

**PART- A: PRE-QUALIFICATION CRITERIA**

The BIDDER / VENDOR has to compulsorily meet all the following requirement to get qualified for consideration of their technical offer for the SUPPLY OF STEEL SHOTS. If the vendor does not qualify as per PRE QUALIFICATION CRITERIA, the technical offer of such BIDDER(s) / VENDOR(s) offer will not be considered.

1. The BIDDER(s) / VENDER(s) shall be a manufacturer or an Authorized dealer of STEEL SHOTS. In case of dealers, valid authorization certificate should be submitted along with offer, failing which the offer will not be considered.
2. The BIDDER(s) / VENDER(s) shall have a minimum of Three Years of Continuous Experience in the field of STEEL SHOTS for shot blasting. The BIDDER(s) / VENDER(s) should necessarily attached certificate of Incorporation/ Deed of Partnership / Certification of Registration or any other documents supporting the above experience.
3. The BIDDER(s) / VENDER(s) shall have supplied Cast Steel Shots for shot blasting to at least Two Major Industries in the past Two years and the performance of the same should have been satisfactory. The BIDDER / VENDER should necessarily attach Purchase Order copy and performance Certificate of the supplied item.
4. The Reference list of customers to whom earlier supplies were made shall be attached with the details (Name, Phone Number / Email ID) of the CONTACT PERSON for cross reference by BHEL.
5. Any Deviation in technical specification may lead to rejection of the offer.

**PART- B: TECHNICAL SPECIFICATION:**

1. **Application:** For the surface cleaning of steel objects — mainly piping components, structural section, plates/sheets, etc.
2. **Surface condition:** Either formed with thick flake type scales after heat treatment operations (like normalizing /solution annealing), very fine oxide film formation due to stress relieving / annealing coated with paint or anti-corrosive agents, rusted with pitting due to weathering.
3. **Blasting Process:** For surface cleaning manual shot blasting process is adopted using air supplied at pressure around 70-90 psi or 6.0 bar.
4. **Surface Finish:** Surface finish required is SA2 1/2 after blasting.
5. **Blasting Media:** Steel Shots shall conform to the standard IS: 4606-1983 (Reaffirmed Latest).
6. **Physical Properties:** The offered blasting media shall have
  - a) Spherical shape.
  - b) Average Hardness: 400 to 500 HV
  - c) Density: Minimum 7 gm/cc
  - d) Metallurgical Composition

Carbon: 0.6 to 1.2 %

Silicon: 0.2 to 1.0 %

Manganese: Maximum 1.2 % Phosphorous: Maximum 0.08 %

Sulphur: Maximum 0.08 %

e) Microstructure: Fine Tempered Martensite

7. The offered blasting media shall have

- a) High durability
- b) Uniform hardness
- c) Uniform particle size
- d) Low breakage

8. **Packing:** The steel shot while shall be packed in polyethylene lined bags (to avoid rusting due to moisture) with weight not more than 25 kgs and the packing shall withstand normal handling during transport and storage — in multiple layers, without bag breakage.

9. **Inspection:** The lot shall be offered for inspection by BHEL authorized representatives prior to dispatch, and the certificate of conformance as per the above Clause No. 07 and 08, shall be produced from a reputed/recognized laboratory.

10. **Material Acceptance:** In case of any deviation, for the random samples taken from the lot a receipt at BHEL stores, from the above listed specification — It is the responsibility of within a period of Two weeks (or it might lead to disqualification from vendor list).

11. **Technical offer:** The bidder shall give the offer with point to point response to the above clauses with supporting details / documents for evaluation.

12. **Reference List:** It is preferred to provide details on earlier supplies to BHEL / Trichy and / or the contact details of other reputed customers, using the offered product for a cross reference by BHEL.

----- 0 -----