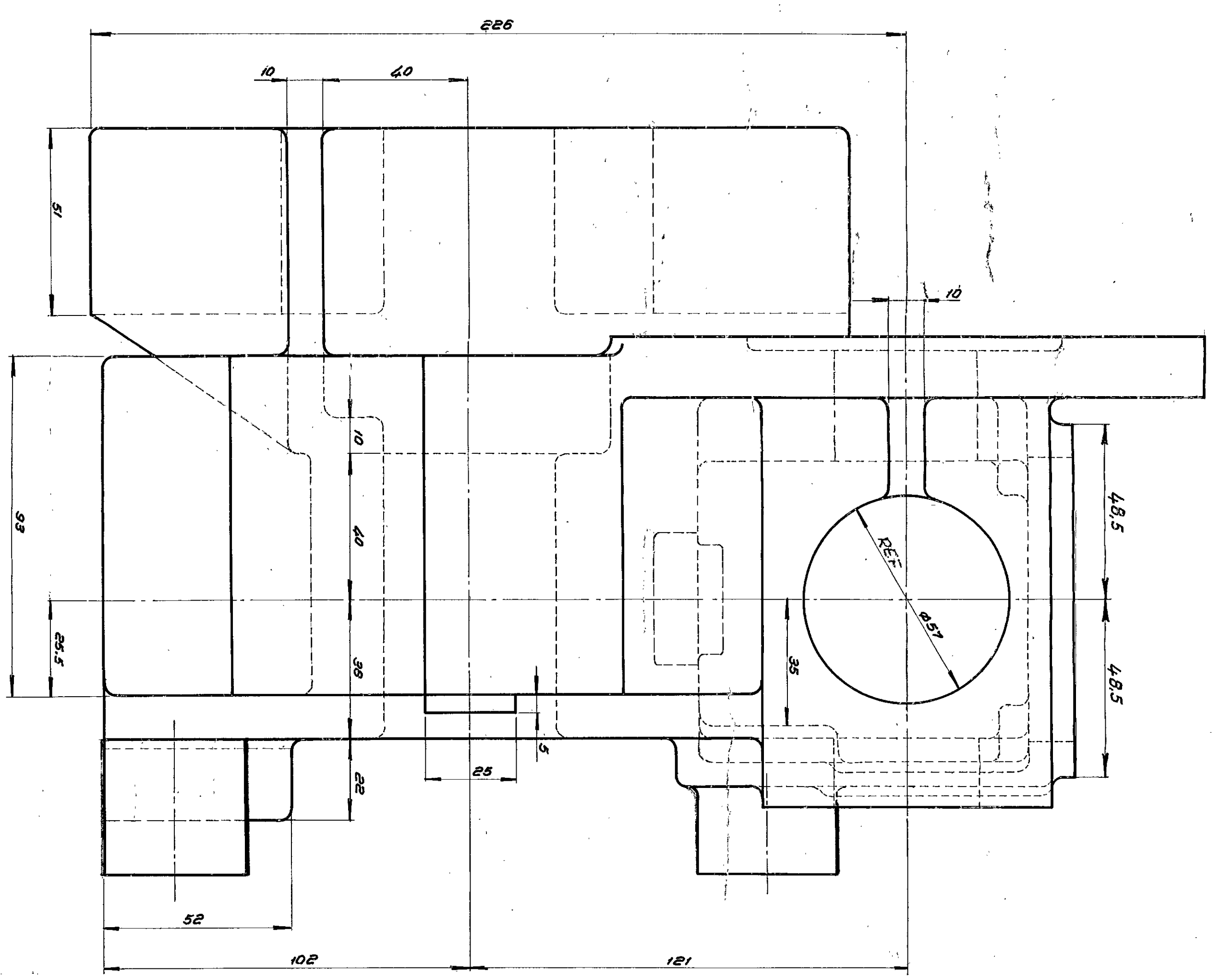


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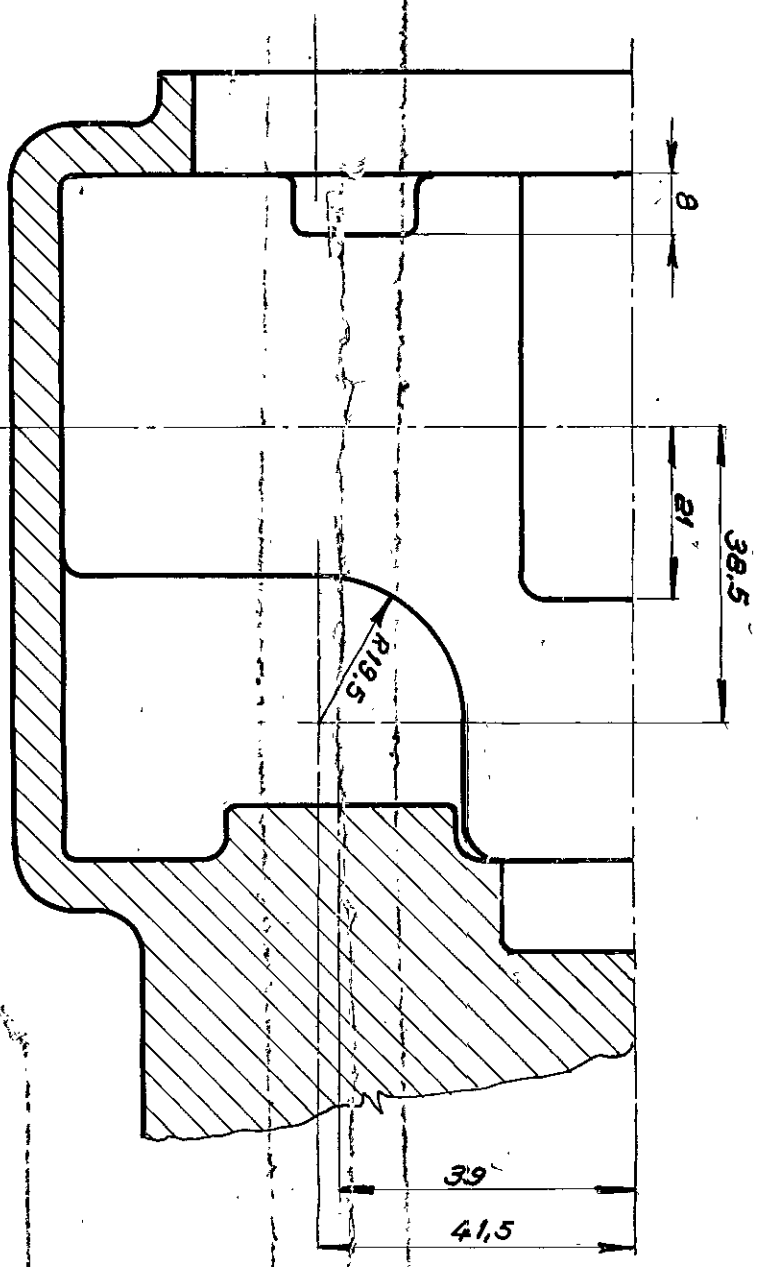
SECOND POSITION FOR MACHINING



SECTION-A-A



SECTION-B-B



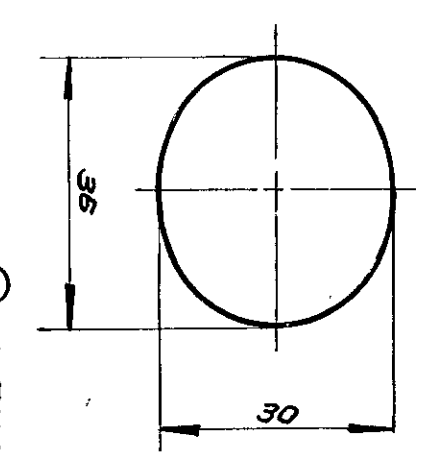
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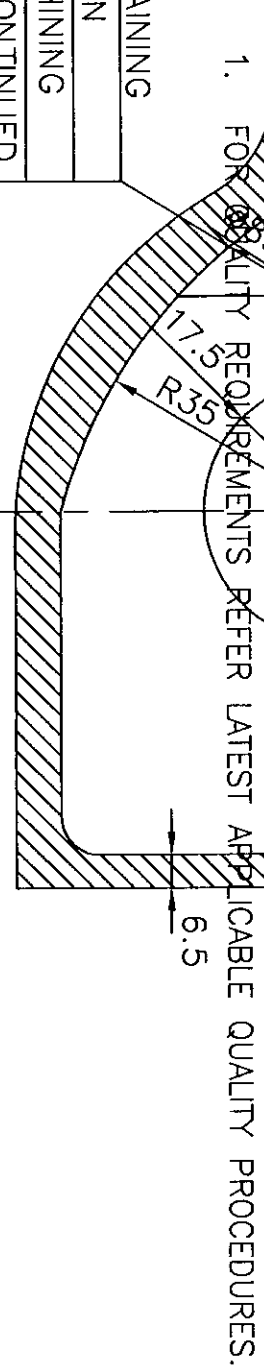
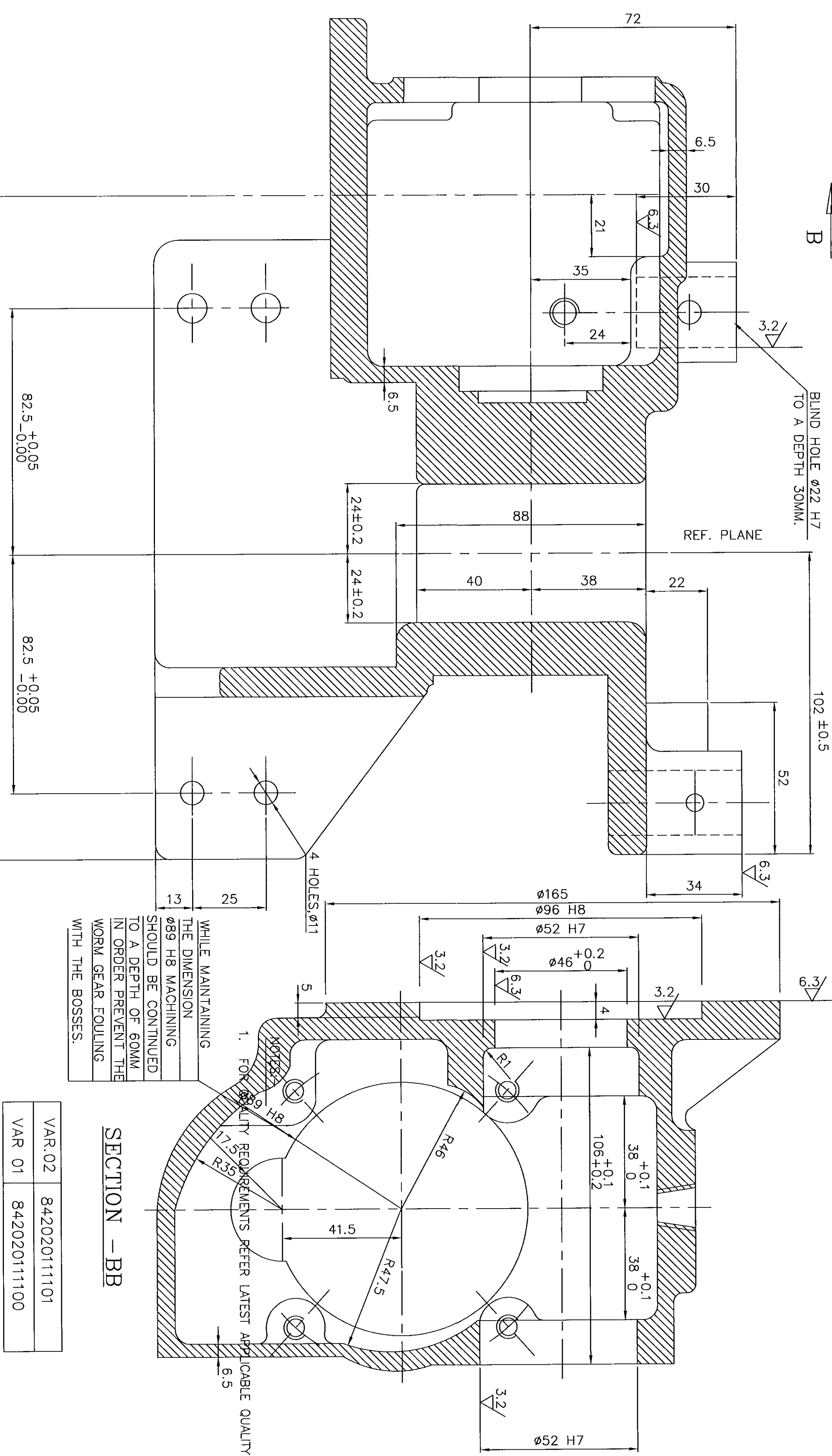
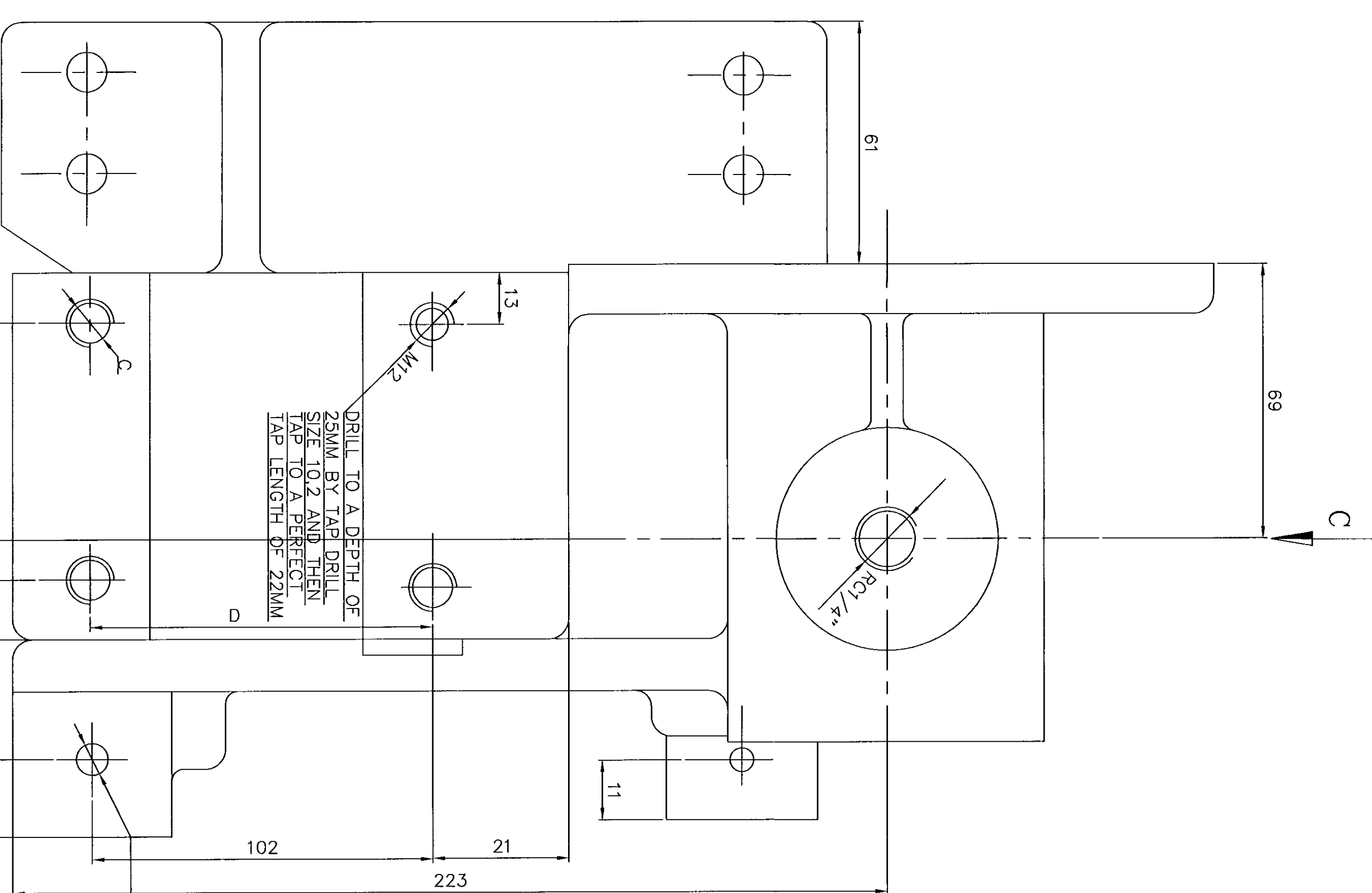
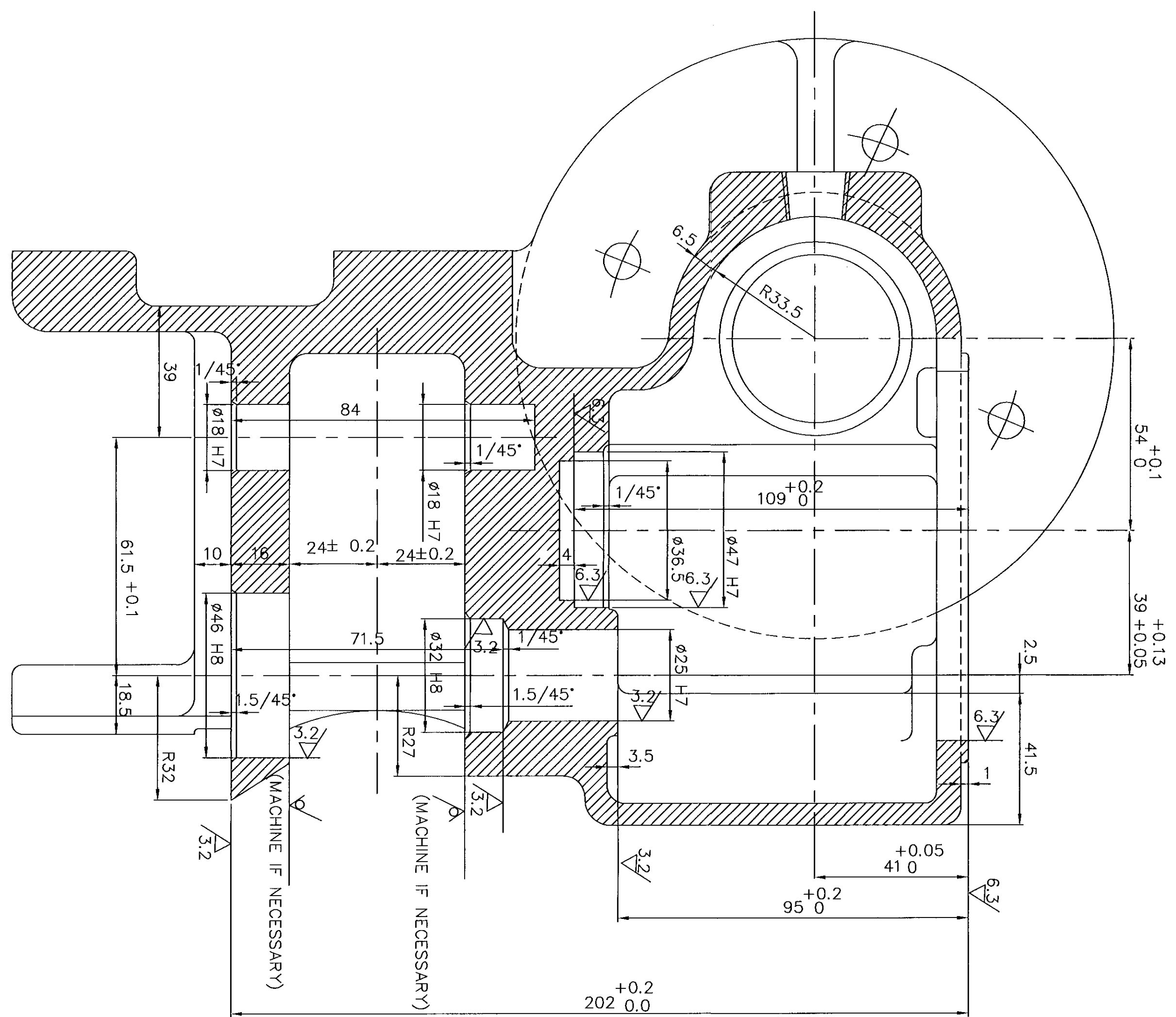
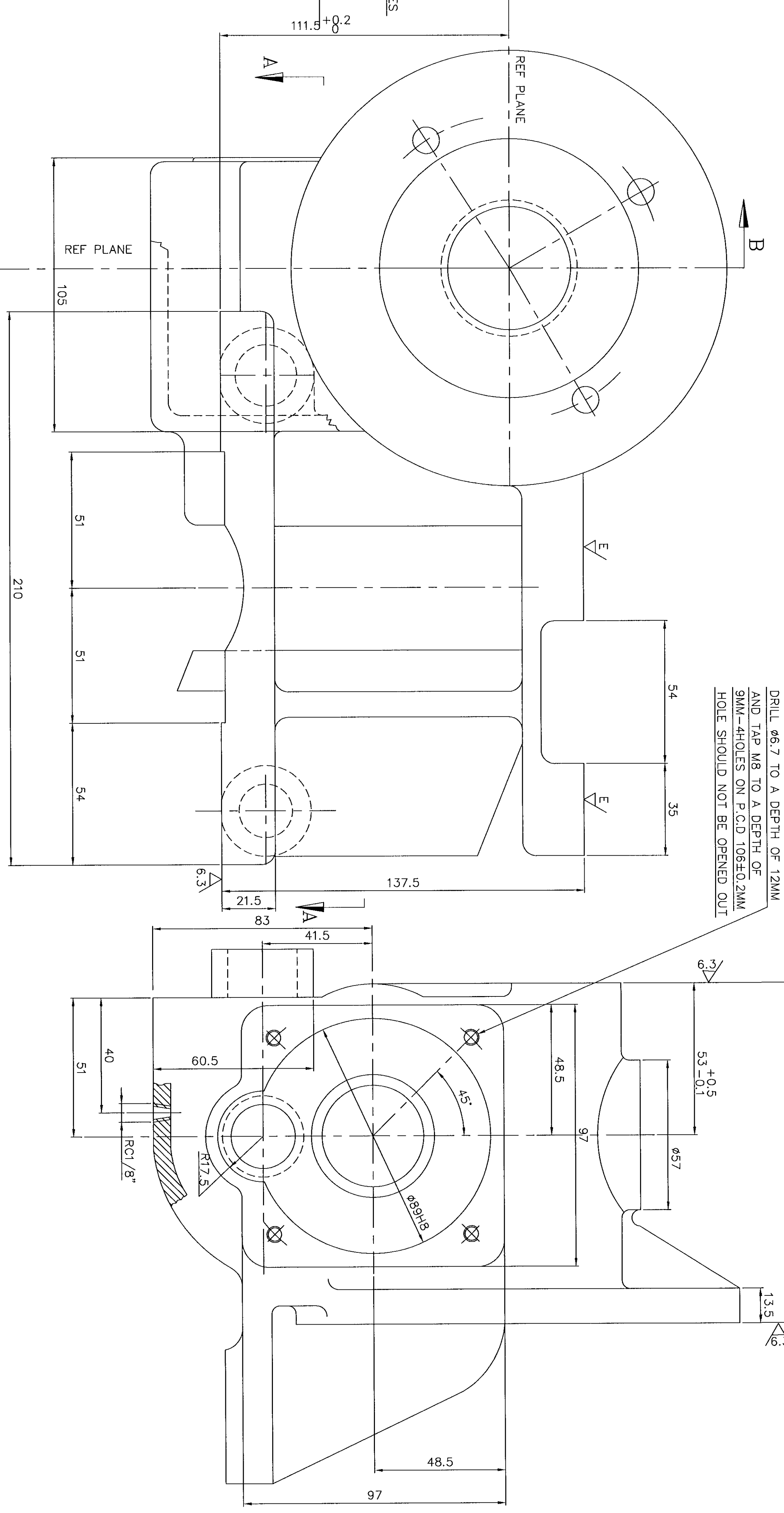
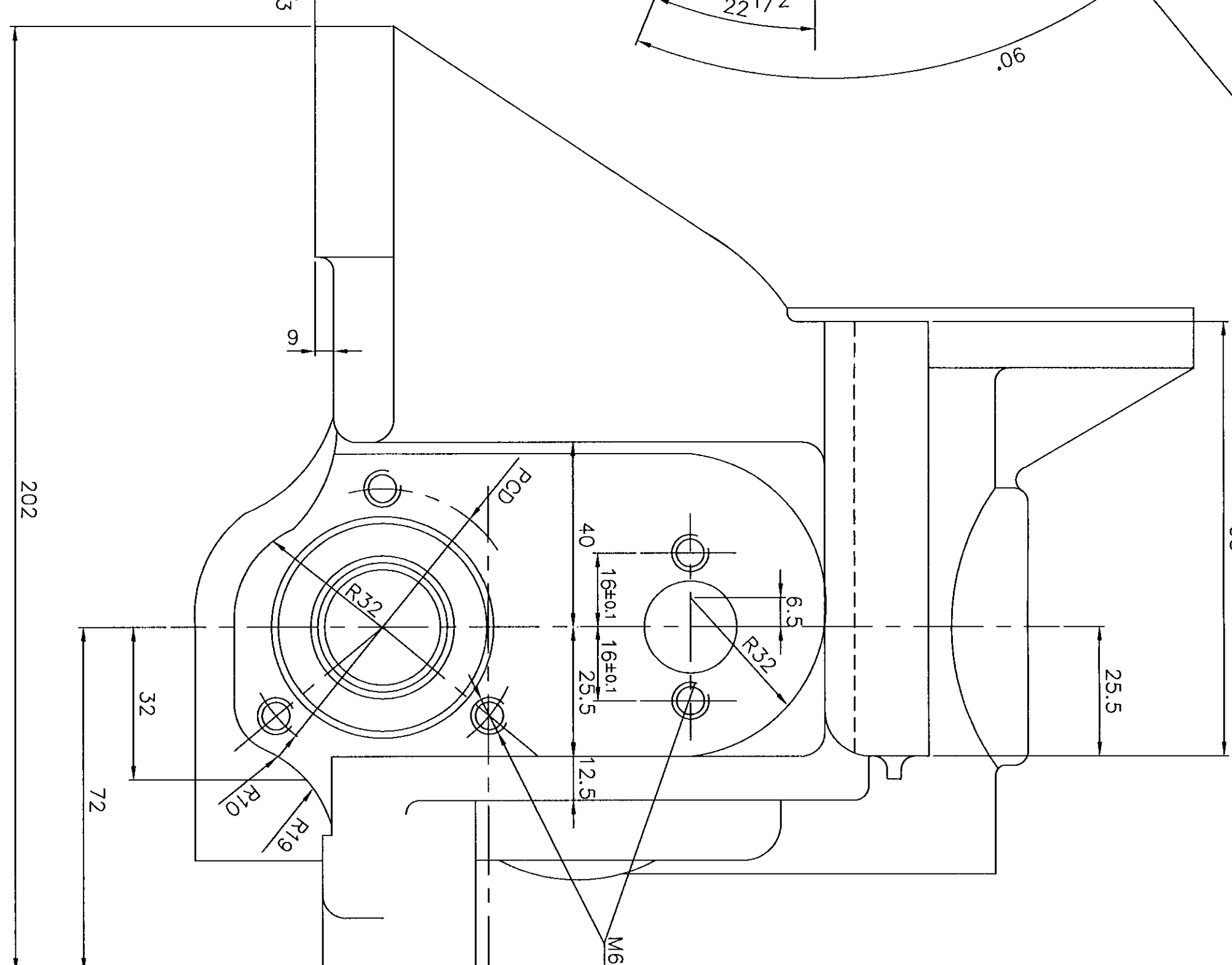
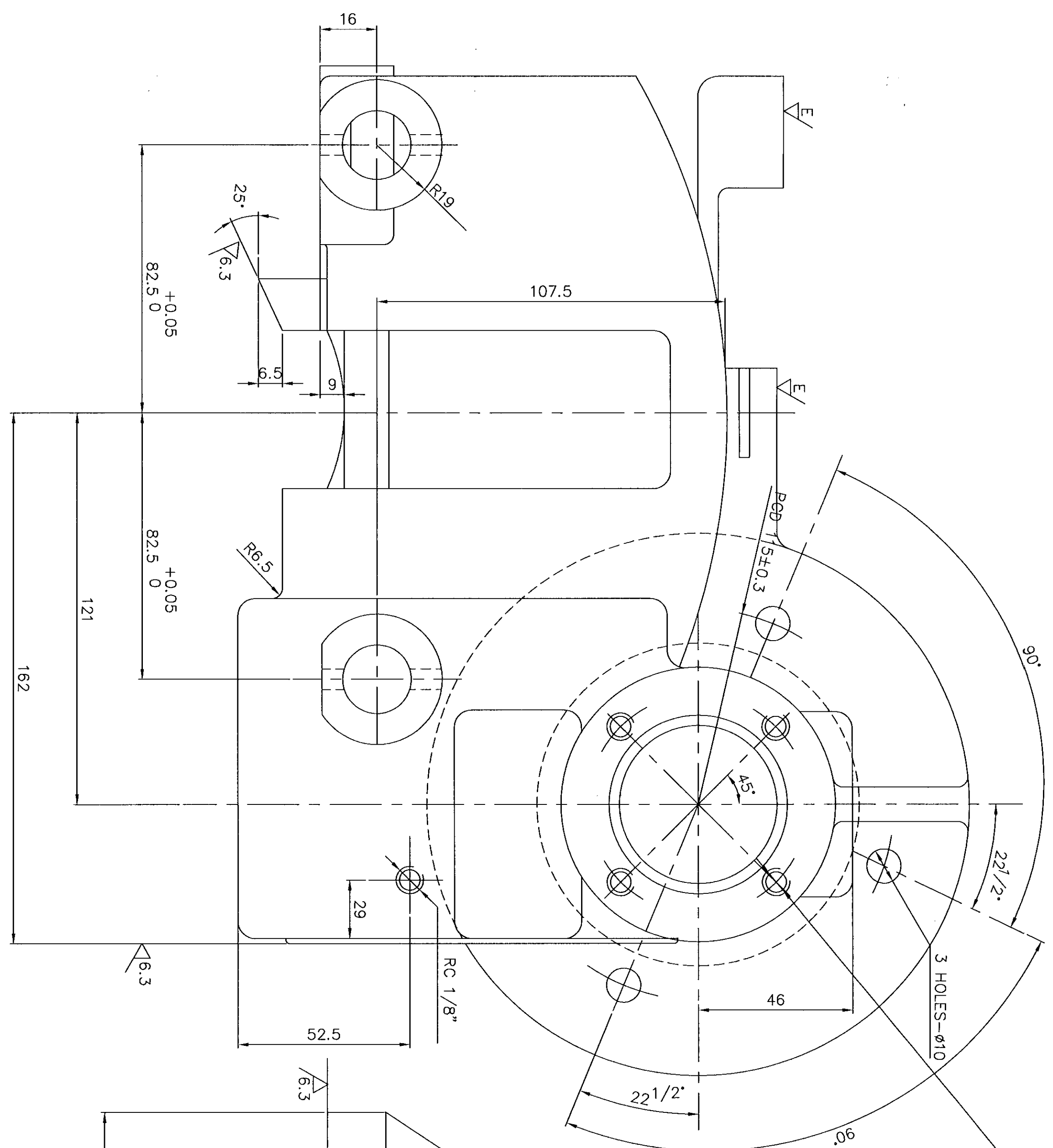
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| 98                   | CASTING     | 98       | CASTING     |
| 99                   | CASTING     | 99       | CASTING     |
| 100                  | CASTING     | 100      | CASTING     |

CAUTION  
RACH GEAR INDUSTRY  
0-20-201-00001  
04



WEN-2\*

| ITEM NO. | DESCRIPTION | ITEM NO. | DESCRIPTION |
|----------|-------------|----------|-------------|
| 1        | CASTING     | 1        | CASTING     |
| 2        | CASTING     | 2        | CASTING     |
| 3        | CASTING     | 3        | CASTING     |
| 4        | CASTING     | 4        | CASTING     |
| 5        | CASTING     | 5        | CASTING     |
| 6        | CASTING     | 6        | CASTING     |
| 7        | CASTING     | 7        | CASTING     |
| 8        | CASTING     | 8        | CASTING     |
| 9        | CASTING     | 9        | CASTING     |
| 10       | CASTING     | 10       | CASTING     |
| 11       | CASTING     | 11       | CASTING     |
| 12       | CASTING     | 12       | CASTING     |
| 13       | CASTING     | 13       | CASTING     |
| 14       | CASTING     | 14       | CASTING     |
| 15       | CASTING     | 15       | CASTING     |
| 16       | CASTING     | 16       | CASTING     |
| 17       | CASTING     | 17       | CASTING     |
| 18       | CASTING     | 18       | CASTING     |
| 19       | CASTING     | 19       | CASTING     |
| 20       | CASTING     | 20       | CASTING     |
| 21       | CASTING     | 21       | CASTING     |
| 22       | CASTING     | 22       | CASTING     |
| 23       | CASTING     | 23       | CASTING     |
| 24       | CASTING     | 24       | CASTING     |
| 25       | CASTING     | 25       | CASTING     |
| 26       | CASTING     | 26       | CASTING     |
| 27       | CASTING     | 27       | CASTING     |
| 28       | CASTING     | 28       | CASTING     |
| 29       | CASTING     | 29       | CASTING     |
| 30       | CASTING     | 30       | CASTING     |
| 31       | CASTING     | 31       | CASTING     |
| 32       | CASTING     | 32       | CASTING     |
| 33       | CASTING     | 33       | CASTING     |
| 34       | CASTING     | 34       | CASTING     |
| 35       | CASTING     | 35       | CASTING     |
| 36       | CASTING     | 36       | CASTING     |
| 37       | CASTING     | 37       | CASTING     |
| 38       | CASTING     | 38       | CASTING     |
| 39       | CASTING     | 39       | CASTING     |
| 40       | CASTING     | 40       | CASTING     |
| 41       | CASTING     | 41       | CASTING     |
| 42       | CASTING     | 42       | CASTING     |
| 43       | CASTING     | 43       | CASTING     |
| 44       | CASTING     | 44       | CASTING     |
| 45       | CASTING     | 45       | CASTING     |
| 46       | CASTING     | 46       | CASTING     |
| 47       | CASTING     | 47       | CASTING     |
| 48       | CASTING     | 48       | CASTING     |
| 49       | CASTING     | 49       | CASTING     |
| 50       | CASTING     | 50       | CASTING     |
| 51       | CASTING     | 51       | CASTING     |
| 52       | CASTING     | 52       | CASTING     |
| 53       | CASTING     | 53       | CASTING     |
| 54       | CASTING     | 54       | CASTING     |
| 55       | CASTING     | 55       | CASTING     |
| 56       | CASTING     | 56       | CASTING     |
| 57       | CASTING     | 57       | CASTING     |
| 58       | CASTING     | 58       | CASTING     |
| 59       | CASTING     | 59       | CASTING     |
| 60       | CASTING     | 60       | CASTING     |
| 61       | CASTING     | 61       | CASTING     |
| 62       | CASTING     | 62       | CASTING     |
| 63       | CASTING     | 63       | CASTING     |
| 64       | CASTING     | 64       | CASTING     |
| 65       | CASTING     | 65       | CASTING     |
| 66       | CASTING     | 66       | CASTING     |
| 67       | CASTING     | 67       | CASTING     |
| 68       | CASTING     | 68       | CASTING     |
| 69       | CASTING     | 69       | CASTING     |
| 70       | CASTING     | 70       | CASTING     |
| 71       | CASTING     | 71       | CASTING     |
| 72       | CASTING     | 72       | CASTING     |
| 73       | CASTING     | 73       | CASTING     |
| 74       | CASTING     | 74       | CASTING     |
| 75       | CASTING     | 75       | CASTING     |
| 76       | CASTING     | 76       | CASTING     |
| 77       | CASTING     | 77       | CASTING     |
| 78       | CASTING     | 78       | CASTING     |
| 79       | CASTING     | 79       | CASTING     |
| 80       | CASTING     | 80       | CASTING     |
| 81       | CASTING     | 81       | CASTING     |
| 82       | CASTING     | 82       | CASTING     |
| 83       | CASTING     | 83       | CASTING     |
| 84       | CASTING     | 84       | CASTING     |
| 85       | CASTING     | 85       | CASTING     |
| 86       | CASTING     | 86       | CASTING     |
| 87       | CASTING     | 87       | CASTING     |
| 88       | CASTING     | 88       | CASTING     |
| 89       | CASTING     | 89       | CASTING     |
| 90       | CASTING     | 90       | CASTING     |
| 91       | CASTING     | 91       | CASTING     |
| 92       | CASTING     | 92       | CASTING     |
| 93       | CASTING     | 93       | CASTING     |
| 94       | CASTING     | 94       | CASTING     |
| 95       | CASTING     | 95       | CASTING     |
| 96       | CASTING     | 96       | CASTING     |
| 97       | CASTING     | 97       | CASTING     |
| 98       | CASTING     | 98       | CASTING     |
| 99       | CASTING     | 99       | CASTING     |
| 100      | CASTING     | 100      | CASTING     |

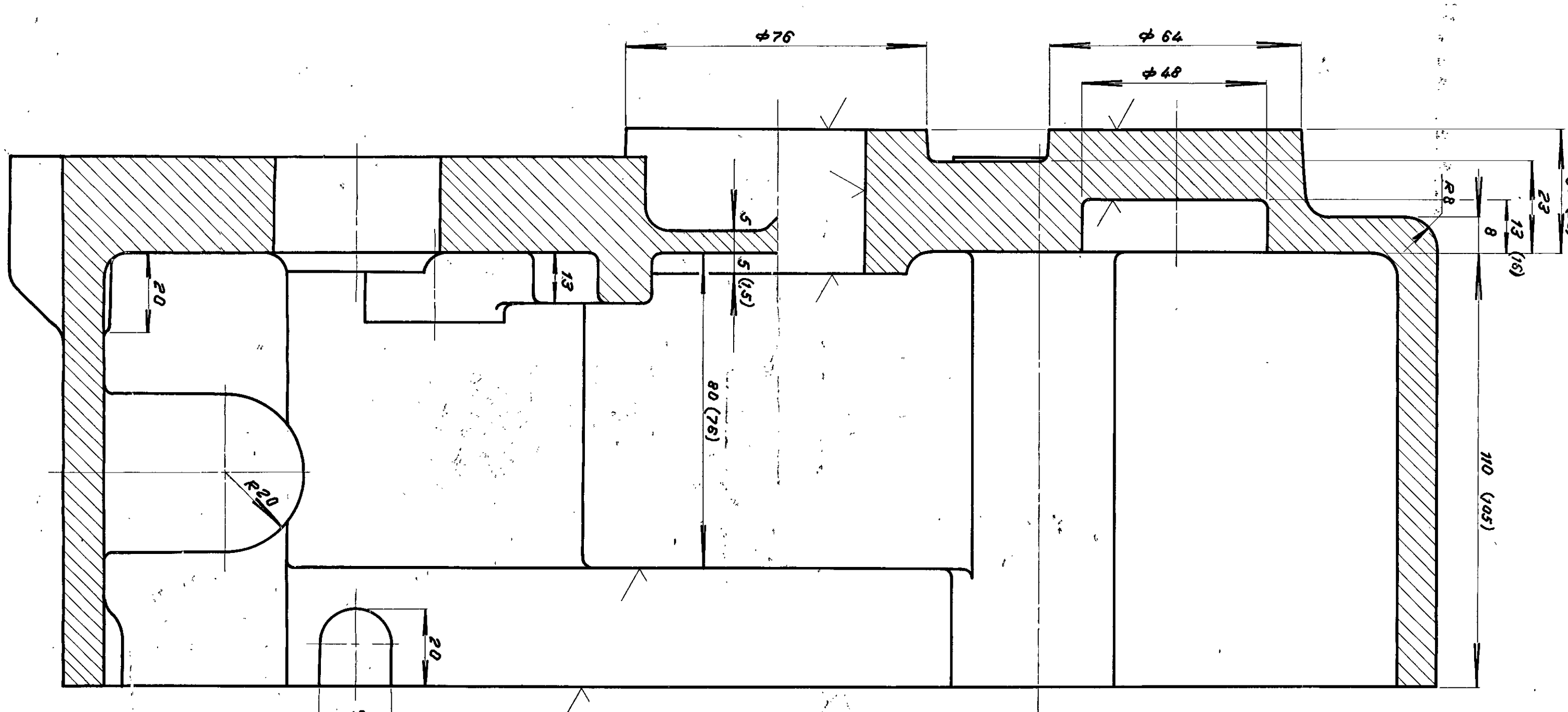
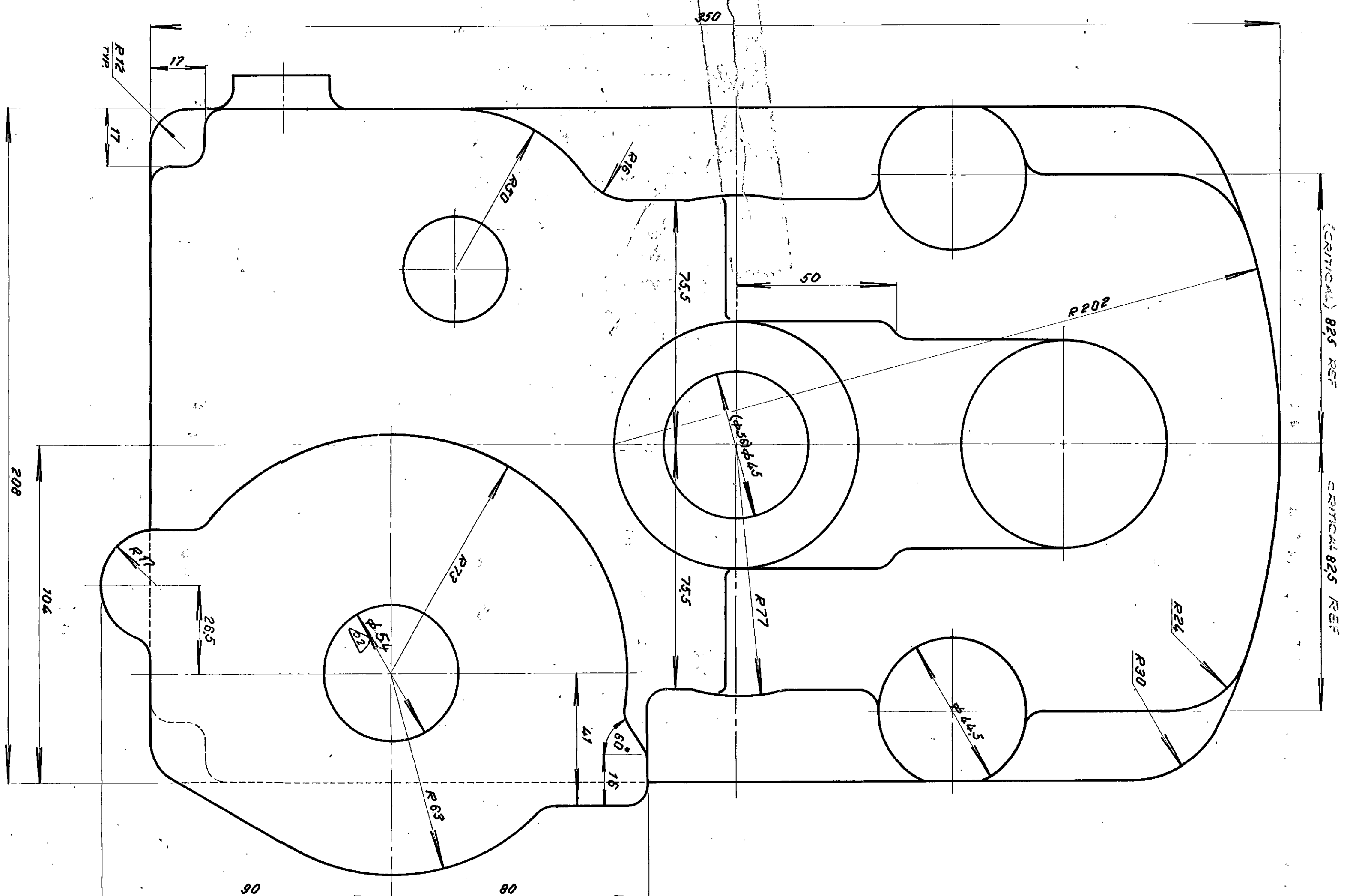
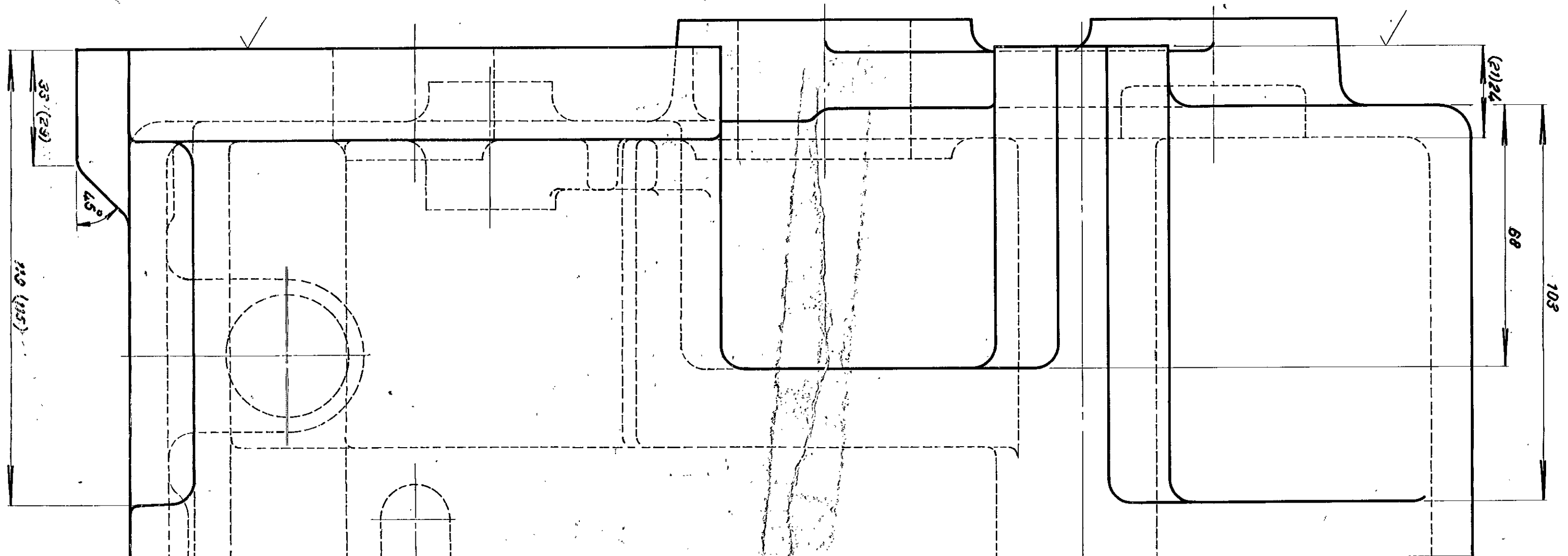
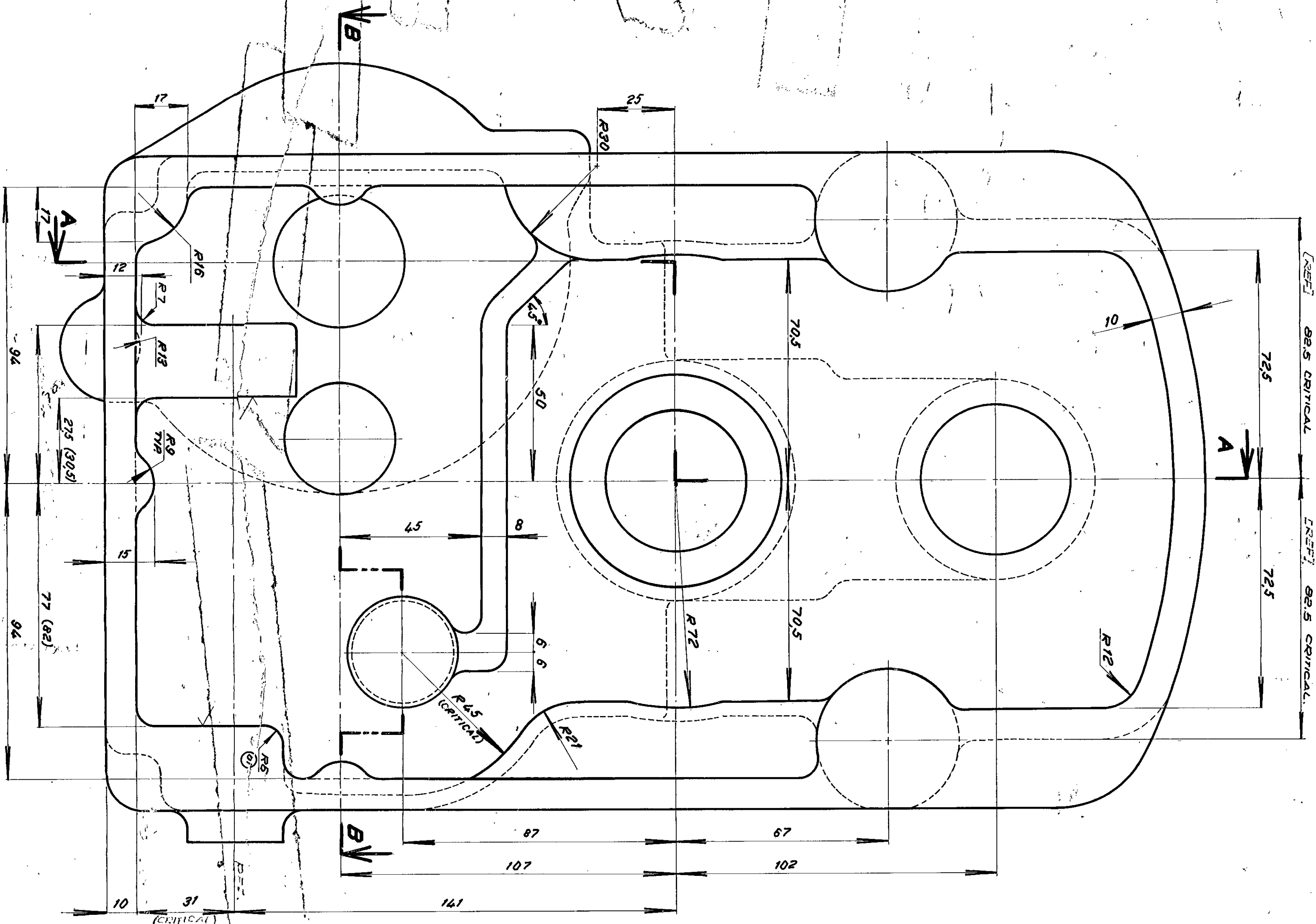


| TOLERANCE VALUES |            |
|------------------|------------|
| 01               | $\pm 0.02$ |
| 02               | $\pm 0.02$ |
| 03               | $\pm 0.02$ |
| 04               | $\pm 0.04$ |
| 05               | $\pm 0.04$ |
| 06               | $\pm 0.03$ |
| 07               | $\pm 0.03$ |
| 08               | $\pm 0.05$ |
| 09               | $\pm 0.05$ |
|                  | $\pm 0.01$ |

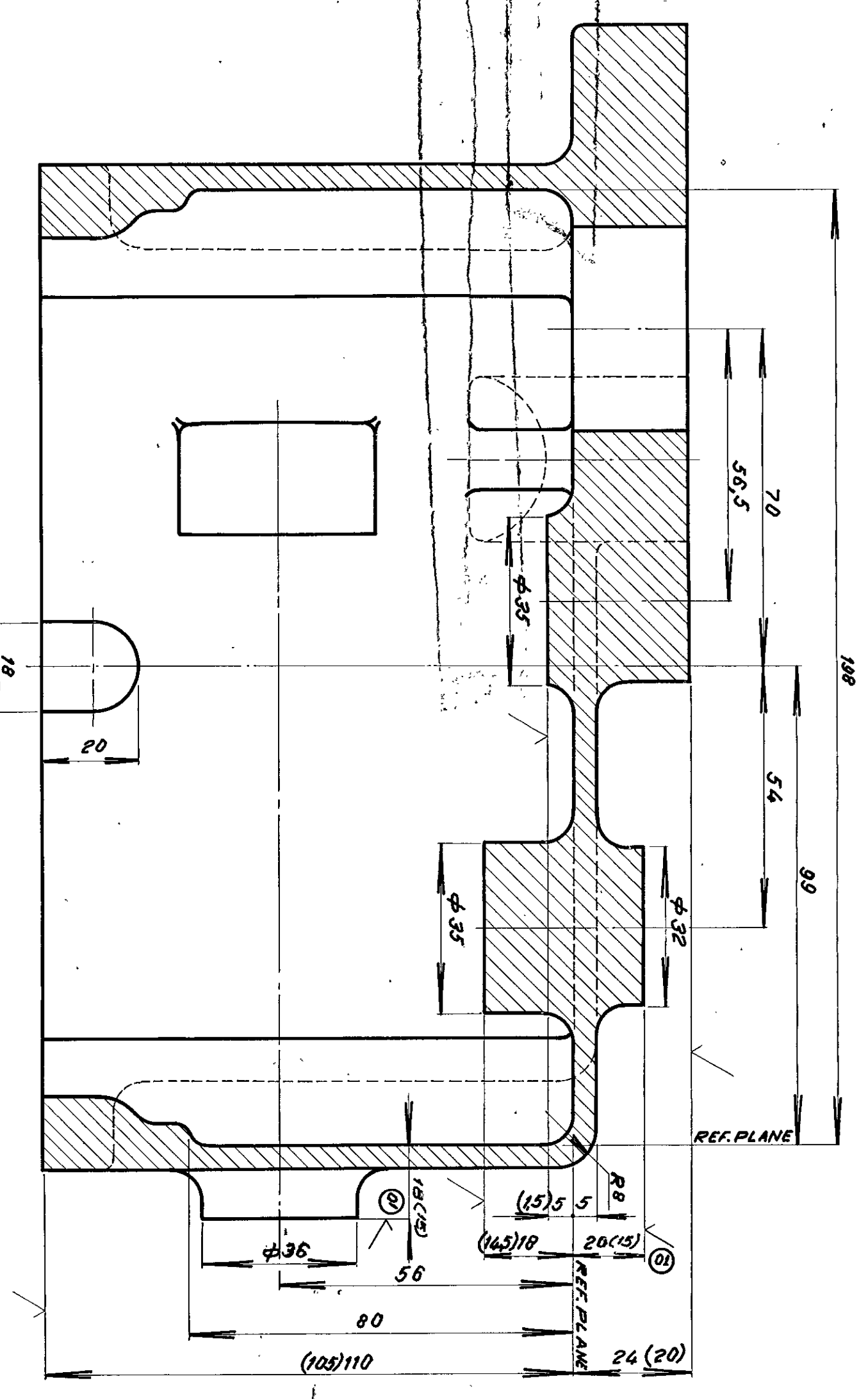
NOTE

1. FOR QUALITY REQUIREMENTS REFER LATEST APPLICABLE QUALITY PROCEDURE.
2. DIM A,B,D & E ARE APPLICABLE FOR VAR NO.2 ONLY (84 20 201 111 01).  
(A=15, B=65, C=M12, 3HOLES D=102, E=12,5

[illegible]



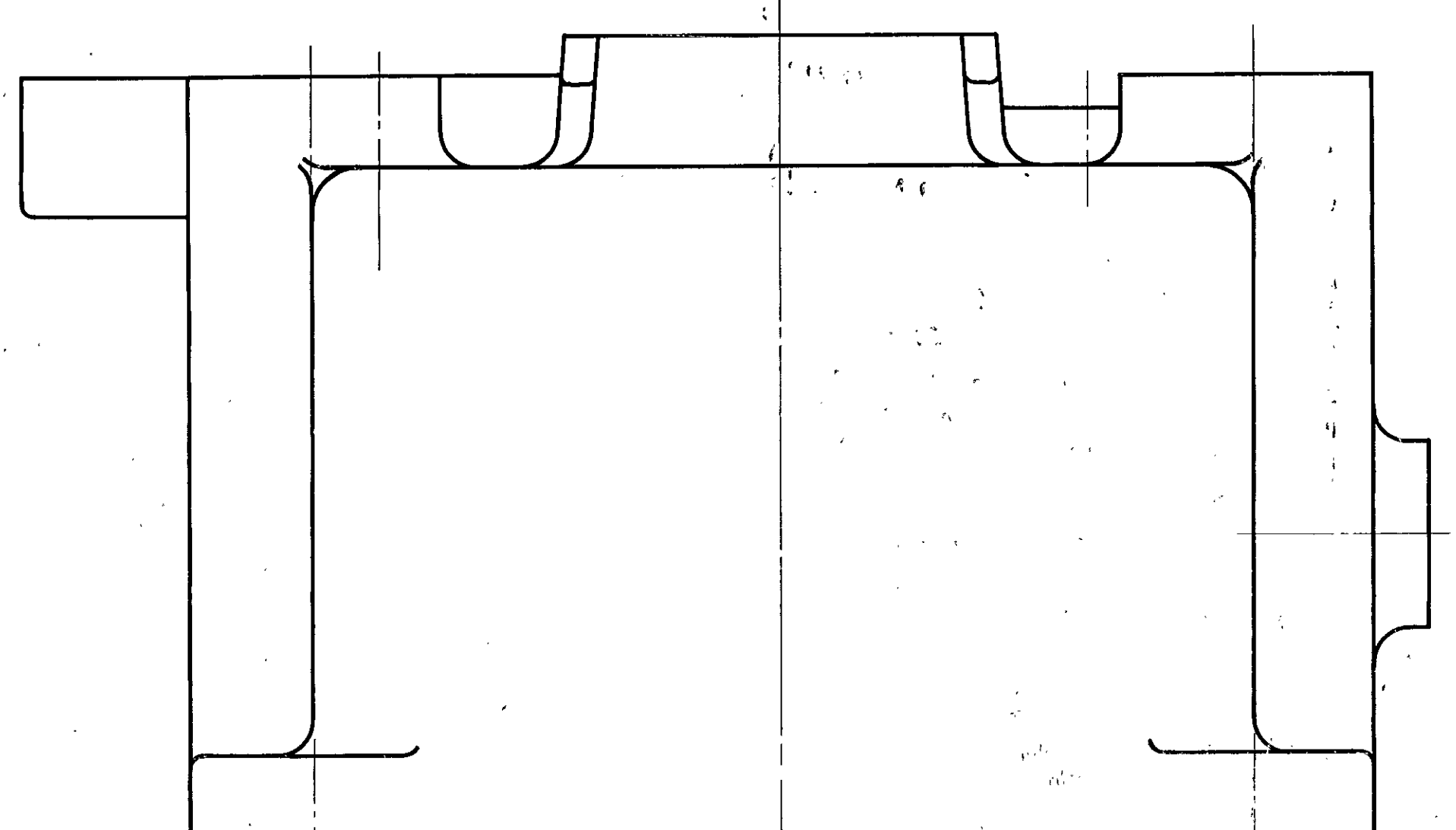
SECTION-A-A.



SECTION-B-B.

FIRST POSITION FOR MARKING.

SECOND POSITION FOR MARKING.



1. ✓ INDICATES THE SURFACES TO BE MACHINED FURTHER.
2. NECESSARY MACHINING ALLOWANCES ARE ALREADY INCLUDED IN THE INDICATED DIMENSIONS AND THE FINISH MACHINED DIMENSIONS ARE GIVEN IN BRACKETS FOR INFORMATION ONLY.
3. DIMENSIONAL DEVIATIONS FOR CASTING IS TO BE STRICTLY AS PER TABLE IV (TOLERANCE OF WORKMAN 0.3) OF ISM-04470.
4. UNSPECIFIED CASTING RADII ARE TO BE 6MM OR 3MM.
5. MATERIAL STANDARD FOR CASTING TO BE ADHERED TO IS 6174 DESIGN 43576. (SOLUTION HEAT TREATED & PRECIPITATION HARDENED)
6. TOLERANCE OF UNTOLEERANDED DIMENSIONS SHOULD BE  $\pm 0.5\%$ .

PROCESS : DIE-CASTING

FOR MACHINE DRAWING REFER DRS. N° 0-20.201.0004.8

| BILL OF MATERIAL NO. |  | ITEM NO. |  | QTY |  | UNIT |  | REMARKS |  |
|----------------------|--|----------|--|-----|--|------|--|---------|--|
| 1                    |  | 2        |  | 3   |  | 4    |  | 5       |  |
| 6                    |  | 7        |  | 8   |  | 9    |  | 10      |  |
| 11                   |  | 12       |  | 13  |  | 14   |  | 15      |  |
| 16                   |  | 17       |  | 18  |  | 19   |  | 20      |  |
| 21                   |  | 22       |  | 23  |  | 24   |  | 25      |  |
| 26                   |  | 27       |  | 28  |  | 29   |  | 30      |  |
| 31                   |  | 32       |  | 33  |  | 34   |  | 35      |  |
| 36                   |  | 37       |  | 38  |  | 39   |  | 40      |  |
| 41                   |  | 42       |  | 43  |  | 44   |  | 45      |  |
| 46                   |  | 47       |  | 48  |  | 49   |  | 50      |  |
| 51                   |  | 52       |  | 53  |  | 54   |  | 55      |  |
| 56                   |  | 57       |  | 58  |  | 59   |  | 60      |  |
| 61                   |  | 62       |  | 63  |  | 64   |  | 65      |  |
| 66                   |  | 67       |  | 68  |  | 69   |  | 70      |  |
| 71                   |  | 72       |  | 73  |  | 74   |  | 75      |  |
| 76                   |  | 77       |  | 78  |  | 79   |  | 80      |  |
| 81                   |  | 82       |  | 83  |  | 84   |  | 85      |  |
| 86                   |  | 87       |  | 88  |  | 89   |  | 90      |  |
| 91                   |  | 92       |  | 93  |  | 94   |  | 95      |  |
| 96                   |  | 97       |  | 98  |  | 99   |  | 100     |  |

**BHARAT HEAVY ELECTRICALS LTD.**  
BOILER PLANT UNIT, THIRUCHIRAPPALLI-620014.

**GEAR HOUSING CASTING**  
0-20-201-00020 04

|          |          |    |    |          |    |
|----------|----------|----|----|----------|----|
| DATE     | 02/03/78 | BY | 01 | REVISION | 01 |
| DESIGNED | 02/03/78 | BY | 01 | REVISION | 01 |
| CHECKED  | 02/03/78 | BY | 01 | REVISION | 01 |
| APPROVED | 02/03/78 | BY | 01 | REVISION | 01 |

