

TECHNICAL BID PROFORMA

Item Name: Sputter System

1.0 Bidder Eligibility Criteria:

I	Bidder Eligibility Criteria-I (Public Procurement – Preference to Make in India)	Class I / Class II	Local Content value	Reference, Page No.
I	Only 'Class-I local suppliers' and 'Class-II local suppliers', as defined under DIPP, MoCI Order No. P-45021/2/2017-PP (BE II) dated 16 th September 2020 and other subsequent orders issued therein.			
2.0	Bidder Eligibility Criteria-II	Compliance (Yes/No)	Reference Page No.	Remarks, If any
1	The bidder/OEM should have supplied at least 5 similar items to IITs, NITs, IISERs, CSIR Labs or other Govt. R&D organizations in the last 5 years, PO copies or installation certificates along with contact details of end user need to be submitted as the proof of supply. IIT Madras reserves its right to verify the claims submitted by the bidder and the feedback from the previous customers will be part of technical evaluation.			

3.0 Technical Compliance:

SI NO.	ITEM	SPECIFICATION	Comply / Not Comply	Ref. Page No.
1.	SS Chamber	SS 304 chamber (14"-16" diameter and appropriate height) to accommodate 3 sputter guns (in confocal geometry) mounted on powder coated steel frame with lockable castors, Dome-shaped		
2.	Sputter sources(confocal geometry)	3 Nos. (Magnetron sources for 2" diameter targets with option for 1") with motorised shutter, all mounted on CF100 flange. High power NdBF _e magnets and water cooling provision. Clamp arrangement to mount targets		
3.	Substrate holder	2" with maximum 800°C with rotation, up down movement of 25mm (all in-situ) & PID controller		
4.	Number of gases to be used	1 (Ar)		
5.	Water chiller	PID programmed, 1kW		
6.	Gas flow range (MFC with valve)	0-200 sccm range (capable of handling multiple standard gases)		

7.	RF supply	3 Nos, 300W with auto matching network & appropriate cables		
8.	Turbo pump	Base vacuum~ 10 ⁻⁶ Torr 250 lit/sec With oil backing pump (10 m ³ /hr), Pirani gauge (upto 8x10 ⁻⁴ Torr) and Cold cathode gauge (upto 10 ⁻⁸ Torr) with display, CF100 flange. All displays and controllers are required for operation		
9.	SS gate valve for throttling	Manual operation, Bellow sealed CF100 SS		
10.	Load-lock	Includes isolation valve for chamber & pump, magnetic transfer arm & hardware to connect backing pump of main chamber. Include other necessary accessories		
11.	Accessories	Instrumentation rack (Frame to mount electronics, display etc.)		
12.	Requirements	<ul style="list-style-type: none"> - Installation & training at IIT Madras - Vendor has to deposit any material like Cu/Al/Ag on glass & send to user for evaluation of thickness. During installation, same deposition to be repeated & results have to be demonstrated - Original invoice & AWB need to be submitted along with the system minimum one year warranty should be provided (letter from OEM for support during warranty to be submitted)		

Terms and Conditions

1.	Bidder should have experience in fabricating similar high vacuum deposition and should have installed at least 10 such setups in the last 5 years.		
2.	Bidder should show evidence of proof of customized deposition chamber building.		
3.	All additional components to required to meet the technical specifications list above should be added and quoted.		
4.	Bidder should have test facility in the manufacturing site to demonstrate the deposition of alloys or compound semiconductors in the quoted product prior to product installation onsite.		