



Government of India
Bhabha Atomic Research Centre
Isotope & Radiation Application Division

IRAD/14/395

October 18, 2019

Sub: Invitation of quotation for procurement of raw material, preparation of fabrication drawing, fabrication & supply of SS 304L Grills (11 No's) for HIRUP Water Pool, IRAD, BARC, Trombay, Mumbai-400085

Dear Sirs,

In connection with the above mentioned work you are requested to submit your detailed quotation/Agreement on the basis of the following requirements.

- The technical specification & scope of work is attached herewith.
- For any clarification regarding the specification, the contact person is

Shri Amit Acharya

Contact No- 022- 225596878

Email- amita@barc.gov.in

- The party should have valid Police Verification Certificate (PVC) for entry inside BARC. The list of manpower available with firm shall be submitted along with their details of PVC.
- The party shall procure all the raw materials required for the work. All material/component should be of tested quality.
- Quotation must reach by speed post/registered post to **Head, Isotope & Radiation Application Division by Wednesday 6th November 2019, 17.30 hrs and should be sent in a sealed envelope superscripted with the above reference number and due date.**
- The address on the envelope should read:

Kind Attention: - Head, HCOS, IRAD

To

Head, IRAD

RC&IG

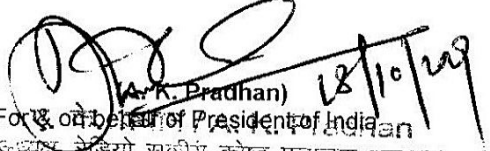
Bhabha Atomic Research Centre, Trombay

Mumbai - 400085

- The party should furnish valid PAN/GST No along with the quotation, otherwise their quotations are liable to be rejected & it may also be emphasized that quotations are submitted in printed letter heads.
- The party must offer warranty on components & work for satisfactory performance for a period of not less than 12 months.
- The fabrication work is subject to inspection by our officers. The work will be inspected by our officers at party's site before supply of the material.
- No advance payment in full or in part will be admissible and payments will be made only after successful completion of job & onsite testing as per satisfaction of our engineers.
- The offer shall clearly indicate the total cost & taxes or levy, if any. The offer shall be valid for a minimum period of 3 months from the date of opening the tender.
- Head, IRAD, BARC reserves the right to accept / reject any or all quotations without assigning any reason.

**Encl: - Tech Spec with tender drawing
(IRAD/14/394, 17/10/2019)**

**Head, SIRD
For uploading in BARC website/Tenders**


A.K. Pradhan
For & on behalf of President of India
अध्यक्ष, सेडयो सश्रीय कोष प्रचालन अनुभाग
Head, Hot Cell Operation Section
आइसोटोप एवं विकिरण अनुप्रयोग प्रभाग
Isotope & Radiation Application Division
भाभा परमाणु अनुसंधान केंद्र 1
Bhabha Atomic Research Centre
ट्रोम्बे / मुंबई / Trombay, Mumbai-400 085.

Job Specification

IRAD / 14/ 394

October 17, 2019

The following job needs to be carried out on urgent basis:

1. Brief Description of the job:

Procurement of raw material, preparation of fabrication drawing, fabrication & supply of SS 304L Grills (11 No's) for HIRUP Water Pool, IRAD

2. Scope of Work:

The Party should fabricate & supply SS grills as per the following details

SS Grill

The SS grill will be made of SS pipe on all 4 sides as outer boundary & square bars will be welded horizontally & vertically at 50 mm gap throughout the inner face of pipe. A 1.5 mm SS sheet will be welded in the bottom surface of the grill.

- Qty- 11 No's
- Size- approx – 2600 x 500 mm
- MOC- SS 304 L (Entire Job)
- Structural materials to be used
 - SS pipe- 25 NB Sch40
 - Sq Bar- 10 x 10 mm
 - SS Sheet- 1.5 mm thick
- Total Quantity of material - **850 Kg \pm 10 %**
- Each Grills should have minimum 4 lifting lugs

Scope:

- ❖ Procurement & supply of raw material as per above details & any other consumable raw materials as required for executing the work.
- ❖ Raw materials procured for this work shall undergo lab test for both mechanical & chemical properties at any govt approved as decided by purchaser/its representative.
- ❖ Preparation of detailed fabrication drawing as per on site measurement. Final drawings should be approved by IRAD officers before commencement of Job.
- ❖ Preparation of QAP detailing fabrication, installation, welding & inspection procedures. Fabrication of SS Grills at party's works & only installation at site.
- ❖ Surface finish: - Buffing & mirror polish. (surface finish 0.1 μ m/N3 or better)
- ❖ Pre dispatch Inspection & Testing of the work by indenting officer or divisional representative at party's works.
- ❖ Installation of grills at site as per final approved drawings.
 - ❖ Submission of inspection & test reports, history document & reproducible as built drawings.

❖ Welding

- Full welding of SS square bar & plate with pipe by TIG welding as per ASME section IX. The filler material shall conform to AWS class ER 308L. SS welding electrodes & filler materials shall conform to ASME section II part C, SFA 5.4 type, E 308L & SFA 5.9 type ER 308L respectively.

❖ Testing of weld

- Root & final passes of all welds shall be subjected to liquid/dye penetrant examination in accordance with ASME section III NB-5111 & acceptance shall be as per NB-5352.
- After weld edge preparation, the surfaces shall be subjected to Liquid Penetrant Examination in accordance with ASME section III NB-2546 & acceptance shall be as per NB-2546.3.

3. Inspection

- I. The party will arrange all the materials of the above specified work. Department will not supply any material in this regard.
- II. The items will have pre dispatch inspection before final acceptance & delivery.

4. Warranty, Place of Delivery

Warranty- Minimum 1 Year
Place of Delivery- RLGZ Stores

Quality Assurance cum Stage Inspection Plan

Sr. No.	Item/Activity	Characteristics to be checked	Type/extent of check	Ref. Document/ Accepted standard
A	<u>Raw Materials</u>			
1	SS Pipe, Square bar, SS Sheet	Visual inspection	Major	Approved Fabrication Drawing
2	Testing	Mechanical , Chemical Analysis, Ultrasonic testing	Major	Do
B	<u>In process</u>			
1	Welding procedure specification & welding procedure qualification	Review	ASME Sec IX	App Fab Drg & relevant doc
2	Material cutting	Dimension profile check	Measurement 100%	App Fab Drg
3	Weld set up	Dimensions/Alignment	Do	Do
4	All Welds butt & fillet	Weld soundness	100% DP test after Final Run	App Fab drg & ASME SEC V
5	Butt/Fillet weld joints	Do	Do	Do
6	Fabrication & assembly of parts	Dimensions/shape check	Measurement 100%	App Fab Drg
C	Overall Dimensions	Correctness if any	Do	Do
D	Fabrication of sample Debris Container	All Dimensions, functionality Ok	DO	Do
E	Final Inspection	Functional Check, Finishing	Moving parts Dim 100%	App Fab drg

SS GRILLS, Qty-11 No's - TENDER DRAWING

Ref:- (IRAD/14/395, dated -18/10/19)

