

TECHNICAL BID PROFORMA
Item Name: Sensors and Measurement Probes

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 3 similar items to IITs, NITs, IISERs, CSIR Labs or other Govt. R&D organizations in the last 5 years in India or abroad, 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:

S. NO	SPECIFICATION	Complied / Not Complied	Reference Page No.
1	High pressure sensor		
	▪ Range : 0~1000bar ~6000bar		
	▪ Accuracy: 0.5%FS		
	▪ Nonlinearity: Full range x 0.2%		
	▪ Reliability: Full range x 0.05%		
	▪ Output: 4-20mA,0-10V, 0-5V, 1-5V, 0.5-4.5V (PT124B-211) ; 1.5mV/V , 2mV/V (PT124G-211)		
	▪ Input voltage: 24VDC (4-20mA,0-10V, 0-5V output) 5 V DC (0.5-4.5V output) 10V DC (1.5mV/V , 2mV/V output)		
	▪ Operating temperature: -20~80°C		
	▪ Compensated temperature: 0~75°C		
	▪ Overload pressure: 150%FS		
	▪ Burst pressure :300%FS		
	▪ Wetted Parts: stainless steel		
	▪ Need to be compatible with high pressure waterjet machine tool		
	▪ Should have relevant data processing software.		

	<ul style="list-style-type: none"> The software module should communicate with Fanuc Controller 		
2	Measuring probe with software module		
	<ul style="list-style-type: none"> The measurement touch probe should be suitable to get situated alongside the waterjet cutting head. 		
	<ul style="list-style-type: none"> Touch probe kit should come with a calibration ring to be used to calibrate the tip of the stylus. 		
	<ul style="list-style-type: none"> Interchangeable stylus 		
	<ul style="list-style-type: none"> Need to be compact, so can be mount to the micro-AWJ cutting head for in-situ measurement. 		
	<ul style="list-style-type: none"> Measurement accuracy: +/- 2 μm 		
	<ul style="list-style-type: none"> Repeatability: motion depending on machine repeatability (+/- 2 μm) 		
	<ul style="list-style-type: none"> Able to find the edge of the workpiece. 		
	<ul style="list-style-type: none"> Ability to 3D measurement <ul style="list-style-type: none"> o Locate a hole o Find towards machine axis find an angle and, on a workpiece o Locate an edge 		
	<ul style="list-style-type: none"> Should come up with relevant data processing and measurement software 		

Other Requirements

S. NO	SPECIFICATION	Complied / Not Complied	Reference Page No.
1	Suppliers are required to provide training for atleast 1 person on programming, operation and maintainance at vendors place and also at IIT Madras free of cost.		
2	The complete system and its associated hardware/software should have a standard warranty of 1 year 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.		
3	All technical literature/catalogues of various systems should accompany the quotation. All the documents should be in English.		
4	Detaills of their engineer's expertise should be enclosed along with the offer.		
5	The system should have compatibility with Indian environment conditions (for better power/energy stability)		
6	The system shall be capable of external control/triggering.		

7	Modules should be compatible to the waterjet environment.They should be demonstrated on the machine tool.		
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(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**