

TECHNICAL BID PROFORMA
Item Name: “Nano positioning stages”

Bidder Eligibility Criteria:

1.0	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 10 years. Purchase order copies or installation certificates 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.			
2	Company should be registered in India for last 3 year. Proof of company registration should be enclosed.			
3	The bidder should have 10 lakhs turnover in any one of the last 3 Financial Year.			
4	The service center should be within Chennai, Tamilnadu. Proof of facility location & contact details to be provided along with technical bid.			

3.0 Technical Compliance:

S.No	Specifications	Details	Complied /Not Complied	Reference Page No
1.0	Positioning parameters			
1.1	Active axes	X, Y, Z, θ_x , θ_y , θ_z		
1.2	Type of stage	Peizo-actuators (nano-positioning) with stepper motor actuators (micro-positioning)		
1.3	Integrated sensor	Capacitive		
1.4	Travel range	X,Y,Z : 4 mm or more		
1.5	Tip/tilt angle	± 0.5 mrad or better		
1.6	Resolution in X, Y, Z	5 nm or better for piezo, 5 μ m or better for stepper motors		
1.7	Linearity error in X, Y, Z	< 0.01 %		
1.8	Repeatability X, Y	± 0.05 μ m for nano positioning to ± 5 μ m for stepper motor		

1.9	Flatness	10 to 15 nm		
2.0	Controller			
2.1	Control	closed loop integrated		
2.2	Multiple channel	6 axis or higher motion controller, Has to compatible with linear and rotary stages		
2.3	Drive system	Must include relevant drive system & enclose full details		
2.4	Encoder	Encoder details must be provided		
3.0	Load specification			
3.1	Normal Load capacity	1 to 5 Kg		
4.0	Other requirements			
4.1	Operating temperature range	Performances must be reproduced in the Indian-subcontinent laboratory condition at 25 °C		
4.2	Material	High strength		
4.3	Adapter Plates	Required		
4.4	Cables	All suitable cables must be included		
5.0	Computer interface			
5.1	System connection	The system shall be connected to external computer/laptop via USB or any advanced technology		
6.0	Application requirements			
6.1	Must be capable to accommodate free form surfaces for laser machining applications			
6.2	Must support the machining of micro nano features in the range of 500 nm to 1 µm			

S.NO	Other Requirements	Complied/Not Complied	Reference Page No
1	Quotations with the complete solution for the above requirement will only be accepted.		
2	I.I.T. Madras has the right to accept the whole or any part of the tender or portion of the quantity offered or reject it in full without assigning any reason		
3	The offer/bids should be sent only for a machine that is available in the market and supplied to a number of customers. Quotations for a prototype machine will not be accepted.		
4	Test certificates for all the stages confirming the specifications from OEM are required with shipping/freight documents.		
5	Suppliers to provide training for programming, operation and maintenance at IIT Madras at free of cost.		
6	All necessary safety regulations such as CE compliance, low		

	voltage directive, EMC regulations compliance details, Alarms and emergency switch off in case of any malfunctioning must be provided. The system must be equipped with all the necessary safety interlocks. Provisions for safety wear are essential.		
7	The complete system and its associated hardware should have a standard warranty of 1 year or more from the date of installation, commissioning and acceptance of the system at IIT madras. Suppler modification (s)/software upgrades shall be intimated and the same will be made available free of cost during the warranty period.		
8	All technical literature/catalogues and drawings of various systems should accompany the quotation. All the documents should be in English.		
9	Installation and commissioning should be provided by the supplier or its Indian agent. The Indian agent should have well proven service capability on similar systems with factory trained service engineers available in India. Details of their engineers expertise should be enclosed along with the offer and will be a key factor in the decision making.		
10	The system should have compatibility with Indian environment conditions (for better power/energy stability)		

(Note: It is mandatory for the bidders to provide the compliance statement in tabular column format along with catalogue page number (comply/not comply) for the above points with document proof as required. Failing which bidders will be technically disqualified)

**SIGNATURE OF BIDDER ALONG WITH
SEAL OF THE COMPANY WITH DATE**