



GOVERNMENT OF INDIA
BHABHA ATOMIC RESEARCH CENTRE
ATOMIC FUELS DIVISION
FUEL ASSEMBLY SECTION

TENDER ENQUIRY

Ref: AFD/FAS/ 2021/ I15469

11/11/2021

Sub: Miscellaneous works at AFD related to fabrication of Aluminium rod and S.S. plug.

Dear Sir/Madam,

Sealed quotations are invited for and on behalf of President of India for "Miscellaneous works at AFD related to fabrication of Aluminium rod and S.S. plug." The scope of work, general specifications, terms and conditions are given bellow.

Description of works: -

1. **Machining of Aluminium rod as per drawings at AFD.**
 - 1.1. Machining of Top end of Aluminium rod ($\varnothing 60\text{mm}$) as per drawing. Total Quantity-360nos.@30nos/month.
 - 1.2. Machining of Weld bead of Aluminium rod. Total Quantity-360nos.@30nos/month.
 - 1.3. Drilling and Reaming of $\varnothing 9$ H7mm on Aluminium rod as per drawing at AFD General Workshop. Total Quantity-360nos.@30nos/month.
 - 1.4. Drilling and Reaming of $\varnothing 10$ H7mm on Aluminium rod as per drawing at AFD General Workshop. Total Quantity-360nos.@30nos/month.
2. **Machining of Graphite Components as per drawing.**
 - 2.1. Machining of Graphite Mould as per drawing. Total Quantity-60nos. @5nos/month.
 - 2.2. Machining of Graphite breaker Rod as per drawing. Total Quantity-120nos.@10nos/month.
3. **Assembly of Seal and Shield plug.**
 - 3.1. Assembly of S.S. plug as per the instructions.
 - 3.2. Quantity of S.S. plug assembly work is 360 nos.@30nos/month.
 - 3.3. Before assembly of S.S. plug, each component shall be cleaned by acetone (to be provided by department).
 - 3.4. Inspection of S.S. plug assembly will be done by departmental personnel.
 - 3.5. Assembly work involves:
 - 3.5.1. Insertion of spring into ball guide component.
 - 3.5.2. Screw fitting of top component to main body.
 - 3.5.3. Functional check of ball guide and spring.
4. **Swaging and machining of Aluminium rod.**
 - 4.1. Swaging of 1 meter long Aluminium rod from 12mm dia. to 10mm dia. and 9mm dia.

4.2. Quantity of swaging of Aluminium rods is 240 nos.@20nos/month.

5. Loading of Aluminium rod & S.S. plug to Truck.

5.1. Loading of Aluminium rod and S.S. plug in truck to transport the material to other division.

5.2. Quantity of Aluminium rod and S.S. plug is approx 30-35nos. of each component every month which is roughly thrice a month.

5.3. The contractor should take utmost care to prevent any damage to the components while shifting.

6. Loading, unloading and shifting of Aluminium rod.

6.1. Collection of Top End of Aluminium rod & S.S. plug components from other division located inside BARC, Trombay, and unloading at AFD, General Workshop (up to thrice in a month). Dimension of Top end of Al. rod is $\text{Ø}60 \times 3800\text{mm}$ length weighing 30kg each. Dimension of S.S. plugs is $\text{Ø}86 \times 700\text{mm}$ weighing 12kg. each. Total Quantity-360nos.@30nos/month.

6.2. Vehicle will be arranged by the department for transfer and collection of materials.

6.3. Persons while handling of Aluminium rod & S.S. plug will be required to report to Health Physics, AFD before commencement of work and after completion of work.

Technical Details:

1. All the works shall be carried out at AFD, BARC, Trombay, Mumbai. The work will be subjected to inspection by the departmental personnel. The overall component rejection rate up to final inspection shall be less than 5%.
2. All material, equipment and tooling will be supplied by AFD, BARC.
3. The man power for above mentioned works shall be arranged by the contractor.
4. At least 3 skilled (2 Turner & 1 Fitter) and 2 unskilled persons shall be available on the site to carry out the work on the regular basis except Saturday, Sunday and holydays for a period of 12th months from the date of work order.
5. The contractors have to submit the copy of ITI certificate for the skilled operator. In absence of copy of required certificate, the personnel will not be allowed to work at site.
6. Personnel working at site shall have minimum 3 years of working experience in the mechanical industries. Freshers are not allowed to work at site.
7. A trade test and an interview will be performed for all the personnel coming for work. Only after satisfactory performance in test, the personnel will be allowed to work at the site.
8. The personnel intended to work on site must produce fitness certificate from registered medical practitioners before commencement of work.
9. Personal protective gears such as boiler suits, hand gloves and respirator (if required for occupation hazard) will be provided by us.
10. Personal protective gears such as safety shoes, socks, undergarments, Face cover/mask and soap shall be provided by the contractor. No worker will be allowed to work without safety gear.
11. Person carrying out above job should take all the safety precautions required to carry out the above work. BARC will not be responsible for any injury or accident taking place on site.
12. Working hours for workers shall be 8 hours/day

13. The contractor should take utmost care to prevent any damage to the components while handling and storage.
14. Personnel working at site should carry out cleaning of site and its surrounding at regular intervals, maintain safe and hygienic work environment.
15. Persons while handling of Aluminium rod will be required to report to Health Physics, AFD before commencement of work and after completion of work.
16. Vendor shall provide a suitable replacement in case of unsatisfactory performance/ behavior or irregular attendance of their personnel.

General Terms & Condition: -

1. Quotations are to be printed on letter head / quotation format which should consists of sales tax registration number registered with local ST authority / CST authority, PAN of the firm, service tax registration number etc. Quotations that are received in computer generated form are to be considered as invalid & rejected.
2. Quotation shall have validity of minimum 90 days from due date of tender.
3. In case of award of work order, the vendor shall give his acceptance through email; or letter within 15 days of issue of work order. Income tax @2% will be deducted from the Suppliers bill or whatever necessary will be specified at the time of placing the order.
4. The contractor shall clearly indicate following in the quotation.
 - Net Price
 - Taxes & duties applicable , if any
 - PAN No. / GST or Service Tax Registration No.
5. Payment will be arranged after satisfactory completion of **12 months** of work at AFD and on production of, a) Bills in triplicate, b) Advanced stamped receipt, c). Advance or Part Payment cannot be made. Proposed payment terms from tendered cannot be accepted.
6. Any delay in completion of work, which is attributable to the contractor, is liable for penalty @1/2 % per week (max 5 %) to be imposed on the contractor.
1. **Visit of the contractor or his representative to AFD/BARC, prior to submitting the quotation is must, in order to understand the work and site condition. You may visit to BARC, for inspecting the site with prior intimation of at least 2 working days to Shri D.P.Kokare, AFD, BARC, Mumbai-400085, Ph-022-25594966, email dpkokare@barc.gov.in or to Shri Amit Sharma, AFD, BARC, Mumbai-400085, Ph: 022-25594637, email: amitshar@barc.gov.in The visit will be approved only after verification of credentials of the visitor. The visit may be carried out on 25/11/2021 between 10.00 am to 6.00 pm. The visitor must have genuine identity proof.**
2. This Work Order will start on tentatively 15/02/2022 for a period of one year. The personnel intended to work during this period shall possess a valid PVC on the commencement date of this Work order and shall be renewed without any lag if it expires during the time period of work order. The party should arrange for the Police verification certificate for their personnel. No person without PVC will be allowed to enter inside BARC.
3. **Quotation received from any party, without visit to AFD/BARC, will be rejected.**

4. Supplier shall have previous experience of the same type of work and shall provide documentary experience before approval site visit.
5. In case of any clarification required supplier shall contact Shri. D. P. Kokare, AFD, BARC, Mumbai 400 085, Tel. No. 2559 4966. OR Shri. Amit Sharma, AFD, Tel. No. 2559 4637

Confidentiality clause:-


No party shall disclose any information to any third party concerning the matters under this contract generally. In particular, any information identified as "Proprietary" in nature by the disclosing party shall be kept strictly confidential by the receiving party and shall not be disclosed to any third party without the prior written consent of the original disclosing party. This clause shall apply to the sub-contractors, consultants, advisers or the employees engaged by a party with equal force.


- "Restricted information" categories under Section 18 of the Atomic Energy Act 1962 and "Official Secrets" under Section 5 of the Official Secrets Act 1923. :-
- Any contravention of the above-mentioned provisions by any contractor, sub-contractor, consultant adviser or the employees of a contractor will invite penal consequences under the aforesaid legislation
- Prohibition against use of BARC's name without permission for publicity purposes.
- The contractor of sub-contractor, consultant, adviser or the employees engaged by the contractor shall not use BARC's name for any publicity purpose through any public media like Press, T.V. or Internet without the prior written approval of BARC.

The quotation, typed on a printed letterhead in a sealed cover super scribing enquiry no. and date shall reach to the undersigned at the address given below on or before 10/12/2021 by Registered / Speed Post only.

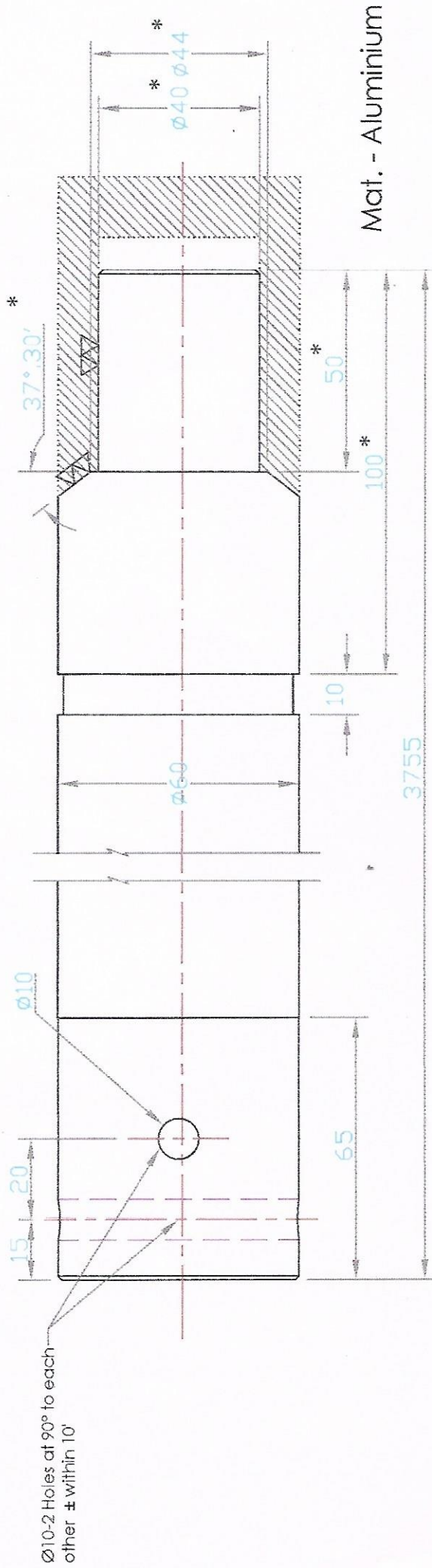
Shri. D. P. Kokare
Scientific Assistant,
Atomic Fuels Division,
Bhabha Atomic Research Centre
Trombay,
Mumbai - 400 085.

Thanking you,


D. P. Kokare
SA/E, AFD

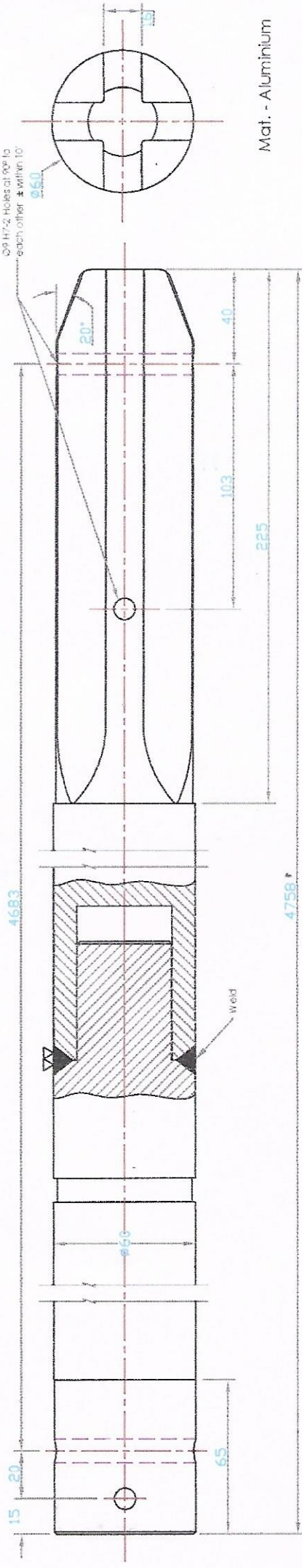

Amit Sharma
Head, FAS, AFD

Top End of Al. Shield.

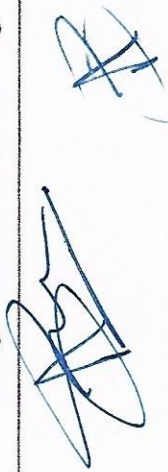


- 1) Only dimension marked * are to be machined.
- 2) Only Area Hatch has to be removed.

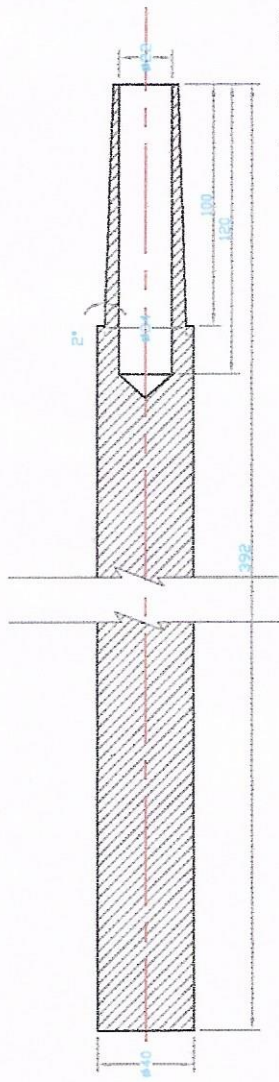
Aluminium Shield



#Welding, Weld bead machining, drilling and reaming is to be carried out.

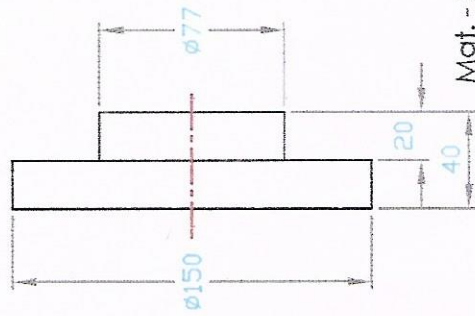


Breaker Rod



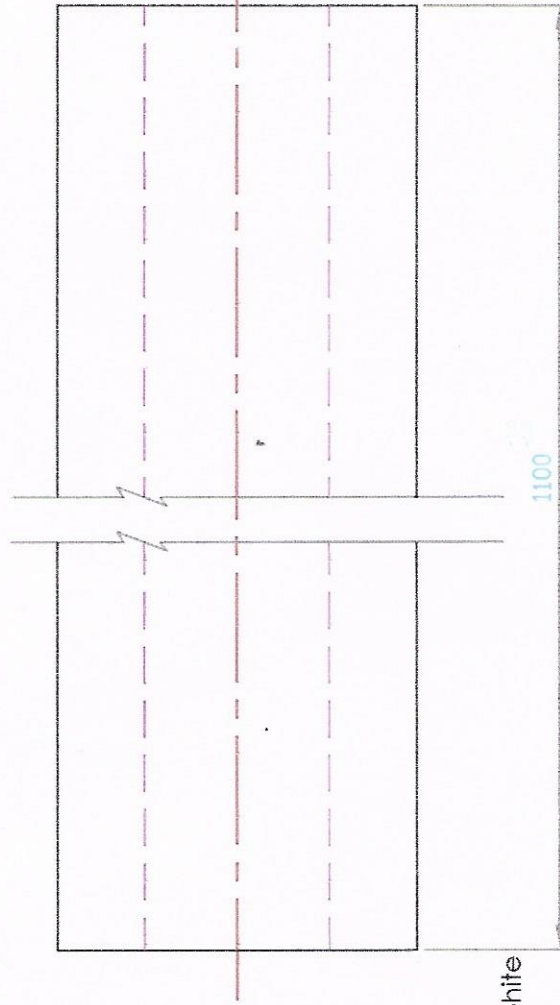
Mat. - Graphite

Bottom plug



Mat. - Graphite

Mould



Mat. - Graphite