

This file has been cleaned of potential threats.

To view the reconstructed contents, please SCROLL DOWN to next page.



प्लाज्मा अनुसंधान संस्थान
INSTITUTE FOR PLASMA RESEARCH
परमाणु ऊर्जा विभाग, भारत सरकार का एक सहायता प्राप्त संस्थान
**An Aided Institute of Department of Atomic Energy,
Government of India**



इन्दिरा पुल के पास, भट, गांधीनगर - 382 428 भारत
दूरभाष: (079) 2396 2020/2021/2028
फैक्स: 91-079-23962277
वेब: www.ipr.res.in

NEAR INDIRA BRIDGE, BHAT
DIST. GANDHINAGAR - 382 428 (INDIA)
Phone: (079) 2396 2000/2026/2332
Fax : 91-079-23962277
Web : www.ipr.res.in

ENQUIRY

ENQUIRY NO : IPR/EQF/18-19/182
Date : 07-01-2019

Due on : 14-02-2019 by 1:00 PM IST

Please send your offer in sealed envelope specifying Enquiry No, Date & Due Date, ALONG WITH your credentials for the following items which we are interested to import directly against Foreign Trade Policy 2015-2020.

Important Note:

Please note that e-mail quotations are not acceptable however you may send your queries (if any) to importpurchase@ipr.res.in

Please ensure your sealed quotation reaches this office not later than above mentioned due date and time.

Kindly go through the following documents properly before quoting which are available on the IPR web portal i.e., http://www.ipr.res.in/documents/tender_terms.html / attached herewith.

- 1) Instructions to the bidders & Terms and conditions (refer Form No: **IPR-FP-01.V3**)
- 2) Bidding format

GST for Goods and Services (IGST/CGST/SGST TAX BENEFITS): Please refer **clause no: 14** of Form No: **IPR-FP-01.V3**

QUOTATION SHOULD BE ADDRESSED TO PURCHASE OFFICER ONLY

Sr No	Description	Quantity
1	Alumina (metallized) Ceramic Disc as per attached specification	10.0 Nos.

Note:

1. Please quote with complete technical details (Technical compliance sheet and product data sheet).
2. TDS as per CGST Act: As per provisions of section No. 51 of the CGST Act 2017, TDS @2% (IGST 2% or CGST 1% and SGST 1%) will be deducted while making payment to the suppliers where total value of orders/contracts/work orders exceeds Rs. 2.5 lakhs, in the event of order in Indian Rupees. Necessary TDS Certificate will be issued to the supplier after TDS deduction.
3. Payment Terms:
 - Through Letter of Credit :- The L/C will be established for 80% value of purchase order will be paid against presentation

of shipping documents.

- Through Wire Transfer : 20% payment will be paid through wire transfer after receipt and final acceptance of the item/s at IPR site and on submission of performance Bank Guarantee for 10% of the order value, valid throughout warranty period (Inclusive Of Two Months Grace Period).

Encl: As per attachment.

Sd/-

Mr. D. Ramesh
Purchase Officer-II

Information to Vendors: We are working towards a single platform for our future requirement. Hence, please refer IPR website i.e, <http://www.ipr.res.in/documents/tendersenq.html> for our future requirement.

Technical Specification of Alumina (metallized) Ceramic Disc

1. Dimension of Metallized ceramic disc:

Diameter: 79.77 mm + 0.10 mm + coating thickness

Thickness: 12.5 mm + 0.10 mm

Metallization should be done on the periphery of disc thickness (reference drawing attached):

The metallization on the ceramic periphery (outer rim) would consist of Mo-Mn layer (~20-30µm) with Ni-plating (~2-10µm) and should be uniform. The metallization should be firm and should not be removed simply by scratching it with nail. No part of the metallization should penetrate over the disc surface.

2. Alumina content	: ≥99.7 %
3. Colour	: Ivory/White
4. Density	: 3.8 gm/c.c. min.
5. Water absorption	: Zero
6. Porosity	: Zero
7. Hardness (Rockwell 45N)	: 82 (typical)
8. Compressive strength	: 2400 MPa (typical)
9. Co. eff. Of thermal exp. (25-1000 °C)	: $8.0 \times 10^{-6} / ^\circ\text{C}$ (typical)
10. Thermal conductivity	: 30 W/mK (25°C) (typical)
11. Specific Heat	: 800 J/KgK (typical)
12. Dielectric Strength	: 8.7 kV/mm (typical)
13. Dielectric loss	: 0.0003 at 1 MHz or better (typical)
14. Dielectric constant	: 9.6 - 9.8 (typical)
15. Volume resistivity	: $\geq 10^{14}$ Ohm-cm (25°C) (typical)
16. Outgassing rate (after Baking)	: 10^{-8} mbar L/sec/cm ² (typical)
17. Vacuum compatibility	: UHV

Note: Baking temperature to be considered is around 250°C.

Test result:

Test result as mentioned in (a) and (b) should be submitted to IPR for evaluation before dispatching the material.

(a) Dimension measurement before metallization and after metallization

(b) Test certificate (showing conformance and compliance to above specifications) which includes:

- Test report for Hardness, Alumina content
- Certificate stating that the material is conforming to the specification.

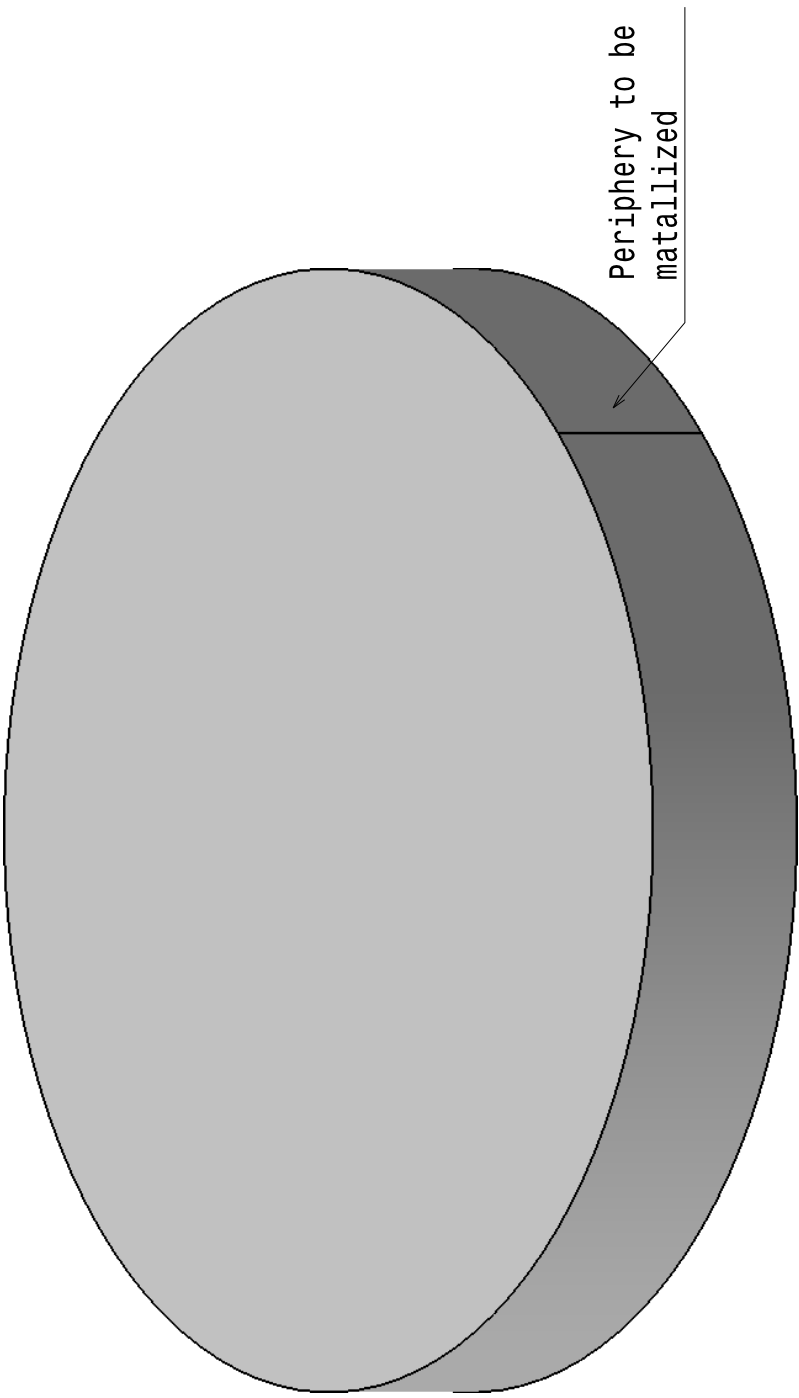
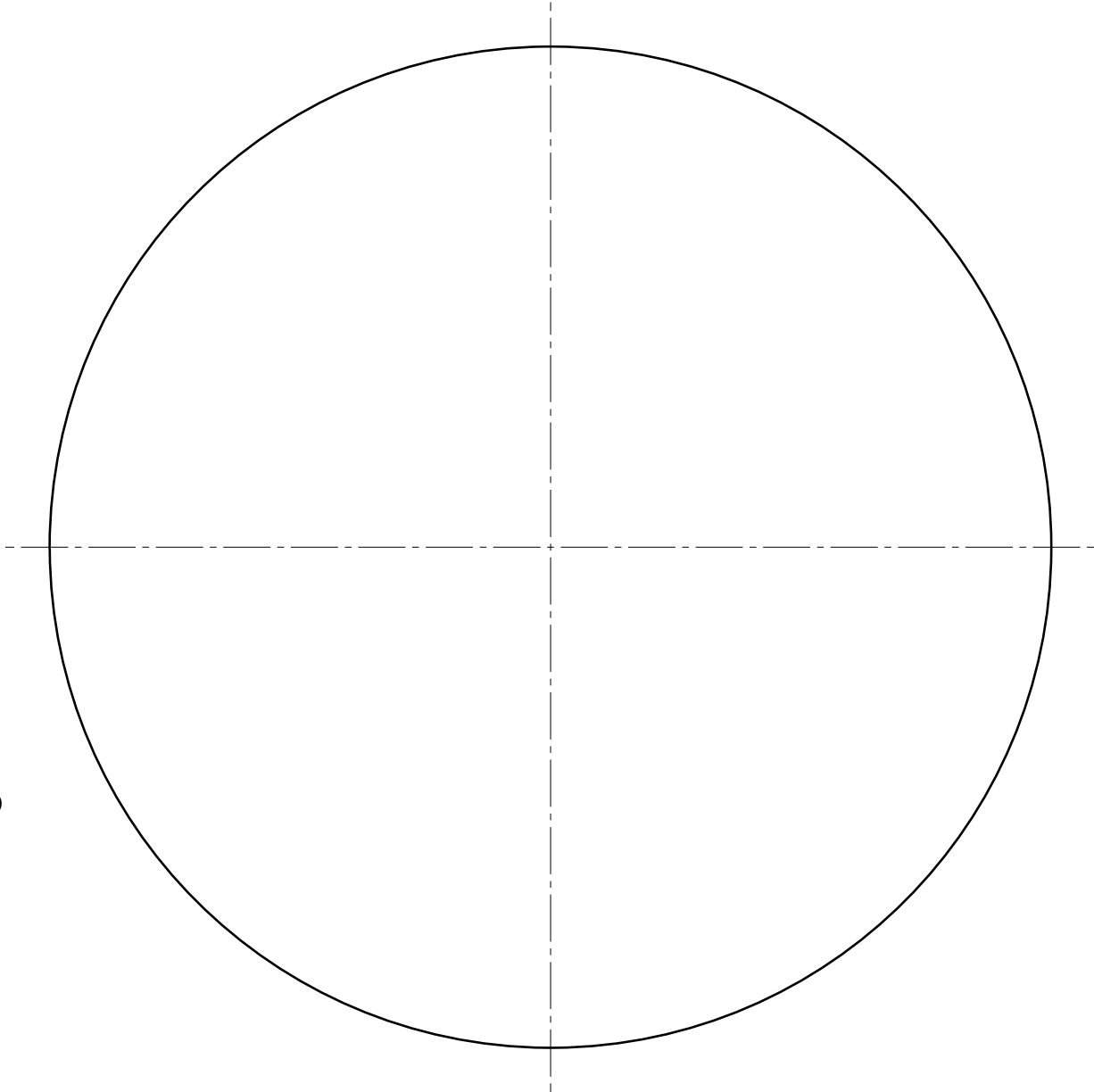
Dispatch: The material should be dispatched to IPR only after getting the dispatch clearance certificate from IPR.

Final Acceptance: Final acceptance will be given after visual inspection of the alumina (metallized) ceramic disc and its dimension measurement at IPR.

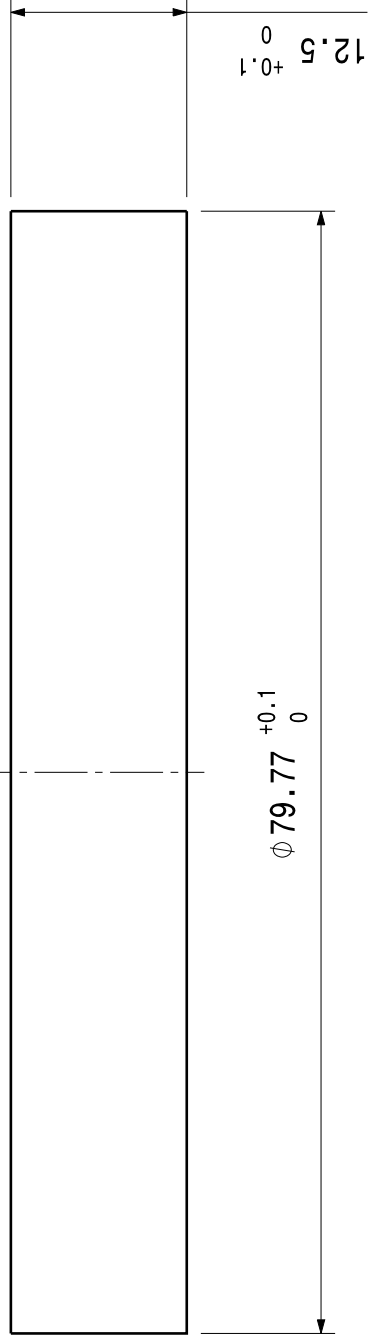
Notes:

- The material should be free from any manufacturing defect.
- The material surface should be clear and no shade or scratch on the ceramic surface is allowed.
- The material should be packed in such a way that there should not be any damage during transportation. Party has to replace the damaged material (if any) free of cost and expenditure will be borne by them.

Reference Drawing



Isometric view



Note:- Dimensions are in 'mm' without coating thickness.

Compliance Form for Alumina (metallized) Ceramic Disc

SN	Particulars	IPR requirement	Vendor's specification
1	Dimension of Metallized ceramic disc	Diameter: $79.77 + 0.10 \text{ mm}$ + coating thickness	
		Thickness: $12.5 \text{ mm} + 0.10 \text{ mm}$	
	Metallization should be done on the periphery of disk thickness (reference drawing attached) :	The metallization on the ceramic periphery (outer rim) would consist of Mo-Mn layer (~20-30 μm) with Ni-plating (~2-10 μm) and should be uniform. The metallization should be firm and should not be removed simply by scratching it with nail. No part of the metallization should penetrate over the disc surface.	
2	Alumina content	$\geq 99.7 \%$	
3	Colour	Ivory/White	
4	Density	3.8 gm/c.c. min.	
5	Water absorption	Zero	
6	Porosity	Zero	
7	Hardness (Rockwell 45N)	82 (typical)	
8	Compressive strength	2400 MPa (typical)	
9	Co. eff. Of thermal exp. (25-1000 °C)	$8.0 \times 10^{-6} / ^\circ\text{C}$ (typical)	
10	Thermal conductivity	30 W/mK (25°C) (typical)	
11	Specific Heat	800 J/KgK (Typical)	
12	Dielectric Strength	8.7 kV/mm (typical)	
13	Dielectric loss	0.0003 at 1 MHz or better (typical)	
14	Dielectric constant	9.6 - 9.8 (typical)	
15	Volume resistivity	$\geq 10^{14} \text{ Ohm-cm}$ (25°C) (typical)	
16	Outgassing rate (after Baking)	$10^{-8} \text{ mbar L/sec/cm}^2$ (typical)	
17	Vacuum compatibility	UHV	

Note: Baking temperature to be considered is around 250°C.

Test result:

Test result as mentioned in (a) and (b) should be submitted to IPR for evaluation before dispatching the material.		
(a)	Dimension measurement before metallization and after metallization	Will be Provided / Not provided
(b)	Test certificate (showing conformance and compliance to above specifications) which includes: - Test report for Hardness and Alumina content - Certificate stating that the material is confirming to the specification.	Will be Provided / Not provided

Dispatch:

The material should be dispatched to IPR only after getting the dispatch clearance certificate from IPR.	Agree / Not agree
--	-------------------

Bidder's Official stamp with Sign:

Date: