

Government of India
Bhabha Atomic Research Centre
Nuclear Recycle Group
Technology Development Division

TENDER No.: BARC/NRG/TDD/TDDS /2017/155914, Dated: 06/09/2017

Sub: Detonation coating of alumina 99.7% and supply of four numbers of SS tubes for Cold Crucible Induction Melter as per our enclosed technical specifications.

Dear Sir,

In connection with the above mentioned work you are requested to submit your lowest quotation to following address on the basis of terms and conditions and detailed scope of work mentioned in annexure attached.

Notes:

1. Your offer shall be valid for minimum 90 days from the date of opening. Quoted price shall be inclusive of all taxes; duties etc and remain firm during the period of execution of the order.
2. Any deviations from specification shall be clearly mentioned in your offer.
3. Payment will be made after successful completion of work.
4. The work covered by this order shall be completed within 10 weeks from the date of issue of Work Order.

Tender offers will be accepted up to **2 pm on 18/09/2017**. **The tenders will be opened at 3 pm** on the same day in presence of a nominee of Accounts Division, BARC.

M H Rao
Technology Development Division, TDD (NRG),
CDCFT Building,
BARC, TROMBAY, MUMBAI – 85.
Contact No: 25591121
Contact mail: mhrao@barc.gov.in, kshashi@barc.gov.in

The offer shall clearly indicate the time required for completing the entire work.

Thanking you.

M. Hanumantha Rao

(Hanumantha Rao M)
Scientific Officer (C) TDD

Scientific Officer (C) TDD
Bhabha Atomic Research Centre
Trombay, Mumbai - 400 085

TECHNICAL SPECIFICATIONS

TENDER No.: BARC/NRG/TDD/TDDS /2017/155914, Dated: 06/09/2017

1.0 SCOPE:

This specification establishes technical requirements for detonation coating of alumina 99.7% and supply of four numbers of SS tubes for Cold Crucible Induction Melter as per our enclosed technical specifications.

2.0 BRIEF DESCRIPTION

A cold crucible induction melter is being developed for the non-radioactive demonstration of the remotely operatable cold crucible induction melting technology for high level liquid waste vitrification. These coating trails are required to establish the coating techniques on the cold crucible water cooled SS tubes. All the fabricated items should be delivered at WMZ store, WIP complex, BARC Trombay.

3.1 Specifications of Alumina detonation coating on 1 inch SS tubes

Coating powder : Alumina (99.7% purity)

Powder size : 5 to 20 microns

Process : Detonation Spray Coating.

Hardness : 900 to 1100 VHN

Apparent Porosity < 1%

Dimond Grinding of surface is required to main good surface finish

Dielectric strength across coating (for 0.4 mm thk coating- 4 kV & 0.2 mm thick coating- 2kV)

3.2 Details of SS tubes to be coated:

Sr.No	Tube length mm	OD mm	ID mm	Length of coating required (mm)	Thickness of coating Micro meter
1	250	25.4	20	200	400
2	250	25.4	20	200	200
3	250	25	16.5	200	400
4	250	25	16.5	200	200

4.0 Completion Period: The work covered by this order shall be completed within **10 weeks** from the date of issue of Work Order.

5.0 Materials: Bare SS tubes will be issued as free issue material (FIM) against submission of insurance for SS tubes (Tubes cost ₹ 1000/-). Supplier has to arrange all the materials and components required for the execution of this work.

6.0 Inspection: BARC Engineer will carry out the stage wise as well as final inspection during the execution of work at all the places. However, inspection by the purchaser shall not relieve the contractor from his responsibilities of the requirements specified.

7.0 Guarantee: The item covered under this work order shall be guaranteed for satisfactory performance against manufacturing defects and faulty workmanship, for a period of 12 months from the date of supply. If the item becomes defective during this period, the contractor shall be responsible for making arrangement for repair/ replacement at his own cost.

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8.0 Validity: The offer shall remain valid for 90 days.

9.0 Safety:

- A. During the execution of job necessary safety, as followed in BARC shall be followed by contractor.
- B. If any accident occurs during the execution of job, it will totally lie with contractor.

10.0 Security:

- Personnel entry into BARC premises for any job in connection with the work awarded is strictly against Police Verification Certificate issued by competent authority for each individual.
- Security rules and transport rules at BARC, Trombay premises shall be strictly followed.
- Labours under 18 years shall not be allowed to work at site.

*M. Hanumanthra Rao
(HANUMANTHA RAO .M)*