Government of India  
Bhabha Atomic Research Centre  
Multidiscipline Research Group  
Applied Physics Division

Ref: APD/CB/MF/20/MGS/379 /OPA/103337  
Oct 23,2020

To,

Sub: Minor Fabrication - invitation of quotations for the job of “Fabrication, Supply, inspection of Transmission Plates, HV Assembly Components and Related accessories” as per attached specifications (Appendix-I) and drawings (Appendix-II).

Due Date: 18/11/2020

Kind attention: MAMTA G SHARMA , EXT - 21316

Dear Sirs,

1. Quotations are invited for the minor fabrication job, as per the enclosed specifications and drawings.
2. Bidder shall quote for fabrication of these components with material.
3. Bidder shall take out an insurance policy in favour of BARC for any free issue material supplied.
4. Taxes shall be quoted separately. Form H shall be provided where necessary.
5. The quotations must reach, Head, Applied Physics Division on or before the due date referred above and must be sent in a sealed envelope superscribed with the above reference number and due date. By SPEED POST only.
6. The address on the envelope should read:
   The Head,  
   Applied Physics Division, PURNIMA LABS,  
   Bhabha Atomic Research Centre  
   Trombay, Mumbai - 400 085,  
   Attn : Mrs. Mamta G Sharma

7. The fabrication work shall be subject to inspection by our representative. The finished components shall not be dispatched prior to approval by our representative at the bidder’s works. Necessary inspection facilities should be provided to our engineers during fabrication at bidder’s premises.
8. The bidder shall deliver the finished components after approval by our representative, within 3 months from the date of the firm purchase order issued to the bidder. The finished components shall be delivered by the bidder at APD,Purnima.
9. Head, Applied Physics Division, BARC, reserves the right to accept/reject any or all quotations without assigning any reason.
10. Payment will be made by cheque only after satisfactory completion of work on production of bill, delivery challan and advance stamped receipt. It may be noted that IT @ 2% and surcharge on tax shall be deducted from your bills.
11. Job will be guaranteed against material and manufacturing defects for 1 year from the date of supply.
12. A component wise cost as per Appendix-I should be quoted by the supplier (in a split cost manner) instead of lump sum amount.

(Mamta G Sharma)  
for and on behalf of  
Head, Applied Physics Division

[Signature]

23/10/2020
Minor Fabrication, Supply, Inspection of Transmission Plate, HV Assembly Components and Related Accessories” as per attached specifications (Appendix-I) and drawings (Appendix-II).

Appendix-I

Following is the list of components as per Drawing (Appendix-II):

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Name of items</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ground line-A (Material: Brass)</td>
<td>10 No’s</td>
</tr>
<tr>
<td>2.</td>
<td>Ground line-B (Material: Brass)</td>
<td>04 No’s</td>
</tr>
<tr>
<td>3.</td>
<td>HV Line-A (Material: Brass)</td>
<td>10 No’s</td>
</tr>
<tr>
<td>4.</td>
<td>HV Line-B (Material: Brass)</td>
<td>04 Sets.</td>
</tr>
<tr>
<td>5.</td>
<td>HV Line-I (Material: Brass)</td>
<td>15 No’s.</td>
</tr>
<tr>
<td>6.</td>
<td>L-Angle (Material: Aluminum)</td>
<td>20 No’s</td>
</tr>
<tr>
<td>7.</td>
<td>Round Plate-A (Material: Brass)</td>
<td>10 No’s</td>
</tr>
<tr>
<td>8.</td>
<td>Round Plate-B (Material: Brass)</td>
<td>04 No’s</td>
</tr>
<tr>
<td>9.</td>
<td>Compact Brass Plate Assembly. (Each assembly consists of five components with quantity of each provided in attached drawings.)</td>
<td>10 sets</td>
</tr>
<tr>
<td>10.</td>
<td>Perspex Holder (Material: Perspex) (please see the precision and special notes mentioned in the drawings)</td>
<td>1000 No’s.</td>
</tr>
<tr>
<td>11.</td>
<td>Copper tube : Size 1 inch tube having (OD- 28.57mm or nearest standard ) and thickness 1.65mm or nearest standard, total length: 5 meters (No drawings attached)</td>
<td>01 No</td>
</tr>
<tr>
<td>12.</td>
<td>Brass L-Angle 25mmX25mmX8mm (thickness). (L-angle is maintained only in 650mm length and after that it is like a plate in next 400mm.)</td>
<td>02 No’s</td>
</tr>
<tr>
<td>13.</td>
<td>Holder (Material: Brass)</td>
<td>20 No’s</td>
</tr>
<tr>
<td>14.</td>
<td>Top Plate (Material: Prespex/Nylon)</td>
<td>20 No’s</td>
</tr>
<tr>
<td>15.</td>
<td>Base plate (Material: Prespex/Nylon)</td>
<td>20 No’s</td>
</tr>
<tr>
<td>16.</td>
<td>Washer material SS-304 Dimension: ID-(a)2mm, thickness: (b) 1.0mm</td>
<td>20 No’s</td>
</tr>
<tr>
<td>17.</td>
<td>Washer material SS-304 Dimension: ID-(a)2mm, thickness: (b) 2.0mm</td>
<td>20 No’s</td>
</tr>
<tr>
<td>18.</td>
<td>Accessories- Hardware-A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Slotted Head M4x5 Bolts and Nuts (Material: MS)</td>
<td>500 No’s each.</td>
</tr>
<tr>
<td></td>
<td>b) Slotted Head M3x15 Bolts and Nuts (Material: MS)</td>
<td>100 No’s each.</td>
</tr>
<tr>
<td></td>
<td>c) Allen CSK bolt M4X10 (Material: MS)</td>
<td>100 No’s</td>
</tr>
<tr>
<td></td>
<td>d) Allen head bolts M8 x 25 and Nuts (Material: SS)</td>
<td>100 No’s each</td>
</tr>
<tr>
<td></td>
<td>e) Allen head bolts M6 x 25 and Nuts (Material: SS)</td>
<td>100 No’s each</td>
</tr>
<tr>
<td></td>
<td>f) Allen head bolts M6 x 15 (Material: SS)</td>
<td>100 No’s</td>
</tr>
<tr>
<td>g) Allen head bolts M5 x 10 (Material: SS)</td>
<td>100 No’s</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>19. Accessories- Hardware-B (Make: Taparia or Equivalent)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Metric Allen Key Set (Sizes: 1.5,2,2.5,3,4,5,6,8,10 mm)</td>
<td>02 Sets.</td>
<td></td>
</tr>
<tr>
<td>b) Double ended spanners: Made from chrome vanadium steel, with nickel chrome plated with Hardness in the range from 42-48 HRC. (Sizes: 6-7, 8-9, 10-11, 12-13, 14-15, 16-17, 18-19, 20-22, 21-23, 24-27, 25-28, 30, 32)</td>
<td>02 Sets.</td>
<td></td>
</tr>
<tr>
<td>c) Adjustable Spanner Length: 300mm with max. jaw opening 35 mm.</td>
<td>02 No’s.</td>
<td></td>
</tr>
</tbody>
</table>

General Notes:
1. All dimensions in Appendix-II are in mm.
2. Drawing should not be measured for making/ checking for the dimensions of the component.
3. In case of any doubt the authority and the representative of the purchaser shall be contacted before taking any final decision.
4. Tolerance value is 0.2mm, unless specified.
5. Specific instructions and accuracies marked for some components in the drawing should be strictly followed.

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Appendix-II

Brass Plate Based Components, Assemblies and Related Accessories

Part 1: Ground Line-A (Material Brass):
Qty: 10 No’s.

Eight 8.5mm dia Through Holes on a PCD of 85.0mm.
Five M6 Threaded Holes 10mm deep.

Part 2: Ground Line-B (Material Brass):
Qty: 04 No’s.

Eight 6.5 mm dia CSK Through Holes on a PCD of 100 mm.
Five M6 Threaded Holes 10mm deep.

Part 4: HV Line-B (Material: Brass) Qty: 04 No's.

Part 5: HV Line-1 (Material: Brass) Qty: 15 No's.

Part 6: L-Angle (Material: Aluminum), Qty: 20 No's.

Part 7: Round Plate-A (Material: Brass) Qty: 10 No's.

Part 8: Round Plate-B (Material: Brass) Qty: 04 No's.
Part-9 Compact Brass Plate Assembly with Enclosure: 10 Sets: (Quantities of individual components shown are for one single set.)

Notes:
1) Part-1 and Part-2 should be loose fit.
2) Part-2 and Part-4 are also loose fit.
3) O ring and all M3 Screws required for assembly are also in the scope of supplier.
4) All Dimensions are in mm.
5) No part of the drawing should be used for measurements.
6) In case of any doubts, please contact the Indenting Officer.
Part-10- HOLDER Material: Perspex
Qty: 1000 No's.

Non-standard Threads matching to the mini round shell two pin electrical female connector.
approx. 12.7 mm x 1 mm (7mm long).

Notes:
1) ALL DIMENSIONS ARE IN mm.
2) The dimensions shown with precision values should strictly be maintained, other dimensions may have precision of +/- 0.2 mm.
3) A female mini round shell connector will be provided to the supplier for matching the threads.
4) Before making the bulk quantities the supplier should submit five samples and a gauge tool for measuring the inner diameter (6.2, +0.1/-0.0) as well as inner step length (10, +/- 0.1) for approval. The gauge tool may be designed using a metal rod of suitable diameter with a step and a standard marking for length.
5) Mismatch in dimensions or precision may result in rejection of pieces.
6) A step needs to be bored out at the details shown in expanded view at 'A'.
and after that it is like brass plate in next 400 mm.

20 Nos. (L) angle is main tained only in 650 mm length.

Item 12: Brass L - Angle 25mm x 25 mm x 8 mm (Thickness).

After that holes are in set of three each separated by 15 mm and two sets are separated by 17 mm.

9 Nos. thread holes (first three holes at a separation of 17 mm, next three after a gap of 22 mm).
Item 16 and 17- Washer

No Chamfering, only burrs should be removed by fine polishing.

Washers, Material: SS-304

Notes:
1) For dimensions 'a' (inner diameter) and 'b' thickness, please see the attached list.
2) Top Surface should be parallel to Plane 'A' and to verify it proper gauge, surface plate etc. should be arranged by the fabricator at the time of time of inspection.
3) No Chamfering is required on inner edges of washers only fine polishing should be done to avoid any burrs and sharp edges.
4) All Dimensions are in mm.
5) No part of the drawing should be used for measurements.
6) In case of any doubts, please contact the Indenting Officer.