

**NOTICE INVITING EXPRESSION OF INTEREST (EOI)**  
**TERMS OF REFERENCE**


Reference : Specification Number- **TXM/SB-CNC/2023-24-02**

1. **OBJECTIVE OF THIS EXPRESSION OF INTEREST (EOI):** The objective of this EOI is to:
  - a) Solicit proposals from the interested and experienced manufacturers/ suppliers of the proposed procurement.
  - b) On receipt of EOI, technical discussions/ presentations may be held with the manufacturers/ suppliers who are, prima facie, considered technically capable of executing the proposed procurement.
  - c) Arrive at uniform specification & parameters for the proposed procurement and to collect the information about probable suppliers.
2. **CONDITIONS UNDER WHICH THIS EOI IS ISSUED:**
  - a) This EOI is not an offer and is issued with no commitment. BHEL reserves the right to withdraw the EOI and change or vary any part thereof at any stage.
  - b) BHEL reserves the right to withdraw this EOI if such action is in the best interest of the BHEL.
  - c) BHEL reserves the right to finalize specification as per the requirement. Details submitted by the vendors may or may not be the part of the final specification.
  - d) Timing and sequence of events resulting from this EOI shall be determined by BHEL.
  - e) In order to achieve the objective of EOI, the interested manufacturers/suppliers should visit BHEL works with prior appointment for understanding the requirement.
3. **Technical requirements :**

The vendors/ suppliers to furnish details as per specifications mentioned in Annexure-1 (Specification Number- **TXM/SB-CNC/2023-24-02**).
4. **Pre-Qualification Requirement (PQR)**

The vendors/suppliers should fulfil pre-qualification criteria as per Clause 5 of Specifications in Annexure-1 (Specification Number- **TXM/SB-CNC/2023-24-02**). Offers not meeting this clause would not be considered.

  
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## Annexure-I

### SECIFICATIONS FOR EOI OF PROPOSED CNC SLANT BED LATHE

(Specification Number: **TXM/SB-CNC/2023-24-02**)

**PURPOSE:** This machine is required for OD/ ID Turning ,drilling in Shafts , machining of bearing components and End Shield .

Typical required operations are turning,boring,drilling, chamfering, facing and grooving.

**MATERIAL OF THE COMPONENT TO BE MACHINED:** Carbon Steel (IS AA19512 OR IS AA10122),Alloy Steel, SG Iron (IS AA19721).

**DRAWING REFERENCES:** The machine should be capable of performing machining operations as per the sketches attached in Annexure-2,Annexure-3 and Annexure-4

**MACHINE TYPE:** CNC Slant Bed Lathe

### TECHNICAL AND PRE-QUALIFICATION REQUIREMENT (PQR)

Clause No.	Description	Requirement
<b>(A) TECHNICAL REQUIREMENT</b>		
The above sketches are Component drawings for reference purpose only. Further jobs having Dia 200 mm to dia 1000 mm with length from 400-1400 mm will be Machined on the proposed Machine.		
2	<b><u>MACHINE DESIRED SPECIFICATION</u></b>	
2.1	<b>Required Distance between Centres</b>	1500mm
2.2	Tailstock	Motorised with quill,which can be used for drilling.
2.3	<b>Tool Post</b>	
2.3.1	Type	Automatic Indexing Drum Turret
2.3.2	<b>Number of tools to be mounted</b>	Minimum 12
3	<b>Other terms</b>	
3.1	Vendor shall suggest suitable accessories like hydraulic chuck, Chip Conveyor, Steady rest, Tailstock with Hydraulic built in center etc for machining of our component.	Vendor to Suggest

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3.2	<b>Above Machine Specifications are indicative and tentative .Finalization of Machine is subjected to interest and offer received in EOI</b>	Vendor to Note and confirm.
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4	<b><u>CONSTRUCTIONAL DETAILS</u></b>	
4.1	<b>Machine configuration</b> : Vendor to specify the configuration of the machine	Vendor to specify
4.2	Whether the main assemblies / sub-assemblies of the machine are made of <b>Cast/Forged Iron</b> .	Vendor to specify
4.3	Vendor to submit complete technical specifications / details of the major assemblies / sub-assemblies of the machine such as constructional details and accuracy. Any special attachment, tooling and other relevant/necessary data pertaining to the machine also to be specified.	Vendor to specify
4.4	Details of CNC/PLC/Drives/Motors offered (Acceptable makes Siemens / Fanuc).	Vendor to specify

**(B) PRE-QUALIFICATION REQUIREMENT (PQR) :**

Vendor must submit complete information against **Clause No.5**. Offers not meeting this clause would not be considered.

5	<b>QUALIFYING CONDITIONS :</b>	
5.1	The supplier/ <b>vendor</b> should be either an Original Equipment Manufacturer (OEM) or an authorized Dealer of the OEM for the offered <b>machine</b> . Along with the offer, dealers have to submit a valid certificate of Authorization from OEM for quoting the <b>machine</b> . Vendor should submit proof of the same.	Vendor to confirm
5.2	The OEM or the authorized dealer of the OEM must have supplied <b>at least ONE machine</b> of the OEM make of same or higher capabilities suitable to machine jobs as specified in Clause 1 in the past 10 years (on the date of opening of Tender).	Vendor to confirm
5.3	Copy of Purchase Order (PO) in the name of OEM or the authorized dealer of the OEM for machine as per <b>clause 5.2</b> is to be submitted along with the offer. The type, make and model of the machine should be clearly mentioned in the PO copy. Vendor should submit proof of the same.	Vendor to confirm

  
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5.4	Bidder shall not be under a" <b>Declaration of Ineligibility for corrupt or fraudulent practices or blacklisted with any of the State, Central Government/Public Enterprises"</b>	Vendor to confirm
<b>(C) OTHER QUALIFICATION REQUIREMENTS (TO BE NECESSARILY SUBMITTED AT THE TIME OF FINAL TENDERING)</b>		
6.1	Authorized Dealer of the OEM shall be required to submit the <b>declaration for support</b> from OEM for Erection & Commissioning, after sales service & necessary spares support for <b>minimum of 5 years from the date of commissioning</b> . In addition to the above, a back-to-back guarantee from OEM for performance of the machine is also required.	Vendor to note
6.2	The machine referred in <b>Clause 5.2</b> should be working satisfactorily for more than one year after commissioning (on the date of opening of Tender).  The Performance Certificate against the same shall be submitted.  <b>Note:</b> Vendor to indicate clearly the Purchase Order (PO) Number, PO Date and Date of Commissioning of the machine on the performance certificate.	Vendor to note
6.3	Vendors should necessarily furnish following details about the companies where they have supplied the machine for which they are submitting the documents in order to fulfil qualifying criteria as mentioned in <b>clause 5</b> :  A) Name of the customer/company. B) Complete postal address. C) Broad parameters of the machine and application. D) Name & designation of contact person. E) Phone, Mobile & E-mail address of the contact person.	Vendor to note

6.4	<b>Financial PQC:</b>  Vendor should have minimum average turnover of Rs.150 lakhs for the last 3 consecutive years ending March 2023.  Vendor to submit Profit & Loss Account Statement of last three consecutive years ending march 2023 as documentary evidence for the same.	Vendor to note
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	For Micro & Small Enterprises (MSE) & Start-Up Vendors who are OEM, no Financial PQR criteria is required. However, if they are quoting as authorised dealer of OEM then either OEM or the concerned MSE & Start-up vendor should necessarily qualify the financial PQC as mentioned above.	
<b>(D) MAKE IN INDIA (MII) CONTENT</b>		
7	Vendor to mention the Make In India content (Value addition in India) of the offered machine in percentage (%). Details to be submitted.	Vendor to specify
<b>(E) MISCELLANEOUS</b>		
8.1	<p>The sample sketches (Annexure- 2,Annexure-3, Annexure-4) are enclosed for the purpose of clarity of requirement to potential bidders.</p> <p>These sketches are for the purpose of explanation of extreme machining dimensions only.</p> <p>These sketches are confidential in nature and must not be used directly or indirectly in any way detrimental to the interest of BHEL.</p>	Vendor to note
8.2	Potential vendors can visit to BHEL works on prior appointment for any clarification & discussion about our requirement.	Vendor to note
8.3	BHEL reserves the right to verify information provided by the Vendor at their referred customer's works including machining accuracies (For the machine mentioned in qualifying criteria). It shall be the responsibility of the vendor to facilitate the visit of BHEL's team at their referred customer works. In case the information provided by vendor is found to be false / incorrect, <b>the offer shall be rejected.</b>	Vendor to note
8.4	BHEL reserves the right to assess the OEM or the authorized Dealer of the OEM, with respect to their technical and financial capability (As per the information provided in <b>clauses 5.1 to 5.3</b> ).	Vendor to note

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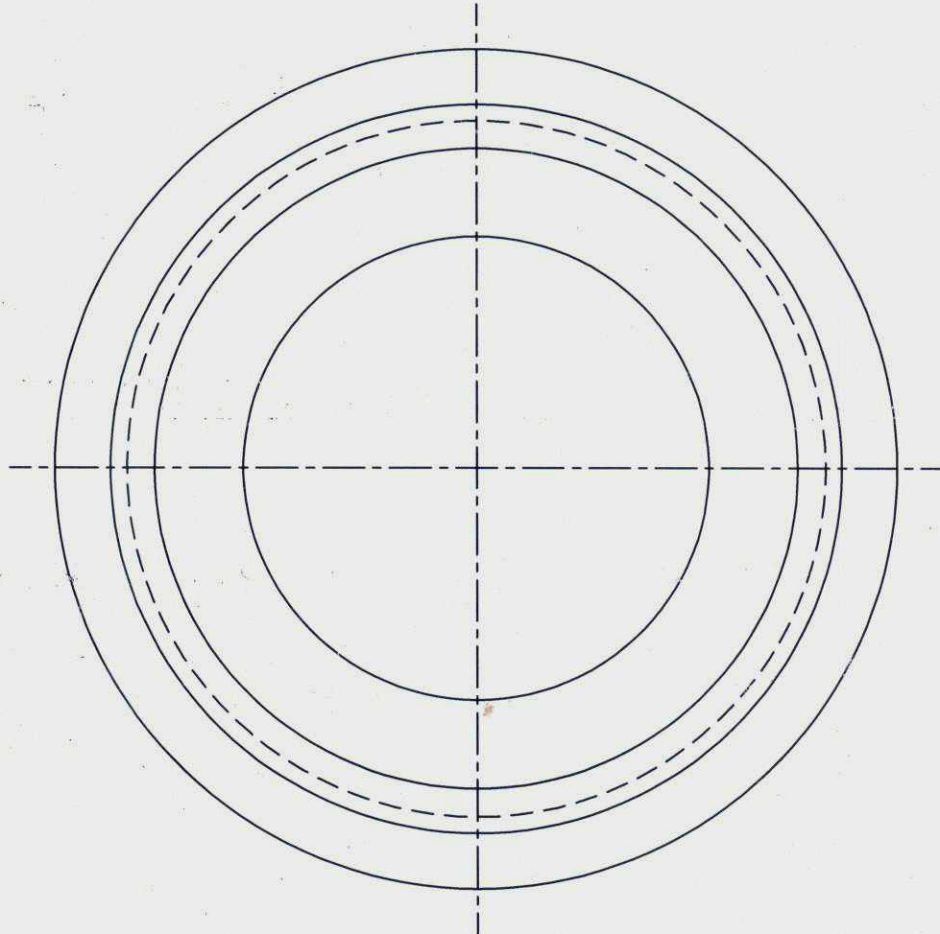
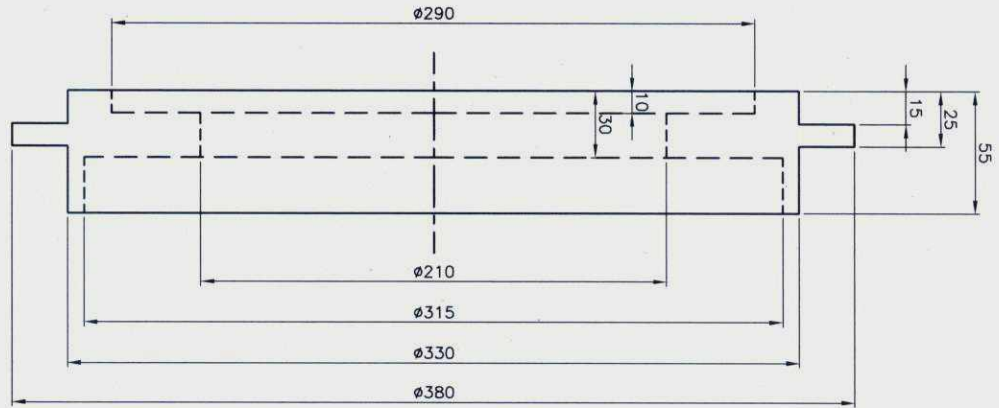
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BEARING COMPONENT-1

Annexure-2

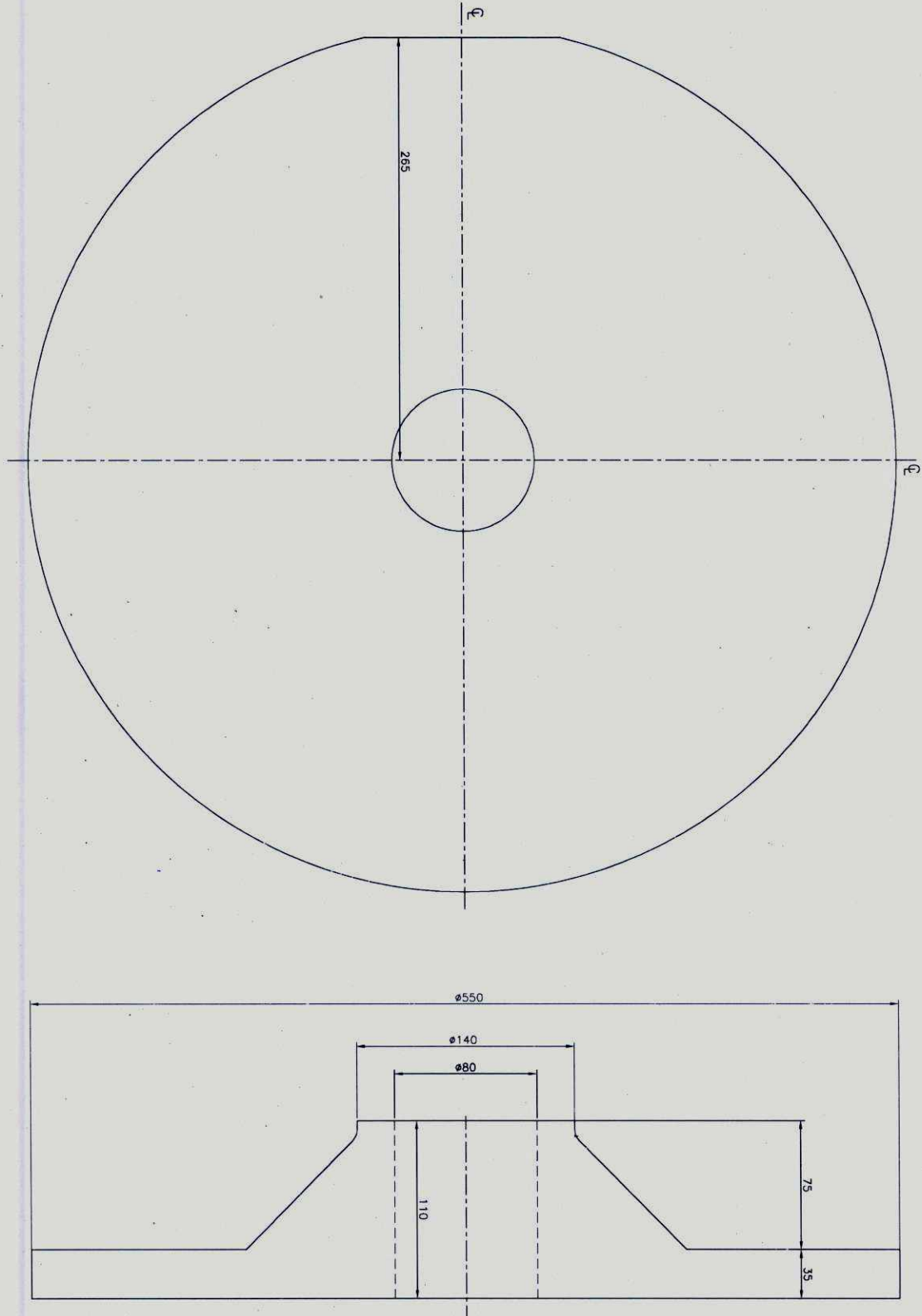
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# END SHIELD 1



Amepure-3

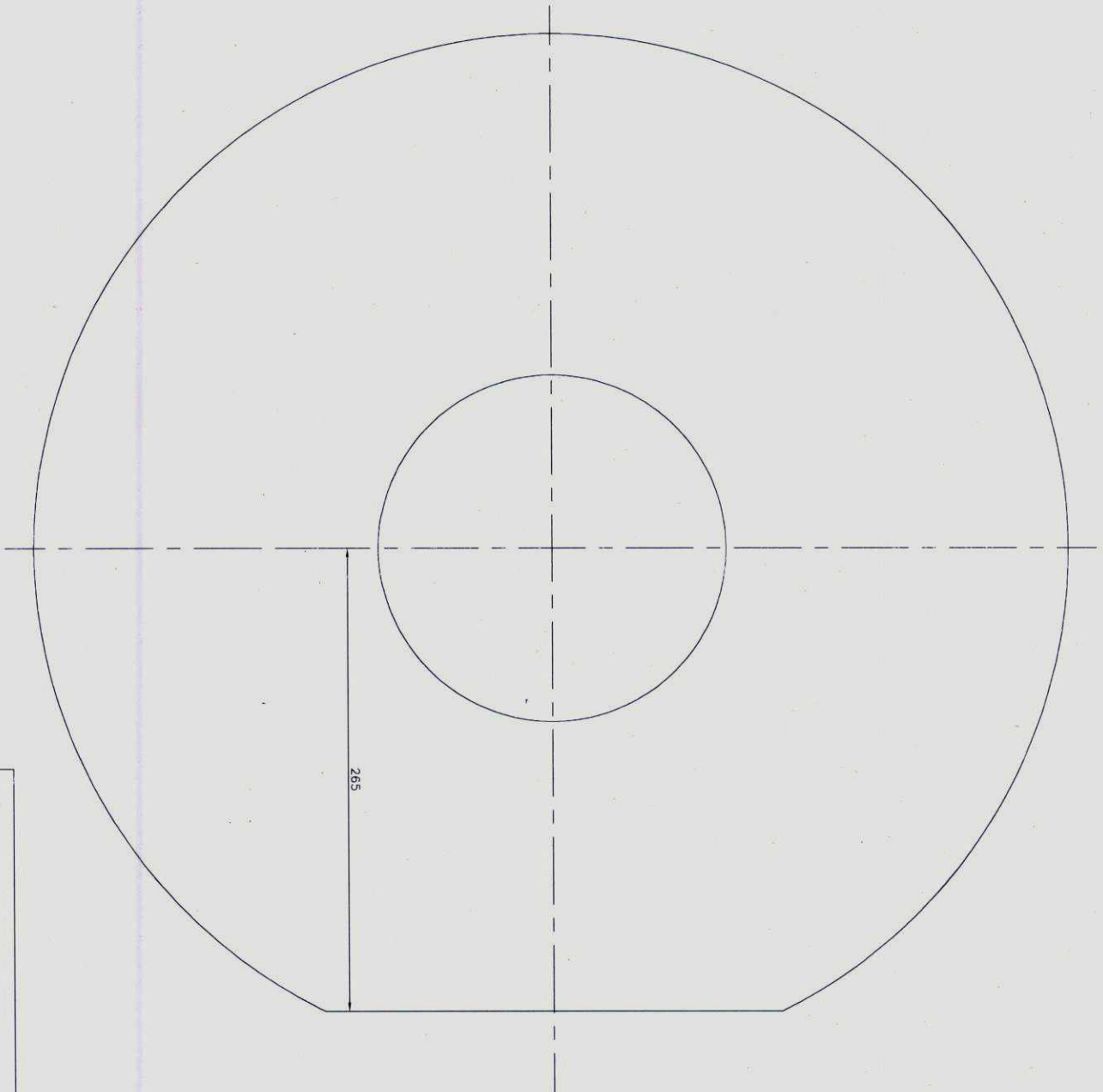
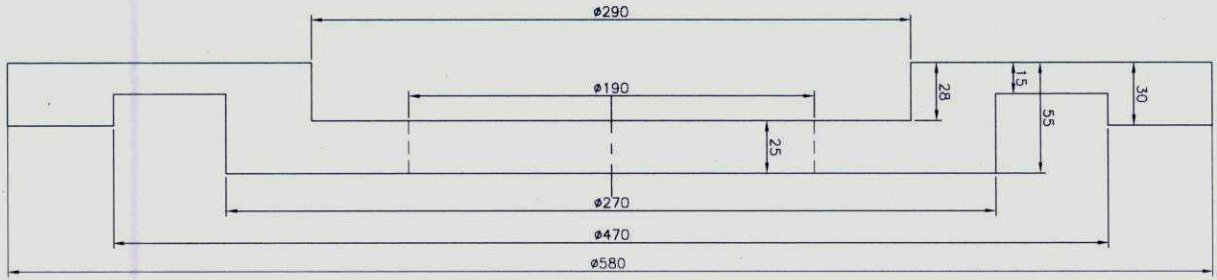
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END SHIELD 2

Annexure - 4

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