Government of India  
Bhabha Atomic Research Centre  
Laser & Plasma Technology Division  

REF: LPTD/Works/YC/20/111966  

Trombay, Mumbai-85.  
Date: 03/11/2020  

To  

Sub: Inviting quotation for fabrication  

Dear Sirs,  

1. Quotations are invited for Fabrication of 20 Kg Plasma Spray grade Yttrium Oxide Powder as per specifications attached  
2. Bidder shall quote for fabrication along with components involved.  
3. GST shall be quoted separately. GST Exemption certificate (for 5%) shall be provided where ever necessary.  
4. The quotations must reach, Head, Laser & Plasma Technology Division by 18-11-2020 and must be sent in a sealed envelope super scribed with the above reference number and due date given above.  
5. The address on the envelope should read:  
   Head, Laser & Plasma Technology Division  
   Bhabha Atomic Research Centre, Trombay, Mumbai-400 085.  
   (Attn.: Y.Chakravarthy)  
6. The bidder shall have to take insurance policy against any material issued to him by the purchaser.  
7. The fabrication work shall be subject to inspection by our engineer. The final powder shall not be dispatched prior to approval by our engineer at bidder's works. Necessary inspection facilities should be provided to our engineers during fabrication at bidder's premises.  
8. The bidder shall deliver the final powder after approval by our engineer, within 45 days from the date the firm purchase order is issued to the bidder. The final powder and the scrap from the free issue material shall be delivered by the bidder at PRIP Shed, BARC, Trombay.  
9. Head, Laser & Plasma Technology Division, BARC, reserves the right to accept/reject any or all quotations without assigning any reason.  
10. PAN number and GSTIN number must be given  

(Signed)  
(Dr. Srikumar Ghorui)  
Head, TPTS, L&PT Division  

Encl.: As above.  
Copy to: Accounts Officer, GSS  
Head, SIRD, BARC  
In charge, Notice Board, V.S.Bhavan, Anushakti Nagar  
BARC site notice board  

The quotations will be opened at 16.00 Hrs on 19-11-2020
Fabrication of 20 Kg Plasma Spray Grade Yttrium Oxide Powder

Description: Plasma spray grade Yttrium Oxide (Y₂O₃) powder is used as a feedstock powder for Plasma Spray coatings. The present work involves converting commercially available fine powder into spray grade quality powder suitable for plasma spray coating. Fine powder are converted into spray grade quality by various techniques such as agglomerated & sintered, fused & crushed, sintered & crushed etc. The fabricated powder should be in micron size with narrow range and good flow ability. The fabricated powder should have the following specifications.

1. Material: Yttrium Oxide (Y₂O₃)
   Type: Powder
   Purity: >99.9%
   Powder size: -270+1250 (Mesh Size) or -53+10μm (approx)
   Shape: Preferably spherical or agglomerated and sintered
   Flow ability: 50 gr / <100 sec’s
   Quantity: 20 Kg

Other Terms and Conditions:
1. The supplier should procure the required quantity of commercial powder themselves. The buyer will not provide the commercial powder.
2. The supplier should mention powder shape and size of final powder clearly in their quotation.
3. Flow ability will be checked as per ASTM B213 standard and should match with commonly used thermal spray grade powders.
4. Certificate mentioning chemical analysis of Y₂O₃ powder and microstructure of final powder should be provided on request.
5. The bidder should supply final powder within 45 days after release of work order.
6. The supplier should have supplied similar type of thermal spray powders at least once in last three years.