

**Technical Specification for SS 1180 (S-460)& SS 1000 (S-390)**

Sl.No	DESCRIPTION	Vendor to confirm	Vendor's Reply (To be filled)
	<b>The BIDDER/VENDOR has to compulsorily meet all the following requirements 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.</b>		
1	<b>TECHNICAL SPECIFICATION (IS 4606-1983 SHALL BE REFERRED FOR ANY CLARIFICATION)</b>	Accepted / Not Accepted	
2	<b>Type and specification of steel shots: SS-1180 (S-460) &amp; SS-1000 (S-390)</b> Application: For the surface cleaning of high alloy steel pipes/tubes and heat treated high alloy steel pipes/tubes with scales and rust for achieving surface finish of SA 2.5.	Accepted / Not Accepted	
3	<b>Size</b> - S390 / SS 1000 (0.85mm to 1.7mm) 1.4mm-5%,1mm-80%,0.85mm-11%, Pan-4%)	Accepted / Not Accepted	
4	<b>Material</b> - The steel shots shall be manufactured by atomizing molten steel into random sizes of steel using a suitable heat treatment procedure.	Accepted / Not Accepted	
5	<b>Shape</b> - The steel shots shall be almost solid spherical as is maximum commercially possible and shall not contain more than 5% of tails and irregular steel shots. The presence of foreign material shall not exceed 1% of weight of the sample taken.	Accepted / Not Accepted	
6	<b>Chemical composition</b> - %Carbon 0.6-1.25, %Silicon 0.2-1.1, % Manganese 1.25 max, % Sulphur 0.08 max, %Phosphorus 0.08 max. The chemical composition test report shall be submitted along with the material delivery.	Accepted / Not Accepted	
7	<b>Hardness</b> - The average hardness of the steel shots shall be 400-500 in terms of Vickers Pyramid Number (HV).	Accepted / Not Accepted	
8	<b>Microstructure</b> - On examination of steel shots under microscope at magnification of 500X, it shall reveal tempered martensitic structure. <b>Density</b> - Density of steel shots shall not be less than 7g/ml, nor contain more than 10% hollow shot	Accepted / Not Accepted	
9	<b>Test report</b> - The test for chemical composition, Density, Hardness, weight of foreign material present per unit weight of sample and microstructure shall be submitted along with the material delivery.	Accepted / Not Accepted	
10	<b>Inspection:</b> A lot from the bulk supply shall be tested by BHEL as per PQC before acceptance	Accepted / Not Accepted	
11	<b>Material acceptance:</b> In case of any deviation, for the random samples taken from the lot on receipt at BHEL stores, from the above listed specifications - it is the responsibility of the supplier to replace the lot as per the technical specifications - at the cost of the supplier within a period of two weeks (or it might lead to disqualification from the vendor list)	Accepted / Not Accepted	
12	<b>Packing:</b> The steel shots while delivery shall be packed in polyethylene lined bags (to avoid rusting due to moisture) with weight not more than 25 kg and the packing shall withstand normal handling during transport and storage - in multiple layers, without baggage damage.	Accepted / Not Accepted	


**The Bidder should submit the above documents along with the offer. Offer without the above documents will be rejected.**



**M. DEEBANKUMAR**  
MANAGER  
BPN / UNIT - II  
BHEL, TRICHY - 620 014.

**PRE-QUALIFICATION CRITERIA**

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	<b>The BIDDER/VENDOR has to compulsorily meet all the following requirements 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.</b>		
1	<i>The BIDDER(s) / VENDOR(s) shall be a manufacturer or an authorized dealer of STEEL SHOTS. In case of dealers, valid authorization certificate should to be submitted along with offer, failing which the offer will not be considered.</i>	<i>Attached / Not Attached</i>	
2	<i>The BIDDER / VENDOR should necessarily attach purchase order copy / performance certificate (on or after 01.01.2018) against their experience for supply of Sl no: 10 &amp; 20..</i>	<i>Attached / Not Attached</i>	
3	<i>Sample from the supplied lot shall be tested by BHEL as per PQC before acceptance. BHEL shall take 7 days for testing and acceptance of the lot.</i>	<i>Accepted / Not Accepted</i>	
4	<b><u>Delivery Schedule-</u></b> 1.) For SS 1180 (S-460) 1st delivery 45 days from the date of PO- 20000 kg 2nd delivery 90 days from the date of PO- 25000 kg 2.) For SS 1000 (S-390) 1st delivery 45 days from the date of PO- 10000 kg 2nd delivery 90 days from the date of PO- 10000 kg	<i>Accepted / Not Accepted</i>	

  
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