

Technical Physics Division  
PURNIMA Laboratories

Ref: NXPF/MF/PSN/141

Date: 25-05-2018

**Due on :** 13/06/2018

Sub : Minor Fabrication - invitation of quotations.

Dear Sir,

1. Quotations are invited for the minor fabrication job, as per the enclosed specifications.
2. Bidder shall quote for fabrication of these components with material.
3. Taxes and excise duties shall be quoted separately. Form AF shall be provided where necessary.
4. The quotations must reach to the Head, Technical Physics Division within **7 days** of the date of this letter and must be sent by Indian post/Indian speed post 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, Technical Physics Division**  
**Bhabha Atomic Research Centre**  
**Purnima Labs., Trombay, Mumbai 400085.**  
Attn: Prashant Singh

6. The bidder shall have to take an insurance policy against any material issued to him by the purchaser
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 and install it after approval by our representative, **within 8 weeks** from the date the firm purchase order issued to the bidder. The finished components and the scrap from the free issue material shall be delivered by the bidder at PURNIMA Laboratory, Technical Physics Division (Near Plutonium Plant), Bhabha Atomic Research Centre, Trombay, Mumbai 400085.
9. Head, Technical Physics Division, BARC, reserves the right to accept/reject any or all quotations without assigning any reason.
10. Quote for each part separately.
11. Detailed drawing will be made available after issue of order.
12. Clarifications for executing the order can be sought after issue of order.



(Prashant Singh)  
for Head

Technical Physics Division

वैज्ञानिक अधिकारी/Scientific Officer  
तकनीकी भौतिकी प्रभाग/Technical Physics Division  
भौतिकी वर्ग/Physics Group  
भारत सरकार/Government of India, BARC  
ट्रॉंबे, मुंबई-४०००८५./Trombay, Mumbai -400 085.

**Description and specification of different items of**

**Work order ref: NXPD/MF/PSN/141**

Fabrication and supply of Low Leak Rate Ceramic and Kovar Electrodes

**Specifications:**

**I. Electrode 1**

1. Quantity : 2nos
2. Length : 104mm
3. Outer Diameter : 52mm
4. Material : Metalized ceramic
5. This electrode has to be vacuum brazed to end rings made of kovar (for exact specifications please refer to drawing of electrode-1)
6. Leak rate at brazed points should be  $\leq 10e-10$  L-Torr/sec

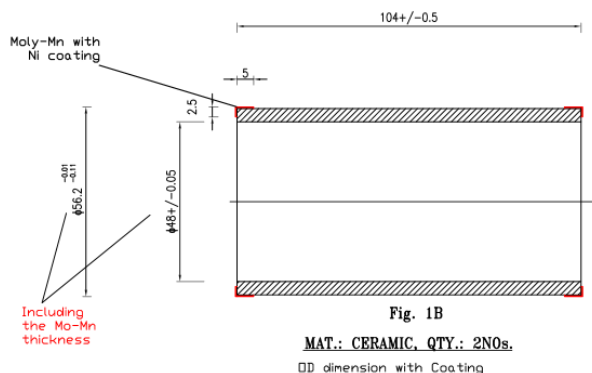
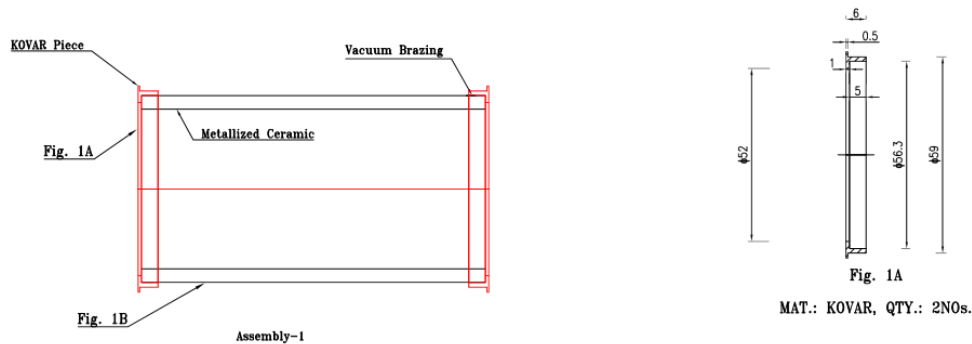
**II. Electrode 2**

1. Quantity : 2nos
2. Length : 87mm
3. Outer Diameter : 39mm
4. Material : Kovar
5. This electrode has to be vacuum brazed to metalized ceramic. Also metalized ceramic is vacuum brazed to copper cylinder (for exact specifications please refer to drawing of electrode-2)
6. Surface finish of electrode should be 3 delta followed by diamond polish as mentioned in drawing.
7. Leak rate at brazed points should be  $\leq 10e-10$  L-Torr/sec

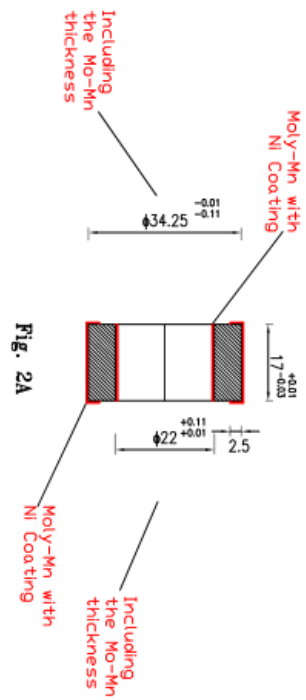
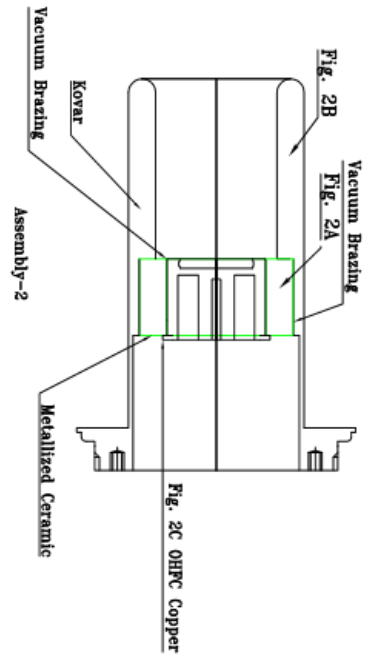
**Note:**

All the items should be quoted simultaneously. The items will be leak tested at user's site before acceptance. Necessary leak test certificate may be provided by the manufacturer.

**Electrode 1 Assembly**

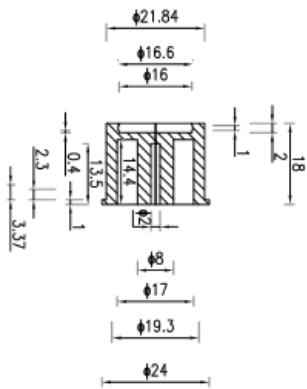
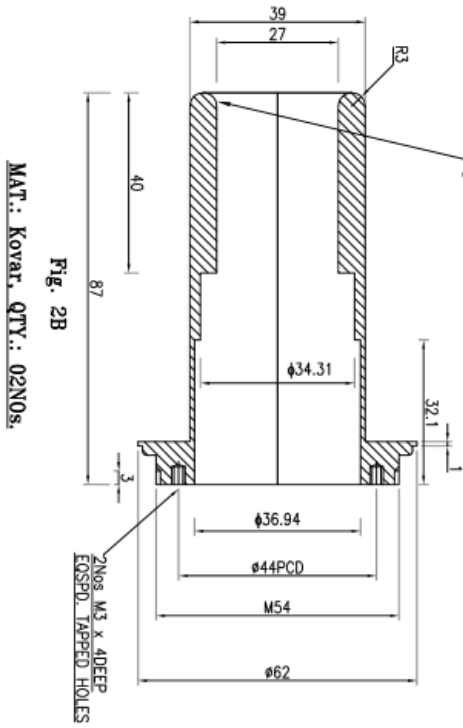


# Electrode 2 Assembly



MAT.: CERAMIC, QTY.: 2NOS.  
 OD and ID dimensions with Coating

Outer including Curvature Surface Finish - 3delta followed by diamond polish



MAT.: OPHC COPPER, QTY.: 2NOS.  
 Surface Finish - 3delta