

BHARAT HEAVY ELECTRICAL LIMITED
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Phone: +91-01334-285103/281969
Email: pankaj05@bhel.in, avijit.chowdhury@bhel.in
Website: https://hwr.bhel.com /www.bhel.com

Ref: AIX-DABG/ 6580/EOI/21-22/01

Date: 08.06.2021

Notice for Expression of Interest for empanelment of New Vendors.

Schedule of EoI:

SL NO.	EOI No.	Description of job work	Due Date and time for submission of EOI response.
1.	AIX-DABG/6580//EOI/21-22/01	Deep drilling, rifling and precision machining of Items as per Drawings(Qty:1).	30.06.2021 Wednesday 14:00 Hrs(IST)

Purpose: Selection of Vendor for deep drilling and rifling job thru development route.

1) Introduction:

This Expression of Interest (EoI) seeks response from prospective vendors who are capable of Deep Drilling, Rifling and Precision machining as per general standards of defense industry and are willing to associate with Bharat Heavy Electricals Limited (BHEL) – HEEP, Haridwar.

BHEL is a Govt. of India owned Maharatna company which is an integrated power plant equipment manufacturer and one of the largest engineering and manufacturing organizations in India, catering to the core infrastructure sectors of Indian economy viz. energy, transportation, industry, non-conventional energy and Defence. BHEL has been in the business for more than 56 years and has supplied more than half of power producing equipment installed in the country.

Defence and Aerospace Business Group of Heavy Electrical Equipment Plant (HEEP), one of the major manufacturing units of BHEL located at Haridwar, Uttarakhand, is manufacturing Naval Guns for Indian Navy since 1994.

2) Present Expression of Interest – Broad Scope:

BHEL seeks a prospective vendor who can do deep drilling, rifling and precision machining as per drawing details in three cylinders. The quantity of job as per current EoI will be 1 no. only. After successful execution of Current EOI, BHEL is expecting 250+ nos. of same job order from its customer. BHEL presently intends to shortlist and select a suitable vendor for machining this component as per replies received from vendors in format given in Annexure-1. Fully filled Annexure-1 will be considered as qualifying criteria.

BHEL shall receive applications pursuant to this EoI in accordance with the terms set forth herein, as modified, altered, amended and clarified from time to time by BHEL, and all Applications shall be prepared and submitted in accordance with such terms on or before the date specified in this EoI for submission of applications.

3) Obligations of Prospective Vendor:

The obligations of the selected vendor, inter alia, shall be as below:

- A. BHEL will provide 3 solid round forged cylinders as per Annexure-2. The material of these cylinders is IS:4367-1991, Gr.40Cr4Mo3, or, Bloom/Billet IS:4368-1967, Gr.40Cr1Mo28, or En19. Selected vendor will have to do deep drilling in these 3 cylinders as per attached drawings. Machining operations include polishing, lapping, deep drilling, thread cutting as per drawing.
- B. Prospective vendor has to send these finished cylinders back to BHEL. After value addition, BHEL will send it back to Vendor in the form of a rectangular block in which these cylinders are welded.
- C. Prospective Vendor has to perform boring, reaming, rifling operation and finish machining on this block as per Annexure-2 and send back to BHEL after quality checks.
- D. Prospective vendor must do required Quality Checks and NDT on the finished job as per QAP. These may include LPI, MPI, UT, surface finish and dimensional checks and visual inspection. Vendor to submit QAP for BHEL approval.
- E. Prospective vendor must give a technical offer.
- F. Once selected, the prospective vendor will be required to sign NDA (Non-Disclosure Agreement) with BHEL.
- G. BANK GUARANTEE and INDEMNITY Bond shall be applicable against free issue of BHEL material.

Above mentioned requirements are only indicative in nature and additional information may be sought at a later date.

4) Brief Description of EoI Process:

The interested prospective collaborators shall ensure that their response along with duly filled and signed Annexure-1 and Annexure-2 is received by BHEL on or before 30th June 2021, Wednesday. The response shall necessarily be accompanied with details on company background and record of previously done similar jobs having deep drilling, rifling with dimension of job.

In case any further information is needed, prospective vendor may get in touch with BHEL contact person, whose details are mentioned in Para 5. In case of any amendment/corrigendum issued to this EoI, it shall be notified only at <https://hwr.bhel.com> and www.bhel.com

The offers received will be technically evaluated by BHEL, and successful short listed parties will be considered for our future requirements.

Following documents/information are to be necessarily filled and submitted along with the technical offer:

- o Details/Documents in support of PQR/Technical Requirement as per Annexure-1.
- o Details of manufacturing Facility (vendor is required to submit details specification, make, model, type of machine, year of manufacturing of machine and a technical brief regarding the process/sequence of carrying out for required operation on component to be provided by BHEL).
- o Company Profile.
- o Financial report of the company.
- o Past experience along with documentary proof.
- o Vendor to inform estimated delivery time for carrying out complete operation.

Offer shall be duly sealed and super scribed as "EOI Offer against Tender No. AIX-DABG/6580/20-21/01, Due dated 30.06.2021 SUBMITTED BY (Name of Company)".

This notification shall be published on <https://hwr.bhel.com> and www.bhel.com

- Last date for downloading tender documents shall be 30.06.2021 till 13:30 Hrs.(IST). EOI offers will be received up to 13:45 Hrs.(IST) on 30.06.2021 and will be considered and opened on the same day at 14:00 Hrs.(IST) in the Tender Room BHEL HECP, Haridwar.

- Technical offers complete in all respects must be addressed to "The Tender Room, 4th floor, main Adm. Building HEPP, BHEL, Ranipur, Haridawr, Uttrakhand -249403".
- No EMD & Fees are to be submitted.
- The Technical offer should be from the principal/Original Manufacturing, failing which the technical offer may likely to be ignored. In case the technical offer is submitted through agent, the technical offer must accompany original authorization letter.
- Late offer will not be considered in any case. BHEL will not bear responsibility for any type of postal delay/incomplete information from vendor.
- Amendments/Corrigendum, if any will be hosted on our site only.
- For any further details please log on to www.bhel.com or hwr.bhel.com.

5.Contact Details:

Pankaj Kumar
 Dy Manager/AIX-DABG
 Heavy Electrical Equipment Plant
 Bharat Heavy Electricals Limited
 Ranipur,Haridwar 249403
 Uttrakhand, India
 Phone: +91 1334285103/01334281969
 Email: pankaj05@bhel.in

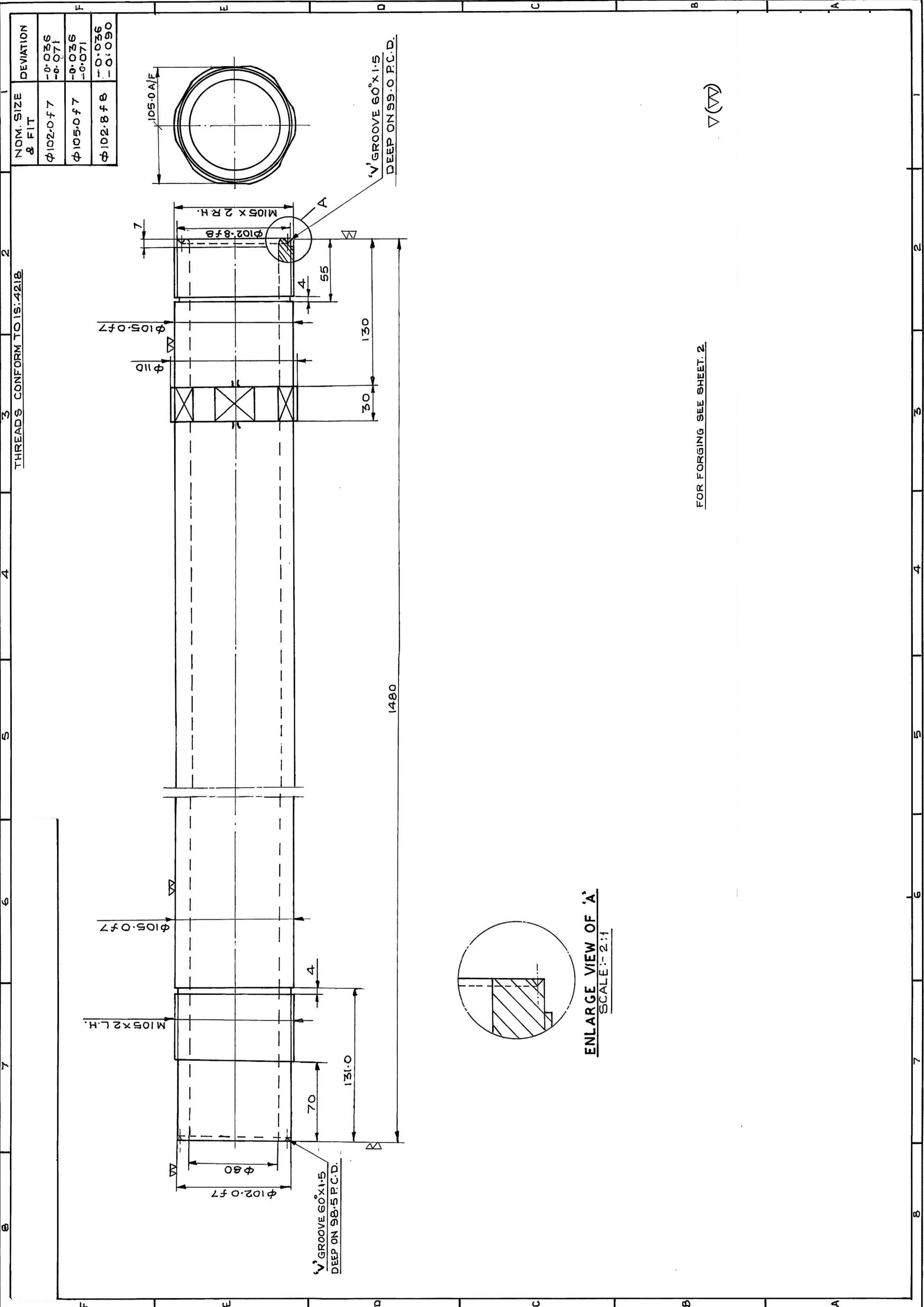
6) Miscellaneous:

A. Right to accept or reject any or all Applications:

1. Notwithstanding anything contained in this EoI, BHEL reserves the right to accept or reject any Application and to annul the EoI Process and reject all Applications, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons thereof. In the event that BHEL rejects or annuls all the Applications, it may, at its discretion, invite all eligible prospective vendors to submit fresh Applications.
2. BHEL reserves the right to disqualify any Applicant during or after completion of EoI process, if it is found that there was a material misrepresentation by any such Applicant or the Applicant fails to provide, within the specified time, supplemental information sought by BHEL.
3. BHEL reserves the right to verify all statements, information and documents submitted by the Applicant in response to the EoI. Any such verification or lack of such verification by BHEL shall not relieve the Applicant of his obligations or liabilities hereunder nor will it affect any rights of BHEL.

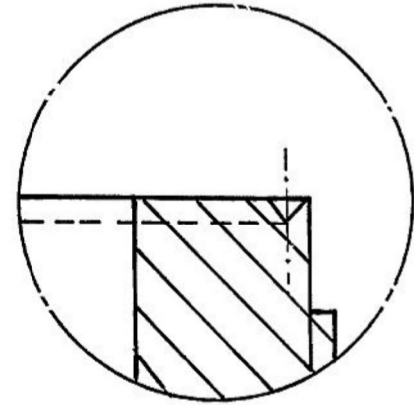
A. Governing Laws & Jurisdiction

The EoI process shall be governed by, and construed in accordance with, the laws of India and the Courts at New Delhi (India) shall have exclusive jurisdiction over all disputes arising under, pursuant to and/ or in connection with the EoI process.



THREADS CONFORM TO IS: 4218

NOM. SIZE & FIT	DEVIATION
φ102.0 f7	-0.036 -0.071
φ105.0 f7	-0.036 -0.071
φ102.8 f8	-0.036 -0.090



ENLARGE VIEW OF 'A'
SCALE: 2:1

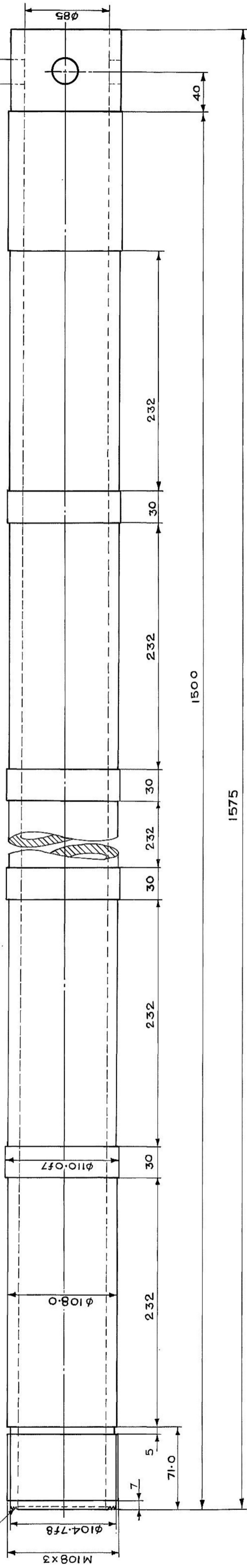
FOR FORGING SEE SHEET. 2

▽(▽)

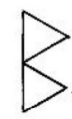
NON-SIZE FIT	DEVIATION
$\phi 104.7f8$	-0.036 -0.090
$\phi 110.0f7$	-0.036 -0.071

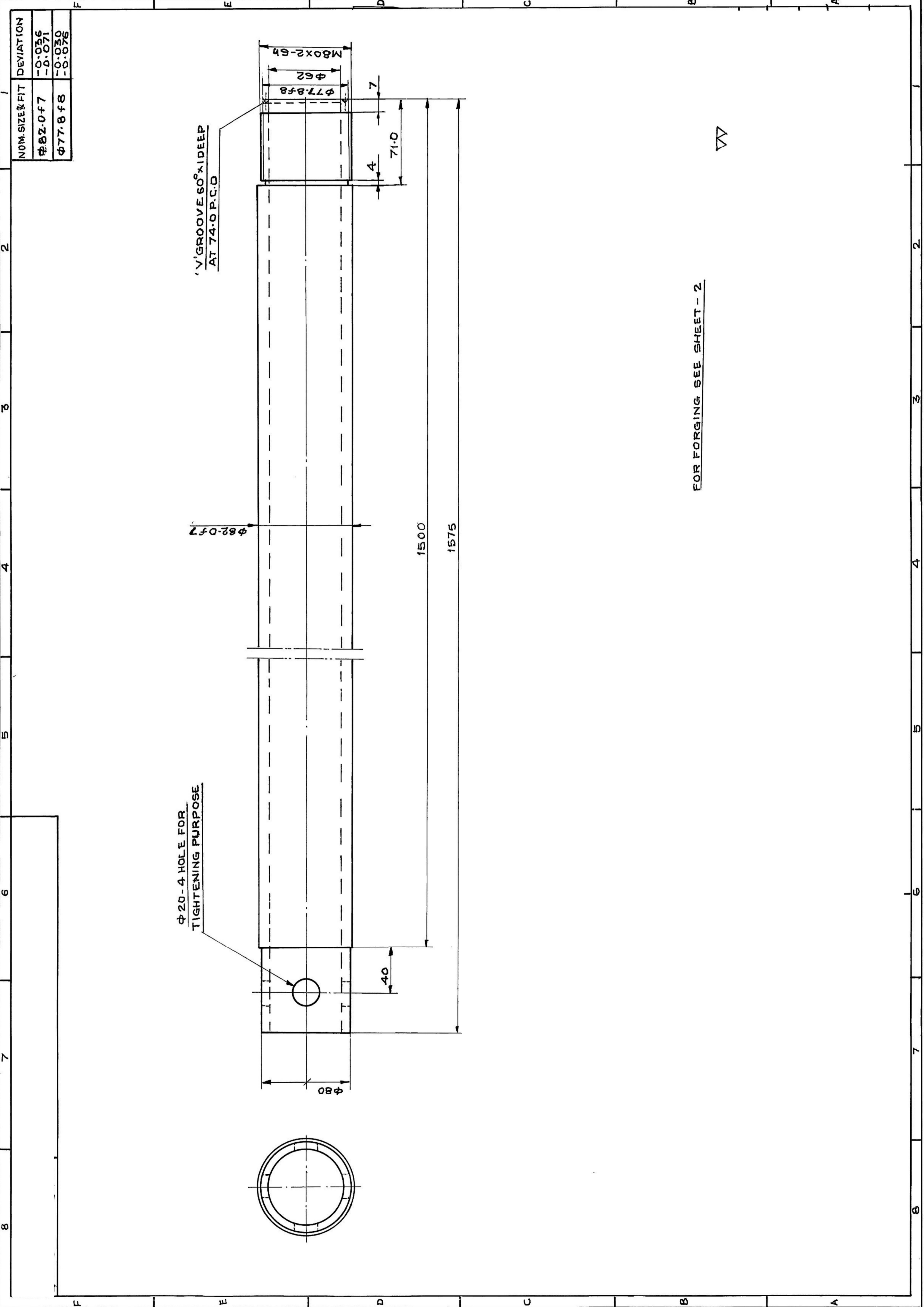
$\sqrt{}$ GROOVE 60° x 1.5 DEEP ON 100.0
P.C.D. & 97.0 P.C.D.

4 HOLES $\phi 20$ FOR TIGHTENING PURPOSE



FOR FORGING SEE SHEET-2





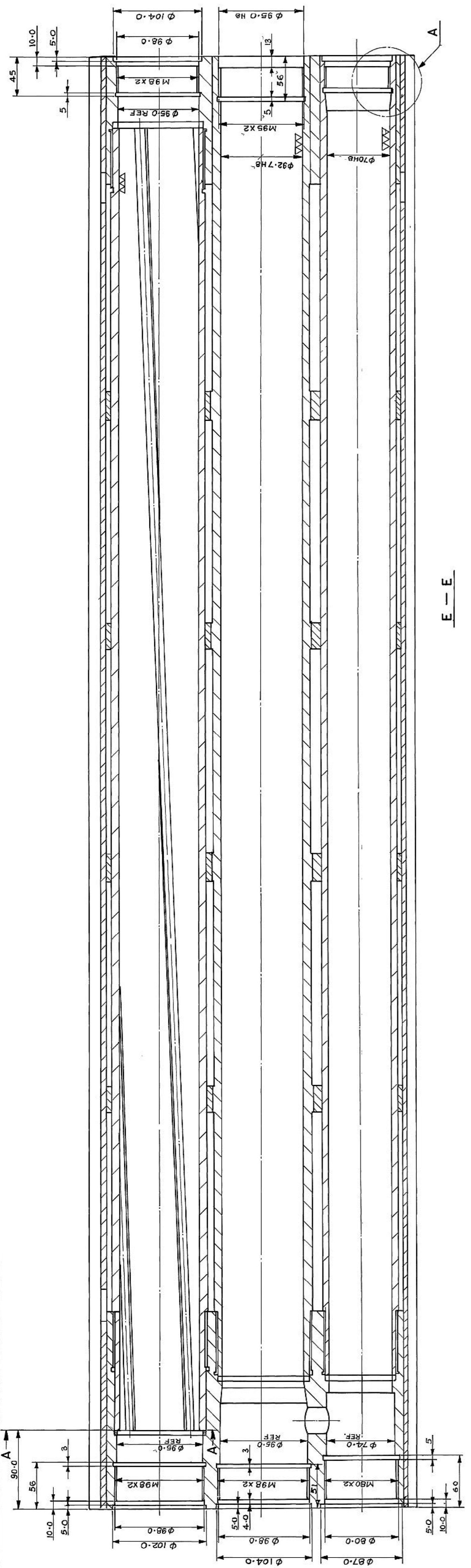
NOM. SIZE & FIT	DEVIATION
Φ82.0f7	-0.036 -0.071
Φ77.8f8	-0.030 -0.076

'V' GROOVE 60° x 1 DEEP
AT 74.0 P.C.D

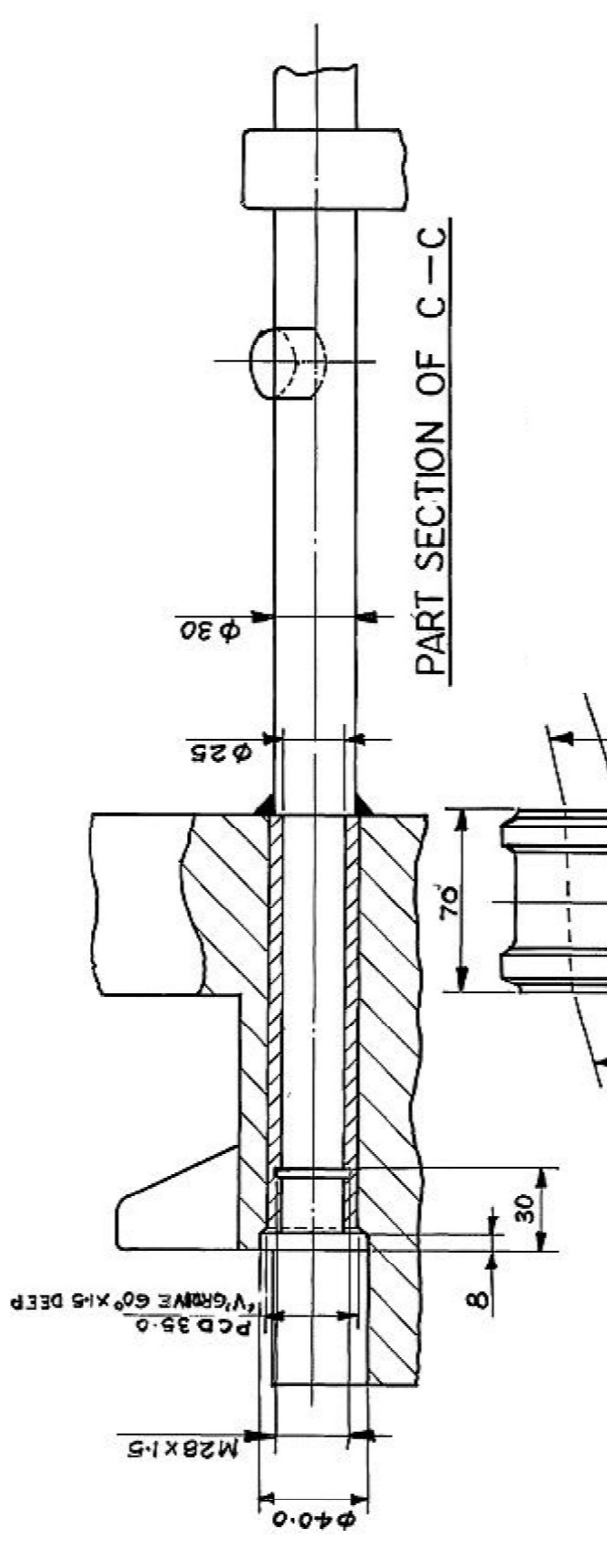
Φ20 - 4 HOLE FOR
TIGHTENING PURPOSE

FOR FORGING SEE SHEET - 2

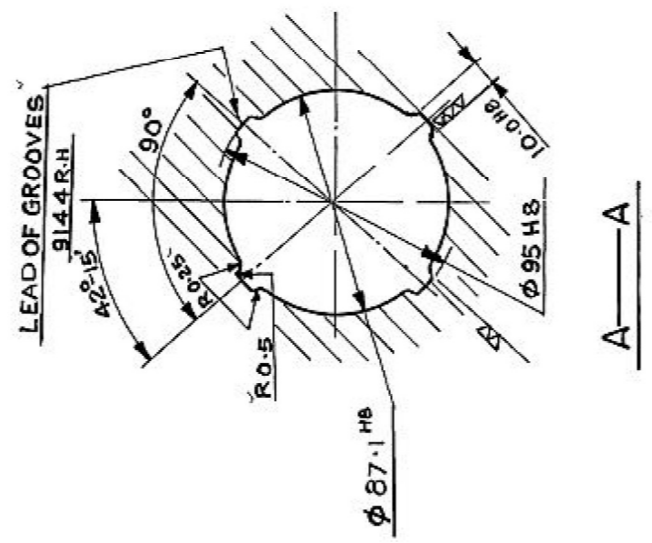




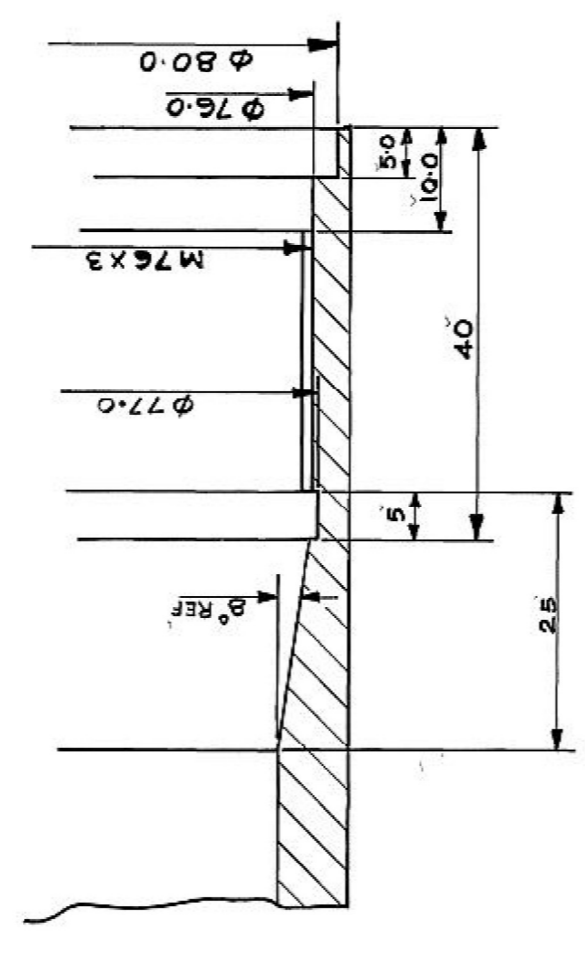
E - E



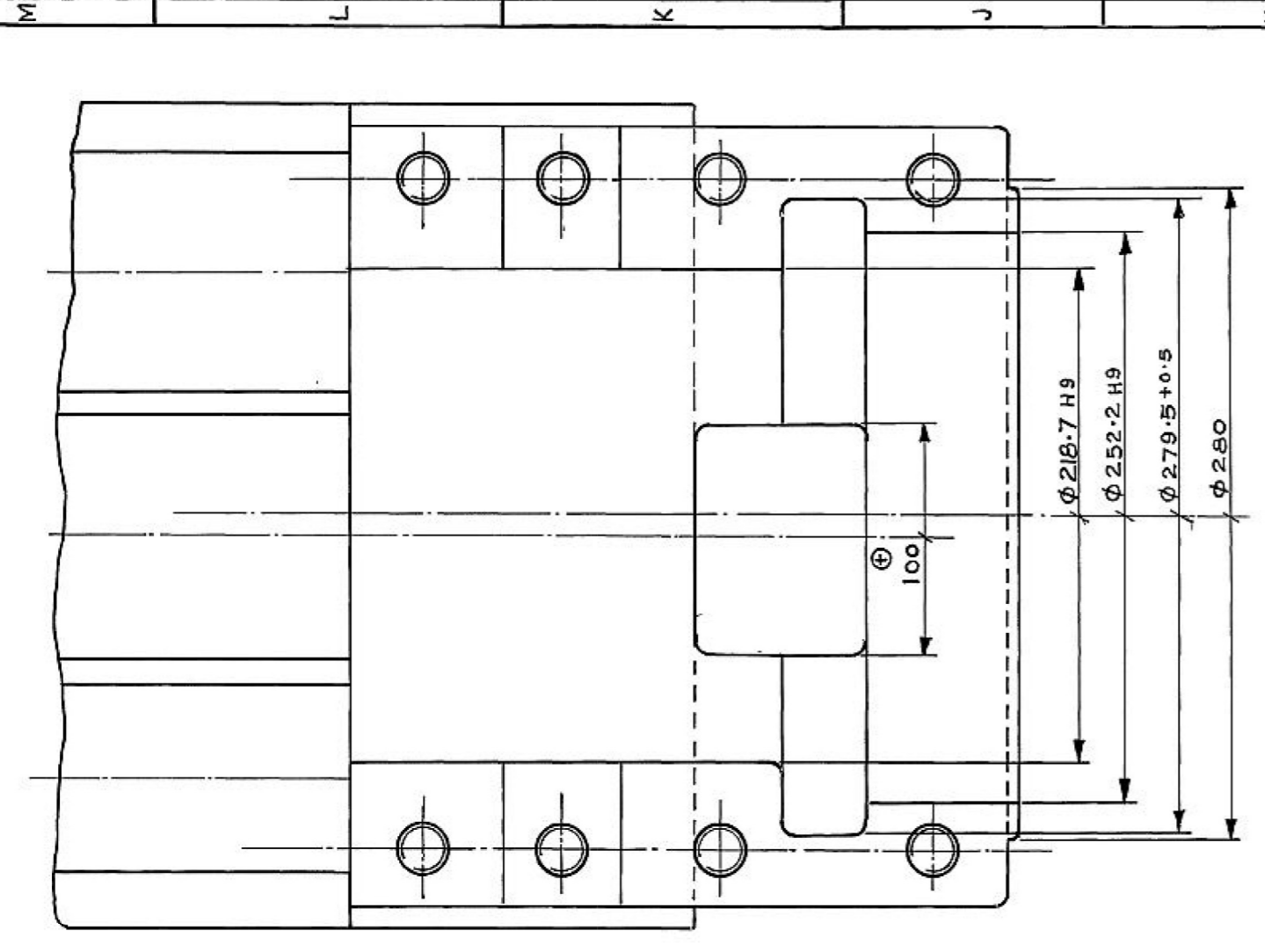
TAPER TO BE MACHINED BY SHELL CUTTER



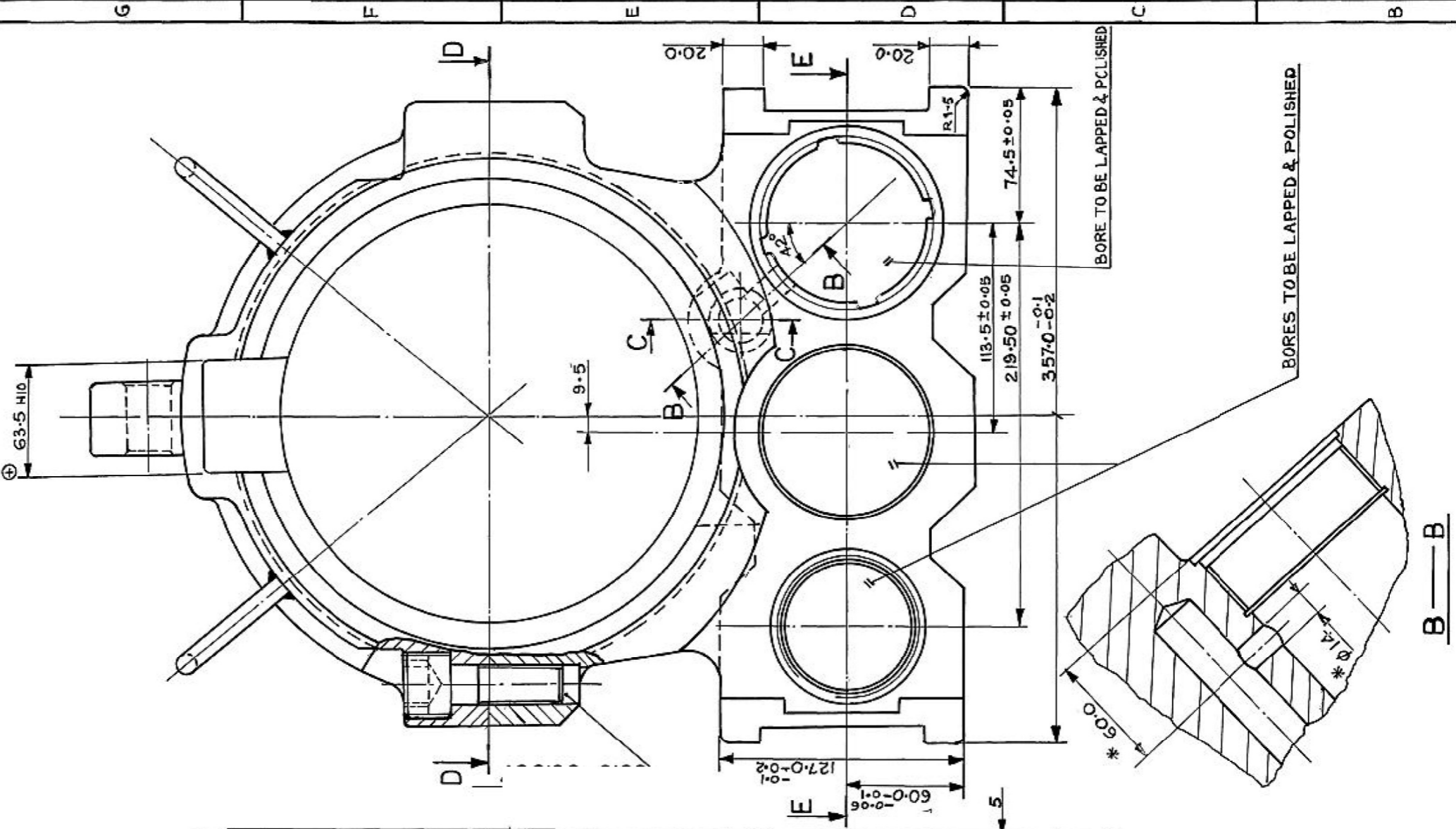
VIEW AT 'A'
SCALE-2:1



(1015-000583)



DIMENSION MARKED WITH THIS SYMBOL TO BE MACHINED AFTER MACHINING OF ALL DIAMETERS.
D - D



BORES TO BE LAPPED & POLISHED

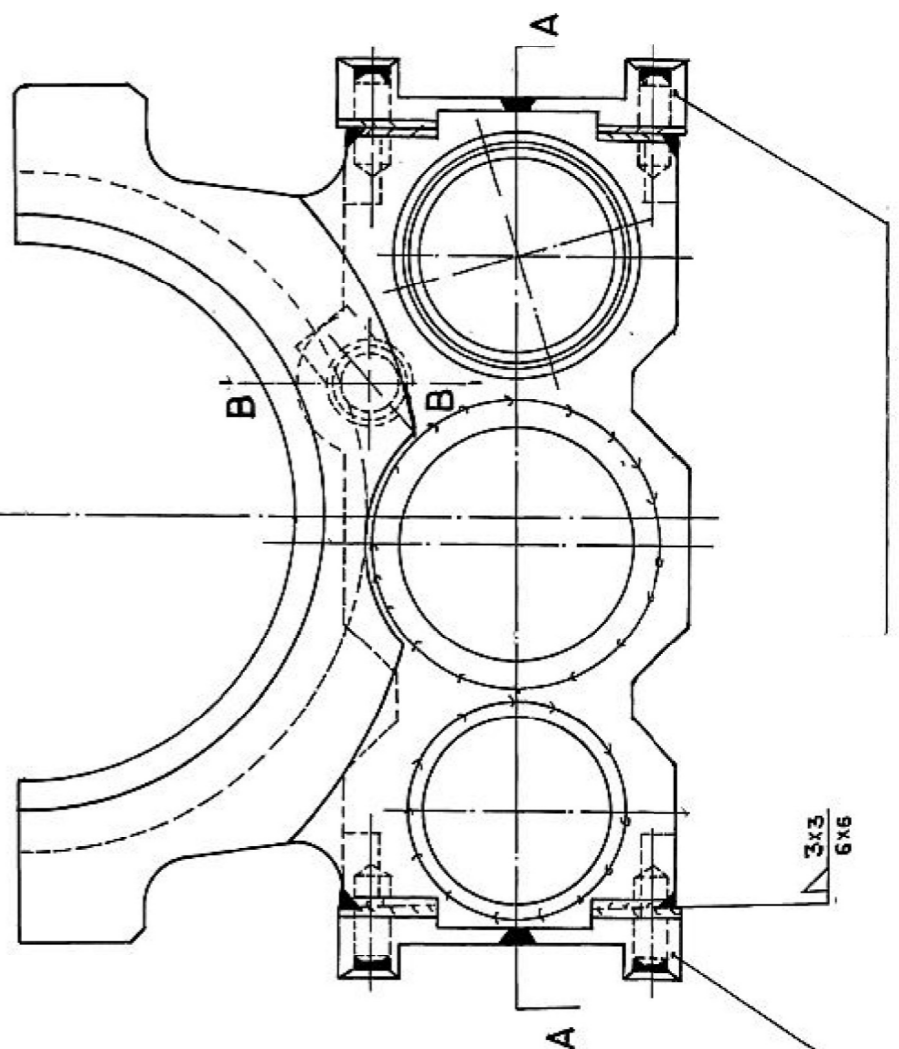
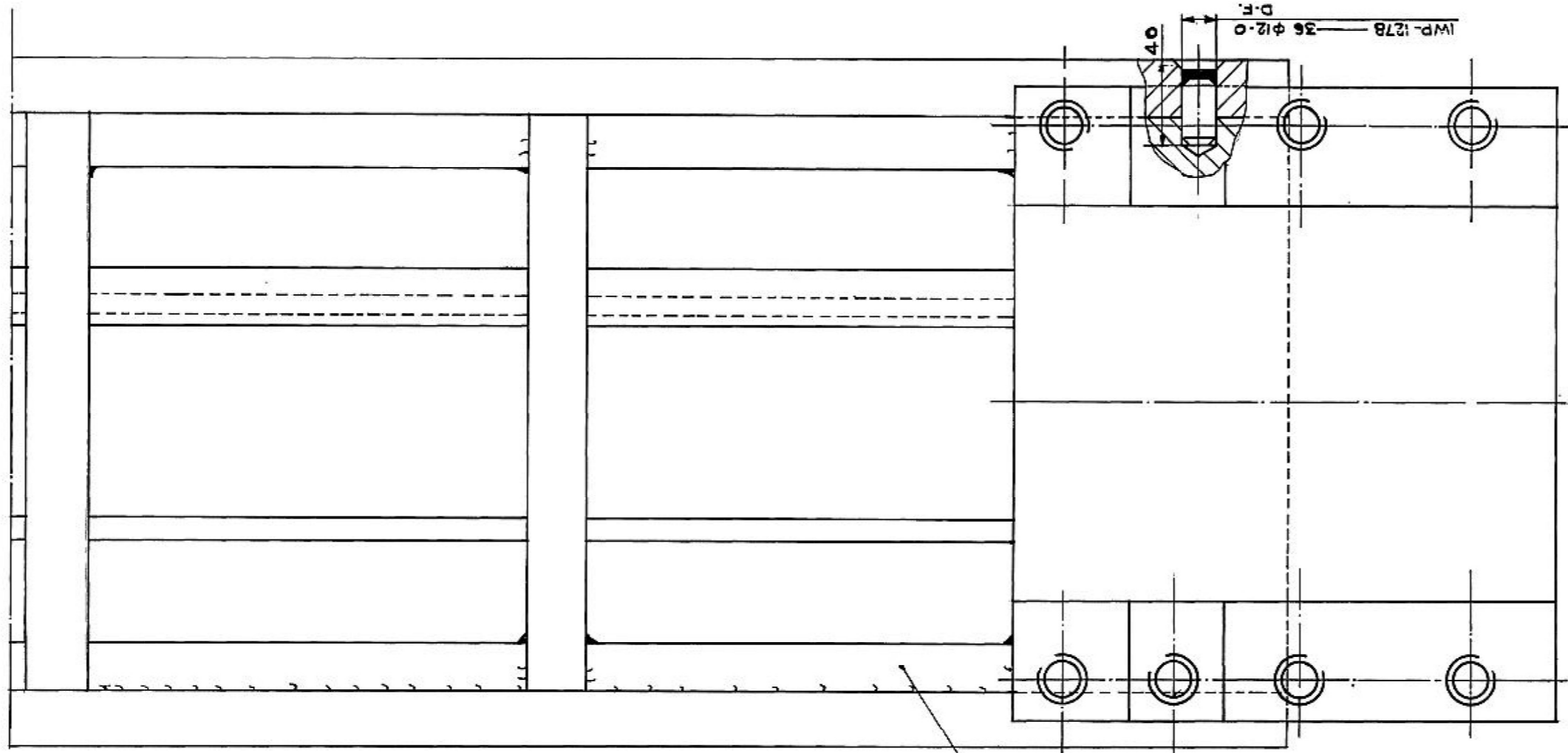


* MACHINING TO BE DONE AFTER TESTING OF CYLINDERS SEE NOTE ON DRG NO.

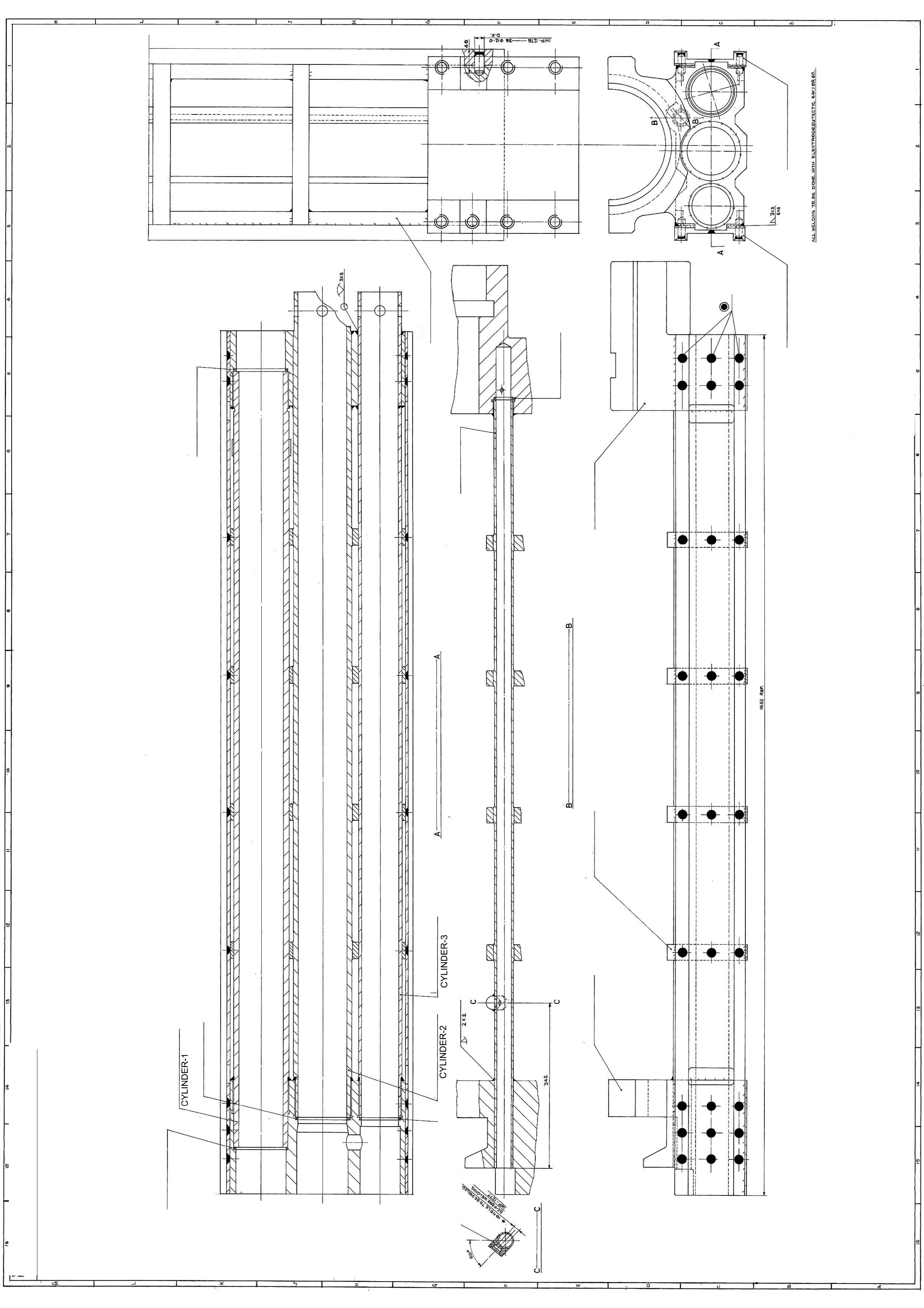
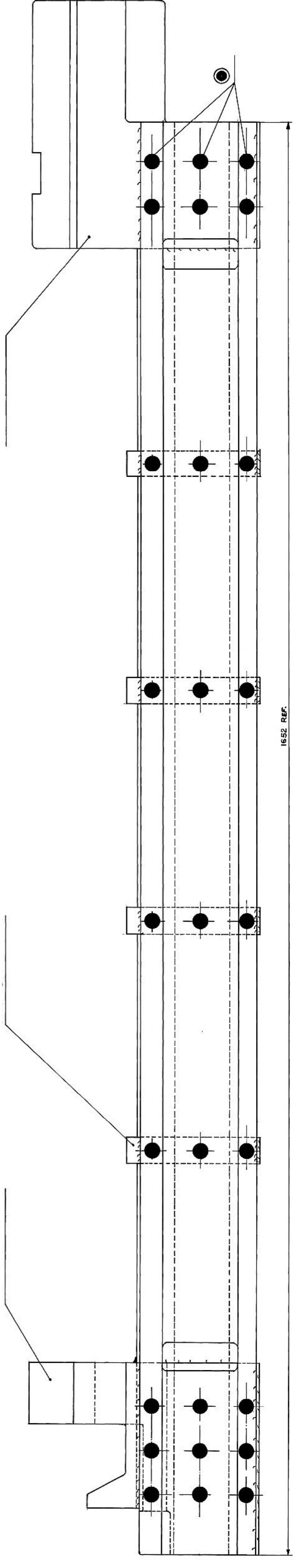
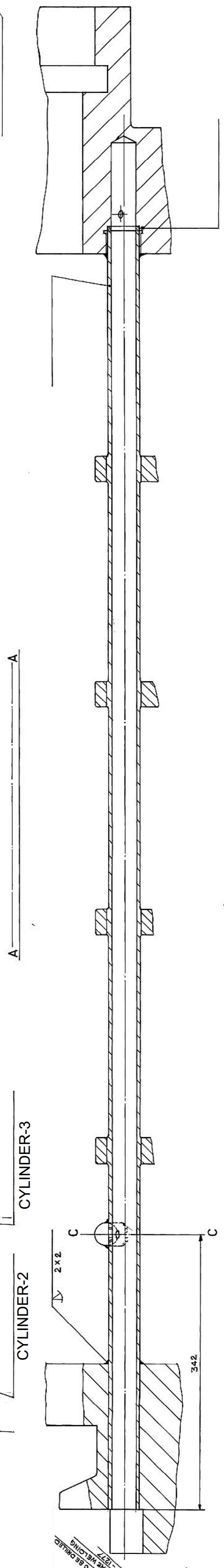
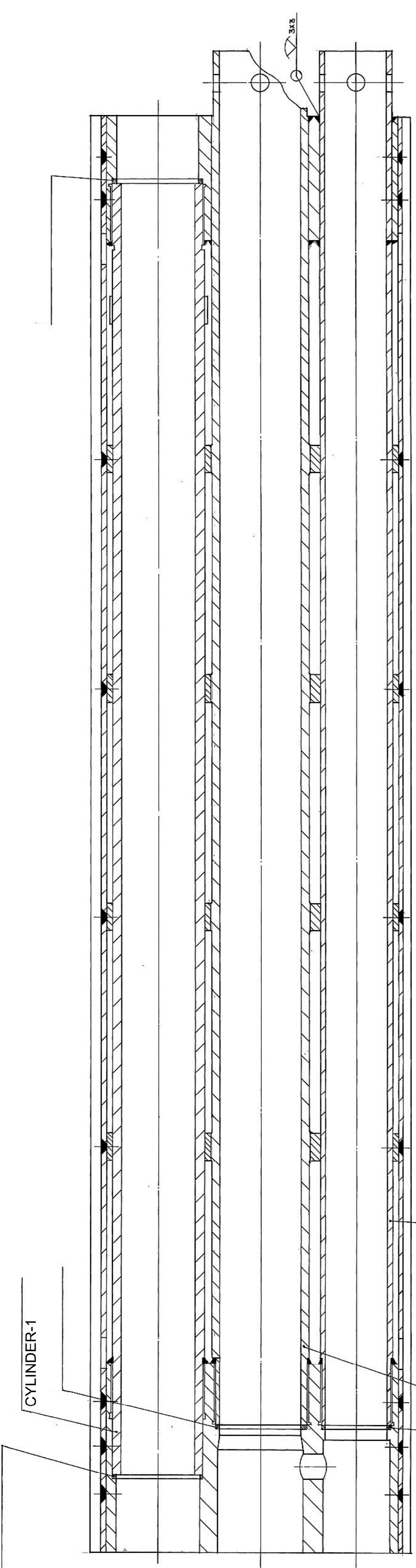
NOMINAL SIZE (H)	DEVIATION
63.5 H10	+ 0.120
10.0 H6	+ 0.032
87.1 H8	+ 0.054
216.7 H9	+ 0.115
70.0 H6	+ 0.046
92.70 H8	+ 0.054
95.0 H8	+ 0.054
262.2 H9	+ 0.130

THREADS CONFORM TO IS:4218

(1651 REF)



ALL WELDING TO BE DONE WITH ELECTRODELECTIC 667 OR 60.





Annexure-1

Details required from prospective collaborator - Eligibility & Pre-Qualification criteria




Experience & Delivery -

S. No.	Item	Requirement	Vendor to Reply
a)	Experience	The prospective collaborator should have manufactured/machined and tested similar jobs involving deep drilling, rifling, precision machining and surface finishing. Kindly confirm.	
b)	In Service	Attach photographs and details like job dimensions, rifling, deep drilling of similar jobs done in past for any client.	
c)	Shop Capability	Whether machines and tools/buttons required for the deep drilling, surface finishing and rifling job are available in shop or vendor will have to buy?	
d)	Time period	How much time period does the vendor require for finishing one such job as per Annexure-2.	

Note: Documentary evidence to substantiate above vendor replies is to be furnished along with response by the vendor.

(Vendor's Signature)

Annexure-2

Sl. No.	BHEL SCOPE OF SUPPLY	VENDOR TO MACHINE IT AS PER DRAWING BELOW	Qty. (nos.)
1		Cylinder-1, refer attachment	1
2		Cylinder-2, refer attachment	1
3		Cylinder-3, refer attachment	1
4	BLOCK Welding drg., refer attachment	BLOCK Machining drg., refer attachment	1