

# भारतीय प्रौद्योगिकीसंस्थानमद्रासचेन्नै 600 036 INDIAN INSTITUTE OF TECHNOLOGY MADRAS Chennai 600 036 भंडार एवं क्रय अनुभाग STORES & PURCHASE SECTION Email: adstores@iitm.ac.in दूरभाषः (044) 2257 8285 / 8287 / 8288 / 8290 फैक्सः (044) 2257 8082



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# P.K. SHEBA SABARI Assistant Registrar (Stores & Purchase)

Date: 23.02.2024

Due Date 29.02.2024 Before 02.00 p.m.

## Tender No. IITM/SPS/Waterjet Cutting Machine/030/2023-24/SPL

Dear Sirs,

On behalf of the Indian Institute of Technology Madras, Tenders are invited in two bid system, namely technical and financial bids for:

# Supply and installation of Waterjet Cutting Machine 3/5 axes at IIT Madras

Conforming to the specifications enclosed.

Tender Documents be downloaded from Central Public Procurement Portal may https://etenders.gov.in/eprocure/app. Aspiring Bidders who have not enrolled / registered in e-procurement enroll/register before participating website should through the https://etenders.gov.in/eprocure/app. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at "Help for contractors". [Special instructions to the bidders for the e-submission of the bids online through this e-Procurement Portal"].

Tenderers can access tender documents on the website (For searching in the NIC site, kindly go to Tender Search option and type 'IIT'. Thereafter, Click on "GO" button to view all IIT Madras tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website https://etenders.gov.in/eprocure/app as per the schedule attached.

**No manual bids will be accepted.** All tender documents including Pre-qualification, Technical and Financial bids should be submitted in the E-procurement portal.

	LAST DATE for receipt of Tender	:	29.02.2024 before 02.00 p.m.	
1	Date & Time of opening of Tender	:	01.03.2024 @ 03.00 p.m.	
	GUIDELINES F	OR	TENDER SUBMISSION IN CENTRAL PUBLIC PROCUREMENT PORTAL	
			(E-PROCUREMENT MODE)	
А	नि वदा की प्रस्त्ति	:	As per the directives of Department of Expenditure, this tender document has been	
	/Submission of		published on the Central Public Procurement Portal URL:	
	Tender		https://etenders.gov.in/eprocure/app	
			The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal More information useful for submitting online bids on the CPP Portal may be obtained at: <u>https://etenders.gov.in/eprocure/app</u> All tender documents including Technical Bid & Financial Bid should be submitted separately in online CPP portal as per the specified format only. Right is reserved to ignore any tender which fails to comply with the above instructions. <b>No manual bid submission will be entertained.</b>	

В	ऑनलाइन बोली जमा	:	REGISTRATION
	के अनुदेश / Instructions for online bid		<ul> <li>Bidders are required to enrol on the e-Procurement module of the Central Public Procurement Portal URL: <u>https://etenders.gov.in/eprocure/app</u> by clicking on "Online Bidder Enrolment". Enrolment on the CPP Portal is free of charge.</li> </ul>
	submission		• As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
			<ul> <li>Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.</li> </ul>
			<ul> <li>Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.) <u>https://eprocure.gov.in/eprocure/app</u> with their profile.</li> </ul>
			• Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
			• Bidder then may log in to the site through the secured log-in by entering their user ID / password and the password of the DSC / eToken.
С	नि वदा दस्तावेज़ की खोज / Searching for tender documents	:	• There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.
			• Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective <b>"My Tender"</b> folder. This would enable the CPP Portal to intimate the bidders through SMS / email in case there is any corrigendum issued to the tender document.
			• The bidder should make a note of the <b>unique Tender ID</b> assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.
D	बोली की तैयारी / Proparation of hids	:	• Bidder should take into account any corrigendum published on the tender document before submitting their bids.
	Preparation of bids		• Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
			• Bidder, in advance, should prepare the bid documents to be submitted as indicated in the tender document / schedule and generally shall be in PDF / XLS formats as the case may be. Bid documents may be scanned with 100 dpi with black and white option.
			<ul> <li>To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, GSTIN Details, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Documents" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.</li> </ul>
E	बोली की प्रस्तुति  / Submission of bids	:	<ul> <li>Bidder should log into the site well in advance for bid submission so that he/she can upload the bid in time i.e. on or before the bid submission date and time. Bidder will be responsible for any delay due to other issues.</li> </ul>
			<ul> <li>The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.</li> </ul>

		• A standard BOQ format has been provided in <b>Annexure-C</b> with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BOQ file, open it and complete the detail with their respective financial quotes and other details (such as name of the bidder). If the BOQ file is found to be modified by the bidder, the bid will be rejected.
		• The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
		• The <b>Tender Inviting Authority (TIA)</b> will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders due to local issues.
		• The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
		• Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
		• Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.
बोलीदाताओं के लए सहायता /	:	• Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
Assistance to bidders		• Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is [0120-4200462, 0120-4001002, 0120-4001005]
बोलीदाताओं के लए सामान्य अनुदेश /	:	• The tenders will be received online through portal <u>https://etenders.gov.in/eprocure/app</u> . In the Technical Bids, the bidders are required to upload all the documents in single pdf file.
Instructions to the Bidders		• Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through <a href="https://etenders.gov.in/eprocure/app">https://etenders.gov.in/eprocure/app</a>
		• Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site <a href="https://etenders.gov.in/eprocure/app">https://etenders.gov.in/eprocure/app</a> under the "Information about DSC".
बयाना जमा ⁄ (ईएमडी)Earnest Money Deposit (EMD)	:	<ul> <li>i. EMD of INR 3,00,000/- (Rupees Three lakhs only) should be transferred through NEFT/RTGS to the following bank account on or before due date 29.02.2024 before 2:00 p.m.         <ul> <li>a. Name : Registrar IIT Madras</li> <li>b. Bank : State Bank of India</li> <li>c. Account No. : 10620824305</li> <li>d. Branch : IIT MADRAS</li> <li>e. IFSC CODE : SBIN0001055</li> </ul> </li> </ul>
		<ul> <li>ii. The EMD will be returned to unsuccessful Bidder(s), after finalization of the tender. The EMD shall be forfeited if any Bidder withdraws the offer before finalization of the tender.</li> </ul>
		iii. The EMD amount should not be sent through DD.
		iv. Non-submission of EMD details on or before the due date and time will result in rejection of the e-bid.
		v. As per Rule 170 of GFR 2017, exemption of EMD will be given subject to submission of undertaking by the firm seeking such exemption. Copies of relevant orders/ documents regarding such exemption should be submitted along with the tender document
	सहायता / Assistance to bidders बोलीदाताओं के लए सामान्य अनुदेश / General Instructions to the Bidders बयाना जमा / (ईएमडी)Earnest Money Deposit	सहायता / Assistance to bidders:बोलीदाताओं के लए सामान्य अनुदेश / General Instructions to the Bidders:बयाना जमा / (ईएमडी)Earnest Money Deposit:

	तकनीकी बोली पर मा र्कंग /Marking on Technical Bid	<ul> <li>vi. The successful bidder shall submit a Performance Guarantee of 3% of the bid amount in the form of Demand Draft/FDR/BG(including e-BG)/Insurance Bond in favour of "The Registrar, IIT Madras" to be obtained from any commercial bank within 14 (fourteen) days from the date of issue of Order by IIT Madras, which shall be released on expiry/termination of the contract after adjustment of dues, if any without any interest.</li> <li>vii. In case of successful bidder, the EMD will be adjusted towards the Performance Security Deposit on request subject to validity. The amount of EMD is liable to be forfeited, if the bidder withdraws from the offer after submission of the tender or after the acceptance of the offer and fails to remit the Performance Security Deposit.</li> <li>i. The bidder eligibility criteria (Eligibility Criteria – I &amp; II), technical specification of the item for this tender is given in Annexure A. The Bidders shall go through the bidder eligibility criteria, technical specification and submit the technical bid in the proforma given in Annexure B in the tender document along with the supporting documents.</li> <li>ii. The Technical bid should be submitted in pdf format only through online (etender). No manual submission of bid will be entertained.</li> <li>iii. The technical bid should have the page-wise heading as "Technical Bid" and page no. in all pages with seal and signature of authorized signatory. The total no. of pages should be mentioned at the last page of the documents.</li> <li>iv. The technical bid should consist of</li> <li>a) Document proof for EMD payment</li> <li>b) Technical Compliance sheet as per proforma given in Annexure -B</li> <li>c) Document proof for bidder eligibility criteria, technical details along with catalogue / brochure and other technical, commercial terms and conditions.</li> </ul>		
J	वत्तीय बोली पर	<ul> <li>Financial bid (BOQ) should be submitted in the prescribed format given in Annexure- C</li> </ul>		
5		in <b>xls format</b> through e-tender only. <b>No manual or other form of submission of Financial</b>		
	मा केंग Marking	Bid will be entertained.		
	on Financial Bid			
1		यदा के निबंधन व शर्तें /TERMS AND CONDITIONS OF TENDER		
	• The bids should be submitted through online only in two bid system i.e. Technical Bid and Financial Bid			
	<ul> <li>separately.</li> <li>The bidder has to submit the tender document duly signed on all pages by an authorized person and his / her full name and status shall be indicated below the signature along with official seal/stamp of the firm. Submission of wrong / forged information / document will be liable to legal action, and rejection of the bid submitted by the firm.</li> </ul>			
	<ul> <li>The bids of the for rejection.</li> </ul>	ne agency/firm/company not in possession of valid statutory license / registrations are liable		
	-	e of the bidder is an employee of the IIT Madras, the name, designation and relationship of ee shall be intimated to the Registrar, IIT Madras in writing while submitting the bid.		
	No bidder wi	ll be allowed to withdraw / alter / modify the bid during the bid validity period.		
2	• नि वदा पर हर	स्ताक्षर Signing of Tender:		
	• The Tender is liable to be rejected if complete information is not given therein or if the particulars and date (if any) asked for in the schedule to the Tender are not fully filled in or not duly signed/authenticated. Specific attention is drawn to the delivery dates and terms and conditions enclosed herewith. Each page of the bids required to be signed and bears the official seal of the Bidders.			
	above their fr attorney for	ubmitted by a firm in partnership, it shall be signed (with seal) by all the partners of the firm ull typewritten names and current addresses or alternatively by a partner holding power of the firm in which case a certified copy of the power of attorney shall accompany the		
		A certified copy of the partnership deed along with current addresses of all the partners of also accompany the application.		

	If a limited company or a corporation makes the application, it shall be signed by a duly authorized person holding power of attorney for signing the application, in which case a certified copy of the power of attorney shall accompany the application. Such limited company or corporation may be required to furnish satisfactory evidence of its existence. The bidder shall also furnish a copy of the Memorandum of Articles of association duly attested by a Notary Public.
3	वह अव ध जिसके लए ऑफर खुला रहेगा Period for which the offer will remain open:
	The Tender shall remain open for acceptance/validity till: <b>120 days from the date of opening of the tender.</b> However, the day up to which the offer is to remain open being declared closed holiday for the Indian Institute of Technology Madras, the offer shall remain open for acceptance till the next working day.
4	कीमत Prices:
	<ul> <li>Prices quoted should be inclusive of transport, loading, unloading, commissioning, training to our personnel and additional charges like packaging, freight, insurance etc as per the Technical bid mentioned in Annexure A.</li> </ul>
	<ul> <li>All conditional tenders will be summarily rejected.</li> <li>Quote should be in INR.</li> </ul>
5	भुगतान टीमें /Payment terms:
	<ul> <li>90% against delivery and balance 10% after successful installation of the machine.</li> <li>Advance if any required may be considered against the request of successful vendor by submitting</li> </ul>
	equivalent amount of BG in addition to PSD
6	सुपुर्दगी <b>/Delivery:</b> 8-12 weeks from the date of issue of work order.
7	वारंटी <i>Warranty</i> : Minimum <b>1</b> year of standard warranty from date of installation for the entire system against defective materials, manufacturing defects and malfunctioning. Bidder should make visits to IIT, Madras during breakdown/customer support program at no cost to IIT during warranty period.
8	संस्थापन <b>Anstallation:</b> Installation should be done by supplier. Also, complete training session should be conducted as per requirement of IITM.
9	निबंधन व शर्तें / <b>Terms and Conditions:</b> Failure to comply with any of the instructions stated in this document or offering unsatisfactory explanations for non-compliance will likely to lead to rejection of offers.
10	स्वीकृति का अधकार / <b>Right of Acceptance:</b> IIT Madras reserves the right to reject the whole or any part of the Tender without assigning any reason or to accept them in part or full.
11	स्वीकृति की सूचना <b>Communication of Acceptance:</b> Letter of Intimation and acceptance will be communicated by post /email to the successful bidder to the address indicated in the bid.
12	All information including selection and rejection of technical or financial bids of the prospective bidders will be communicated through CPP portal. In terms of Rule 173(iv) of General Financial Rule 2017, the bidder shall be at liberty to question the bidding conditions, bidding process and/or rejection of bids.
13	बोलीदाता को इस नि वदा के साथ जमा करना होगा <b>/Bidder shall submit along with this Tender:</b> Name and full address of the Banker and their swift code and PAN No. and GSTIN number.
14	क्षेत्रा धकार <b>Jurisdiction:</b> All questions, disputes, or differences arising under, out of or in connection with the contract, if concluded, shall be subject to the exclusive jurisdiction at the place from which the acceptance of Tender is issued.

15	जुर्माना	& परिसमापन क्षति Penalty & Liquidated Damages / Force Majeure:
	•	If the selected Bidder fails to complete the due performance of the contract in accordance with the terms and conditions, Institute reserves the right either to cancel the contract or to accept performance already made by the selected Bidder after imposing Penalty on Selected Bidder. A penalty will be calculated on a per week basis and on the same Rate as applicable to Liquidated Damages (LD). In case of termination of the contract, Institute reserves the right to recover an amount equal to 5% of the Contract value as Liquidated Damages for non-performance. Both Penalty and Liquidated Damages are independent of each other and are applied separately and concurrently. Penalty and LD are not applicable for reasons attributable to the Institute and Force Majeure. However, it is the responsibility of the selected Bidder to prove that the delay is attributable to the Institute and Force Majeure. The selected Bidder shall submit the proof authenticated by the Bidder and Institute's official that the delay is attributed to the Institute and/or Force Majeure along with the bills requesting payment.
16	•	The bidder shall certify that the tender document submitted by him / her are of the same replica of the tender document as published by IIT Madras and no corrections, additions and alterations made to the same. If any deviation found in the same at any stage and date, the bid / contract will be rejected / terminated and actions will be initiated as per the terms and conditions.
17	•	The bidder should study the tender document, bidder eligibility criteria, and technical specification in detail as given in <b>Annexure A</b> before submitting the bid.
18	बोलीदा	ता पात्रता मानदंड / Bidder Eligibility Criteria:
	Eligibil	ity Criteria - I
	1.	The bidder shall not be from a country sharing land border with India and if the bidder is from a country sharing land border with India the bidder should have been registered with the competent authority as per orders of DIPP OM No. F. No. 6/18/2019-PPD dated 23rd July 2020, and MoCI Order No. P-45021/112/2020-PP (BE II) (E-43780) dated 24th August 2020. A declaration shall be submitted with the bid as per format given in <b>Annexure – D</b> .
	2.	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 <sup>th</sup> September 2020 and other subsequent orders issued therein, shall be eligible to bid in this tender. Declaration for Class-I / Class-II local suppliers should be submitted in the prescribed proforma format as per <b>Annexure – E.</b>
	Eligibil	ity Criteria - II
	1.	Neither the tender participating firm nor any of its partner has been blacklisted / debarred /involved / convicted in any criminal case / economic offence nor any criminal case / economic offence is pending against firm or any partner of the Firm before any Court of Law / Police. A self-declaration format given in <b>Annexure – F.</b>
	2.	The firm must have an aggregate financial turnover of at least Rs.80 lakhs in the last 5 years i.e. 2018-19,2019-20, 2020-21, 2021-22 and 2022-23 (Should enclose the audited financial statement signed by the Chartered Accountant)
	3.	The bidder should be an OEM or authorized supplier of OEM. Necessary OEM certificate / OEM authorization letter for this particular tender should be submitted by the bidder as per the <b>Annexure-G</b> .
		The machine, pump and software should be manufactured by a single OEM who is offering the machine. Offers from established OEM's or their authorized dealers only will be considered. Vendors who carryout assembly by incorporating different sub-systems of the equipment from different sources (Integrators) will not be considered.
	4.	The firm should have executed orders as detailed below in the last 5 financial years in supply & Installation of Waterjet Cutting Machine 3/5 axes (similar to the tendered item) to reputed Institutions like IIT/NIT/ Central or State Government / Central Research Labs / Govt. Undertakings in India. I. Three (3) similar contracts each costing not less than Rs. 40 Lakhs; (Or) II. Two (2) similar contracts each costing not less than Rs. 60 Lakhs; (Or) III. One (1) similar contract not costing less than Rs. 80 Lakhs;

		Copies of the document listed below should be submitted as a proof for the above work experience:
	رد	Work Order/ purchase order should be submitted and also the list of similar instruments supplied
	a) b)	including contact details (name of the person-in-charge, email, and phone number) should be provided. Work Completion Certificate/or User performance Certificate for 3/5 axes waterjet cutting machines models from End User.
	5.	The bidder should have a service centre in Chennai for service support and proof of office address should be furnished as documentary evidence (such as valid rental agreement/ registration certificate/ certificate of incorporation etc.)
	6.	The bidder should quote for the models of 3 axes with the provision to upgrade to 5 axes in future.
	7.	Relevant brochures for 3 axes upgradable to 5 axes should be submitted and the same should be published in website of the OEM. The details of the website link should be provided for verification.
19	बोलियों	की संख्या और उनका प्रस्तुतीकरण Anumber of Bids and their Submission:
		ould be submitted CPP portal. Two bid system should be followed as detailed below:
	Bid I	Technical Bid
		The bidder should go through the bidder eligibility criteria – I & II and technical specification given in <b>Annexure-A</b> of the tender document, understand the requirement of IITM and submit their technical bid along with all relevant document proof in the proforma given in <b>Annexure–B</b> . <b>Any tender documents without these shall be invalid and rejected</b> .
		The technical bid should consist of proof of EMD transfer, Bidder Eligibility Criteria – I & II, Technical specification and compliance sheet (proforma given in <b>Annexure – B)</b> along with all relevant documents
	Bid II	proof. Financial Bid
		The financial bid should be submitted as per the proforma ( <b>Annexure C</b> ). The Quoted price should be for supply and installation of the item and inclusive of all cost at IIT Madras.
		For arrival of lowest bid (L1) value. SI No.2 Optional item will not be taken for financial bid evaluation.
20	<del></del>	
20		का मूल्यांकन / Evaluation of Bids: Bid Evaluation will take place in two stages
20	Technic	al Bid evaluation
20		al Bid evaluation In the Stage I Bidder will be evaluated first for conformity with bidder Eligibility Criteria – I &II and those bidders who have complied with Bidder Eligibility Criteria – I &II will be evaluated further for technical
20	Technic	al Bid evaluation In the Stage I Bidder will be evaluated first for conformity with bidder Eligibility Criteria – I &II and those
20	Technic 1. 2.	al Bid evaluation In the Stage I Bidder will be evaluated first for conformity with bidder Eligibility Criteria – I &II and those bidders who have complied with Bidder Eligibility Criteria – I &II will be evaluated further for technical specifications. Only those bidders who have fully complied with bidder eligibility Criteria – I&II and technical specification
20	Technic 1. 2.	al Bid evaluation In the Stage I Bidder will be evaluated first for conformity with bidder Eligibility Criteria – I &II and those bidders who have complied with Bidder Eligibility Criteria – I &II will be evaluated further for technical specifications. Only those bidders who have fully complied with bidder eligibility Criteria – I&II and technical specification will be considered for opening of financial bid.
20	Technic 1. 2. Stage II: In accor	<ul> <li>al Bid evaluation</li> <li>In the Stage I Bidder will be evaluated first for conformity with bidder Eligibility Criteria – I &amp;II and those bidders who have complied with Bidder Eligibility Criteria – I &amp;II will be evaluated further for technical specifications.</li> <li>Only those bidders who have fully complied with bidder eligibility Criteria – I&amp;II and technical specification will be considered for opening of financial bid.</li> <li>Financial Bid Evaluation <ol> <li>The Lowest financial bid among those who have qualified in the technical bid will be declared as successful bidder (L1) and order will be awarded to the successful bidder (L1).</li> </ol> </li> </ul>
	Technic 1. 2. Stage II: In accor reserves	<ul> <li>al Bid evaluation In the Stage I Bidder will be evaluated first for conformity with bidder Eligibility Criteria – I &amp;II and those bidders who have complied with Bidder Eligibility Criteria – I &amp;II will be evaluated further for technical specifications. Only those bidders who have fully complied with bidder eligibility Criteria – I&amp;II and technical specification will be considered for opening of financial bid. <b>Financial Bid Evaluation</b> <ol> <li>The Lowest financial bid among those who have qualified in the technical bid will be declared as successful bidder (L1) and order will be awarded to the successful bidder (L1). </li> </ol></li></ul> dance to the Rule 173 of GFR, 2017 and relevant provisions thereof in Procurement Manuals, 2022, IITM is the right to carry out the negotiation process through its purchase/technical committee with L1/H1 (as
	Technic 1. 2. Stage II: In accor reserve: applicat	<ul> <li>al Bid evaluation In the Stage I Bidder will be evaluated first for conformity with bidder Eligibility Criteria – I &amp;II and those bidders who have complied with Bidder Eligibility Criteria – I &amp;II will be evaluated further for technical specifications. Only those bidders who have fully complied with bidder eligibility Criteria – I&amp;II and technical specification will be considered for opening of financial bid. <b>Financial Bid Evaluation</b> 1. The Lowest financial bid among those who have qualified in the technical bid will be declared as successful bidder (L1) and order will be awarded to the successful bidder (L1). Idance to the Rule 173 of GFR, 2017 and relevant provisions thereof in Procurement Manuals, 2022, IITM is the right to carry out the negotiation process through its purchase/technical committee with L1/H1 (as oble) vendor to ensure price reasonability before final recommendation to the Competent Authority. The</li></ul>
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Sd/-Assistant Registrar Stores & Purchase

## Acknowledgement

It is hereby acknowledged that I/We have gone through all the points listed under **"Scope / Specification and Terms and Conditions"** of tender document, the same is abided and agreed to be executed. In case, if any of the information furnished by me/us is found false, I/We are fully aware that the tender /contract will be rejected / cancelled by IIT Madras and EMD shall be forfeited.

> Signature of the Bidder Name & Address of the Bidder with Office Stamp

# SCHEDULE OF TENDER

# Supply and installation of Waterjet Cutting Machine 3/5 axes at IIT Madras

# Tender No. IITM/SPS/ Waterjet Cutting Machine/030/2023-24/SPL

Name of Organization	Indian Institute of Technology Madras
Tender Type (Open/Limited/EOI/Auction/Single)	OPEN
Tender Category (Services/Goods/Works)	Goods
Type/Form of Contract (Work/Supply/Auction/ Service/ Buy/ Empanelment/ Sell)	Supply
Name of the Supply	Supply and installation Waterjet Cutting Machine 3/5 axes of at IIT Madras
Source of Fund (Institute/Project)	IIT Madras
Is Multi Currency Allowed	NO
Date of Issue/Publishing	23.02.2024
Document Download Start Date	23.02.2024
Document Download End Date	29.02.2024 @ 02.00.p.m
Bid Submission Start Date	23.02.2024
Last Date and Time for Uploading of Bids	29.02.2024 @ 02.00 p.m.
Date and Time of Tender Opening	01.03.2024 @ 03.00 p.m.
No. of Covers (1/2/3/4)	2
Bid Validity days (180/120/90/60/30)	60 Days
Address for Communication	For Technical Queries: Prof. Shankar Krishnapillai Central Skill Training & Fabrication facility IIT Madras Chennai - 600 036. Phone No: 044- 2257 4964 Email: skris@iitm.ac.in For General Queries: The Assistant Registrar Stores & Purchase Section IIT Madras Chennai – 600 036 Number 044-2257 8287,
Contact No.	Email: adstores@iitm.ac.in. For Queries : 044- 2257 8287/8288/8285/8290

## Supply and installation of Waterjet Cutting Machine 3/5 axes at IIT Madras

#### **BIDDER ELIGIBILITY CRITERIA - I**

- The bidder shall not be from a country sharing land border with India and if the bidder is from a country sharing land border with India the bidder should have been registered with the competent authority as per orders of DIPP OM No. F. No. 6/18/2019-PPD dated 23rd July 2020, and MoCI Order No. P-45021/112/2020-PP (BE II) (E-43780) dated 24th August 2020. A declaration shall be submitted with the bid as per format given in Annexure D.
- 2) Only 'Class-I local suppliers' and 'Class-II local suppliers', as defined under DIPP, MoCl Order No. P-45021/2/2017-PP (BE II) dated 16<sup>th</sup> September 2020 and other subsequent orders issued therein, shall be eligible to bid in this tender. Declaration for Class-I / Class-II local suppliers should be submitted in the prescribed proforma format as per Annexure E.

#### **BIDDER ELIGIBILTY CRIERIA - II**

- Neither the tender participating firm nor any of its partner has been blacklisted / debarred /involved / convicted in any criminal case / economic offence nor any criminal case / economic offence is **pending** against firm or any partner of the Firm before any Court of Law / Police. A selfdeclaration format given in **Annexure – F.**
- The firm must have an aggregate financial turnover of at least Rs.80 lakhs in the last 5 years i.e., 2018-19, 2019-20, 2020-21, 2021-22 and 2022-23 (Should enclose the audited financial statement signed by the Chartered Accountant).
- 3. The bidder should be an OEM or authorized supplier of OEM. Necessary OEM certificate / OEM authorization letter for this particular tender should be submitted by the bidder as per the **Annexure-G.**

The machine, pump and software should be manufactured by a single OEM who is offering the machine. Offers from established OEM's or their authorized dealers only will be considered. Vendors who carryout assembly by incorporating different sub-systems of the equipment from different sources (Integrators) will not be considered.

- 4. The firm should have executed orders as detailed below in the last 5 financial years in supply & Installation of Waterjet Cutting Machine 3/5 axes (similar to the tendered item) to reputed Institutions like IIT/ NIT /Central or State Government / Central Research Labs / R&D units / Reputed Industries/ Govt. Undertakings in India.
  - i. Three (3) similar contracts each costing not less than Rs. 40 Lakhs; (Or)
  - ii. Two (2) similar contracts each costing not less than Rs. 60 Lakhs; (Or)
  - iii. One (1) similar contract not costing less than Rs. 80 Lakhs;

# Copies of the document listed below should be submitted as a proof for the above work experience:

a. Work Order/ purchase order should be submitted and also the list of similar instruments supplied including contact details (name of the person-in-charge, email, and phone number) should be provided.

- b. Work Completion Certificate/or User performance Certificate for 3/5 axes waterjet cutting machines models from End User.
- 5. The bidder should have a service centre in Chennai for service support and proof of office address should be furnished as documentary evidence (such as valid rental agreement/ registration certificate/ certificate of incorporation etc.)
- 6. The bidder should quote for the models of 3 axes with the provision to upgrade to 5 axes in future.
- 7. Relevant brochures for 3 axes upgradable to 5 axes should be submitted and the same should be published in website of the OEM. The details of the website link should be provided for verification.

## **TECHNICAL SPECIFICATION:**

SI. No.	Technical Specifications	Requirements/Range
1	Working Requirements	
i.	X-axis Travel	Min. 3000 mm
ii.	Y-axis Travel	Min. 1500 mm
iii.	Z-axis	Min. 300mm
iv.	Working Condition	Machine and accessories should suit the local tropical weather conditions.
v.	Upgrading to 5 axes in future	<ul> <li>(i) Machine should be having provision for upgrading to 5 axis in future;</li> <li>(ii) The controller should be compatible with the five axis cutting head</li> <li>(iii) The software should be compatible with the 5 axis cutting head and also should have taper control feature.</li> </ul>
2	Machine Type	
i.	resistant gantry chassis	int for minimal floor space utilization, rigid steel tube corrosion
3	Pump System	
i.	Pump type and capacity	Direct Drive type high pressure pump (30 hp) of any reputed make
ii.	Continuous operating pressure range at the delivery end with suitable pump	500 - 3400 bar or more with infinitely adjustable pressure setting
iii.	Delivery rate of water at max pressure	1.9 litres/min or more
4	Abrasive Water Jet (AWJ) Cutting head	
i.	Type of cutting	Abrasive Waterjet and Pure Waterjet Cutting
ii.	Alignment	Facility for precision alignment of orifice and focusing nozzle
iii.	Pressure variation	Provision for appropriate pressure variation
iv.	Orifice and Nozzle diameters	Should be able to accommodate standard sizes of orifices and focusing nozzles
v.	Shielding for containing spray within envelope	Protection against water splashing all around the cutting table
5	Working Cell	
i.	Туре	Back lash free and positive rigid type chassis
ii.	Programmable axes	X, Y & Z
iii.	Simultaneous controllable axes	X, Y & Z
iv.	Linear positional accuracy	±0.05 mm or better
v.	Repeatability	±0.025 mm/m or better
vi.	Motion Transmission	Suitable drives to meet above accuracy, Vendor to specify.
vii.	Guide ways	Suitable guides to meet above accuracy, Vendortospecify.
viii.	Minimum positioning speed	X & Y axis – 12 m/min
ix.	Protection	Ball screws, Guides, bearings, etc., to be suitably sealed against dust, dirt and grit.
х.	Catcher tank	High grade steel or better material of minimum 5mm thickness with corrosion resistant coating
xi.	Slats and Work support grid	High grade corrosion resistant steel slats and grid to support a minimum job weight of 1400 kg/sq.m. or better. It should be easily replaceable section wise so as to prevent replacement of the entire grid in case of local wear.
xii.	Work table height	1000 mm or below from the ground (for easy loading and unloading of jobs)

6	Controller Specifications		
i.	Туре	Latest PC based CNC controller system made by OEM	
		specifically for waterjet cutting machine applications.	
ii.	Motors & Drives for axes	Brushless servo motors with suitable digital servo drives with closed loop positive feedback.	
iii.	Display	Colour graphical display, min 19 inches.	
iv.	Simulation	Programming and cutting path simulation.	
v.	Memory	256GB inbuilt memory for storage of programs and option for SD card to be provided.	
vi.	Memory backup	USB latest version to be provided.	
vii.	Diagnostics, system monitoring and predictive maintenance	Capability to diagnose problems in all sub-systems with instructions in English language.	
7	AWJ Specific Capabilities		
i.		e jet behaviour around sharp corners and curves, unwanted ion in feed rate and taper on the cutting edges due to floppy	
ii.	Real time programming, program preview	w, edit mode, background editing and online help.	
iii.	Kerf width compensation.		
iv.	Optimal stack height calculator to optimi	ize time by stacking materials.	
v.	Automatic piercing methods for faster material piercing.		
vi.	High/Low pressure piercing for machining tough/fragile materials.		
8	Pump controls		
i.	Pump operating pressure should be automatically controlled. So also, dual pressure for cutting brittle and laminated materials.		
ii.	Diagnostic functions should be included in controller to warn the operator of any deficiency.		
9	System Computer & Software		
i.	PC for creating CAD drawing, importing c file/data transfer, machine control, etc.	lrawing files from other softwares, creating tool path, nesting,	
ii.	PC pre-installed with latest version of Windows OS, CAD/CAM software and other relevant waterjet cutting software.		
10	Programming Features		
i.	Support for standards formats of file tran	nsfer such as DXF/DWG/IGES/STEP standards, etc.,	
ii.	Automatic tool path generation, includin	g lead-ins and lead outs.	
iii.	Automatic speed reduction in software at sharp corners, small holes and curves for better edge finish.		
iv.	Spiral cutting cycle for different materials like Titanium, Aluminium, SS and all other metals & nonmetals		
v.	to be provided in the software. Ability to pierce all holes first in low pressure while handling brittle & laminated materials.		
vi.	Precise time estimation for accurate job	costing and reporting.	
vii.	Automatic gathering of part history and	statistics for future reference and reporting purpose.	
viii.	The program should determine cost per	part based on pre-defined parameters.	
ix.	Ability to set multiple user home should	be provided for operator convenience.	
х.	Possibility for dry run should be provided	J.	
xi.	Required software tools/database for sel Mild steel, Titanium, Ceramics, Composit	lection of cutting parameters for different materials like SS, AI, tes, etc., at different thickness.	

11	Input Power Supply			
i.	440V AC, 50 Hz, 3 Phase. Overload protection for all axis required. All cables from the machine to			
	controller and pump to be provided proper shielding /protection from physical damage & wear Accessories			
12(a)				
i.	Chiller unit suitable for machine	Chiller of suitable capacity for machine operations to be provided		
ii.	Three phase servo stabilizers with isolation transformer	Servo stabilizer with Isolation transformer of suitable capacity to be provided		
iii.	Reverse Osmosis system suitable for the Machine	Reverse Osmosis system of suitable capacity to be provided		
iv.	Bulk abrasive storage and delivery syster	n		
v.	Pneumatic drill			
vi.	Water cutting head with suitable nozzles			
vii.	Workpiece holding accessories			
viii.	Water level control module suitable for s	submerged machining		
12(b)	Consumables			
i.	Abrasives	Suitable abrasives and quantity for operating the machine for a period of one year		
ii.	Focusing nozzles	0.75 mm, 1.0 mm, 1.2 mm, 1.4 mm (nearby range)-each 5 sets		
iii.	Orifices	0.25 mm, 0.3 mm, 0.35 mm, 0.45 mm (nearby range)- each 5 sets		
iv.	Filters for the high-pressure pump	Suitable for the pump		
v.	Cutting head spares	Suitable for supplied cutting head		
vi.	High pressure pump spares	Suitable for the pump		
13	Safety Arrangements			
i.	Machine should have safety interlocks/devices to prevent damage to machine, work piece and personnel due to malfunctioning or errors.			
ii.	All hoses and cable assemblies required t resistant to heat and oil and suitable for	for water jet cutting system should be of high quality, robust, tropical environment.		
iii.	Any safety measures as deemed necessa specified.	ry by OEM/vendor for safety of personnel and machine to be		
14	Machine lubrication system- necessary	proof to be attached		
15	Installation, Commissioning and Prove of	put		
i.	Installation, commissioning and proving out any 5 test samples of various raw materials as per IIT- Madras CAD data should be carried out by the vendor.			
ii.	Foundation kit like epoxy, fasteners, etc., required for completion of installation process to be supplied by vendor.			
iii.	Necessary requirements like isolation, vibration criteria, air-conditioning, dust free atmosphere, flooring, civil works, etc., to be clearly specified by vendor before shipping of machine.			
iv.		ommissioning of the machine, Purchaser will provide material		
16	Quality Acceptance/ Quality Test Plan			
١.		ssioning of the machine, vendor to demonstrate cutting oles as per IIT-Madras CAD data. Dimensional inspection will be		
п.	Proving out standard system and program features to be done at IITM. Test charts/methods adopted for confirming the geometrical accuracies of the machine is to be furnished by the vendor as per ISO 230 standards.			

17	Documentation: Two sets of following manuals to be supplied in English language
i.	Machine layout details with detailed drawings of machine, assemblies, sub-assemblies, parts
ii.	Operating instructions of the machine & control
iii.	Programming manuals
iv.	Maintenance manuals including list of spare parts, troubleshooting details, etc.,
v.	Electrical, Total connected load of machine (kVA), electronics, pneumatic and hydraulic circuit diagrams of machine and control system
vi.	Test charts of the machine
18	Software updates: Free software updates during lifetime of the machine to be provided.

### Scope of Work

- 1) Supply, Installation, Commissioning and prove out of Abrasive Waterjet Cutting Machine for cutting materials like Stainless Steel, Mild steel, aluminium and all other metals and Non-metals with essential accessories and spares as per this specification.
- 2) Training for engineers to be provided at IIT, Madras for 2 weeks or 10 working days on the following: -
  - I. Safety
  - II. Introduction
  - III. basic instructions & basic calculations for power at nozzle exit for setting of pressure and selection of cutting speeds
  - IV. operation of the machine
  - V. Software & Programming
  - VI. Mechanical, electrical & electronic maintenance etc. of the whole system.
- 3) **Spares Availability:** Software/hardware support for minimum 10 years, spares should be readily available in stock in India and shipped immediately on the basis of requirement.

## PROFORMA FOR TECHNICAL COMPLIANCE SHEET Tender No. IITM/SPS/ Waterjet Cutting Machine/030/2023-24/SPL Supply and installation of Waterjet Cutting Machine 3/5 axes at IIT Madras

## **BIDDER ELIGIBILITY CRITERIA -I**

S. No.		Compliance (Yes / No)	Reference Page No.
1	The bidder shall not be from a country sharing land border with India and if the bidder is from a country sharing land border with India the bidder should have been registered with the competent authority as per orders of DIPP OM No. F. No. 6/18/2019-PPD dated 23rd July 2020, and MoCI Order No. P-45021/112/2020-PP (BE II) (E-43780) dated 24th August 2020. A declaration shall be submitted with the bid as per format given in <b>Annexure – D</b> .		
2	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 <sup>th</sup> September 2020 and other subsequent orders issued therein, shall be eligible to bid in this tender. Declaration for Class-I / Class-II local suppliers should be submitted in the prescribed proforma format as per <b>Annexure – E.</b>		

## **BIDDER ELIGIBILITY CRITERIA - II**

S. No.		Compliance (Yes / No)	Reference Page No.
1	Neither the tender participating firm nor any of its partner has been blacklisted / debarred /involved / convicted in any criminal case / economic offence nor any criminal case / economic offence is <b>pending</b> against firm or any partner of the Firm before any Court of Law / Police. A self-declaration format given in <b>Annexure – F.</b>		
2	The firm must have an aggregate financial turnover of at least Rs.80 lakhs in the last 5 years i.e. 2018-19, 2019-20, 2020-21, 2021-22 and 2022-23 (Should enclose the audited financial statement signed by the Chartered Accountant)		
3	The bidder should be an OEM or authorized supplier of OEM. Necessary OEM certificate / OEM authorization letter for this particular tender should be submitted by the bidder as per the <b>Annexure-G</b> .		
	The machine, pump and software should be manufactured by a single OEM who is offering the machine. Offers from established OEM's or their authorized dealers only will be considered. Vendors who carryout assembly by incorporating different sub-systems of the equipment from different sources (Integrators) will not be considered.		
4	The firm should have executed orders as detailed below in the last 5 financial years in supply & Installation of Waterjet Cutting Machine 3/5 axes (similar to the tendered item ) to reputed Institutions like IIT/NIT /Central or State Government / Central Research Labs / Govt. Undertakings in India.		
	<ul> <li>I. Three(3) similar contracts each costing not less than Rs. 40 Lakhs; (Or)</li> <li>II. Two (2) similar contracts each costing not less than Rs. 60 Lakhs; (Or)</li> <li>III. One (1) similar contract not costing less than Rs. 80 Lakhs;</li> </ul>		
	Copies of the document listed below should be submitted as a proof for the above work experience:		
	<ul> <li>a) Work Order/ purchase order should be submitted and also the list of similar instruments supplied including contact details (name of the person-in-charge, email, and phone number) should be provided.</li> <li>b) Work Completion Certificate/or User performance Certificate for 3/5 axes waterjet cutting machines models from End User.</li> </ul>		

5	The bidder should have a service centre in Chennai for service support proof of office in India should be furnished as documentary evidence (such as valid rental agreement/ registration certificate/ certificate of incorporation etc.)	
6	The bidder should quote for the models of 3 axes with the provision to upgrade to 5 axes in future.	
7	Relevant brochures for 3 axes upgradable to5 axes should be submitted and the same should be published in website of the OEM. The details of the website link should be provided for verification.	

## **TECHNICAL SPECIFICATION:**

SI. No.	Technical Specifications	Compliance Yes/No	Reference Page No.	
1	Working Requirements			
i.	X-axis Travel	Min. 3000 mm		
ii.	Y-axis Travel	Min. 1500 mm		
iii.	Z-axis	Min. 300mm		
iv.	Working Condition	Machine and accessories should suit the local tropical weather conditions.		
۷.	Upgrading to 5 axes in future	<ul> <li>(i) Machine should be having provision for upgrading to 5 axes in future;</li> <li>(ii) The controller should be compatible with the five axis cutting head</li> <li>(iii) The software should be compatible with the 5 axis cutting head and also should have taper control feature.</li> </ul>		
2	Machine Type			
i.	rigid steel tube corrosio	Il efficient footprint for minimal floor space utilization, n resistant gantry chassis		
3	Pump System			
i.	Pump Type and capacity	Direct Drive type high pressure pump(30hp) of any reputed make		
ii.	Continuous operating pressure range at the delivery end with suitable pump	500 - 3400 bar or more with infinitely adjustable pressure setting		
iii.	Delivery rate of water at max pressure	1.9 liters/min or more		
4	Abrasive Water Jet (AW	/J) Cutting head		
i.	Type of cutting	Abrasive Water Jet and Pure Water Jet Cutting		
ii.	Alignment	Facility for precision alignment of orifice and focusing nozzle		
iii.	Pressure variation	Provision for appropriate pressure variation		
iv.	Orifice and Nozzle diameters	Vendor to provide details		
v.	Shielding for containing spray within envelope	Protection against water splashing all around the cutting table		
5	Working Cell			
i.	Туре	Back lash free and positive rigid type chassis		
ii.	Programmable axes	X, Y & Z		
iii.	Simultaneous controllable axes	X, Y & Z		
iv.	Linear positional accuracy	±0.05 mm or better		
۷.	Repeatability	±0.025 mm/m or better		
vi.	Motion Transmission	Suitable drives to meet above accuracy, Vendor to specify.		
vii.	Guide ways	Suitable guides to meet above accuracy, Vendor to specify.		
viii.	Minimum positioning speed	X & Y axis – 12 m/min		

ix.	Protection	Ball screws, Guides, bearings, etc., to be suitably sealed	
х.	Catcher tank	against dust, dirt and grit. High grade steel or better material of minimum 5mm	
xi.	Slats and Work support grid	thickness with corrosion resistant coatingHigh grade corrosion resistant steel slats and grid tosupport a minimum job weight of 1400 kg/sq.m. orbetter. It should be easily replaceable section wise so	
		as to prevent replacement of the entire grid in case of local wear.	
xii.	Work table height	1000 mm or below from the ground (for easy loading and unloading of jobs)	
6	Controller Specification		
i.	Туре	Latest PC based CNC controller system made by OEM specifically for waterjet cutting machine applications.	
ii.	Motors & Drives for axes	Brushless servo motors with suitable digital servo drives with closed loop positive feedback.	
iii.	Display	Colour graphical display, min 19 inches.	
iv.	Simulation	Programming and cutting path simulation.	
v.	Memory	256GB inbuilt memory for storage of programs and option for SD card to be provided.	
vi.	Memory backup	USB latest version to be provided.	
vii.	Diagnostics, system monitoring and predictive maintenance		
7	AWJ Specific Capabiliti	es	
i.	curves, unwanted blem	on for the adverse jet behavior around sharp corners and hishes due to acceleration/deceleration in feed rate and	
ii.	· · ·	ges due to floppy behavior of the jet. g, program preview, edit mode, background editing and	
iii.	Kerf width compensatio	on.	
iv.	Optimal stack height ca	lculator to optimize time by stacking materials.	
v.	Automatic piercing met	thods for faster material piercing.	
vi.	High/Low pressure pier	cing for machining tough/fragile materials.	
8	Pump controls		
i.		re should be automatically controlled. So also dual ttle and laminated materials.	
ii.		ould be included in controller to warn the operator of any	
9	System Computer & So	oftware	
i.	PC for creating CAD dra file/data transfer, mach	wing, importing drawing files, creating tool path, nesting,	
ii.	PC pre-installed with la	test version of Windows OS, CAD/CAM software and	
10	other relevant waterjet Programming Features		
i.		ormats of file transfer such as DXF/DWG/IGES/STEP	
ii.	standards, etc., Automatic tool path ge	neration, including lead-ins and lead outs.	
iii.	Automatic speed reduc	tion in software at sharp corners, small holes and curves	

iv.		ifferent materials like Titanium, Aluminium, SS and all									
10.		Is to be provided in the software.									
v.	Ability to pierce all holes first in low pressure while handling brittle & laminated materials.										
vi.	Precise time estimation for accurate job costing and reporting.										
vii.	Automatic gathering of part history and statistics for future reference and reporting purpose.										
viii.		ermine cost per part based on pre-defined parameters.									
ix.	Ability to set multiple us	er home should be provided for operator convenience.									
x.	Possibility for dry run sh	ould be provided.									
xi.	-	/database for selection of cutting parameters for S, Al, Mild steel, Titanium, Ceramics, Composites, etc., at									
	different thickness. Input Power Supply										
11	mpact onci supply										
i.	the machine to controlle from physical damage &	. Overload protection for all axis required. All cables from er and pump to be provided proper shielding /protection wear									
12(a)	Accessories										
i.	Chiller unit suitable for machine	Chiller of suitable capacity for machine operations to be provided									
ii.	Three phase servo stabilizers with isolation transformer	Servo stabilizer with Isolation transformer of suitable capacity to be provided									
iii.	Reverse Osmosis system suitable for the Machine										
iv.	Bulk abrasive storage an	d delivery system									
v.	Pneumatic drill										
vi.	Water cutting head with	suitable nozzles									
vii.	Workpiece holding acces	ssories									
viii.	Water level control mod	ule suitable for submerged machining									
12(b)	Consumables										
i.	Abrasives	Suitable abrasives and quantity for operating the machine for a period of one year									
ii.	Focusing nozzles	0.75 mm, 1.0 mm, 1.2 mm, 1.4 mm (nearby range)- each 5 sets									
iii.	Orifices	0.25 mm, 0.3 mm, 0.35 mm, 0.45 mm (nearby range)- each 5 sets									
iv.	Filters for the high pressure pump	Suitable for the pump									
v.	Cutting head spares	Suitable for supplied cutting head									
vi.	High pressure pump	Suitable for the pump									
13	spares Safety Arrangements										
i.		fety interlocks/devices to prevent damage to machine,									
		el due to malfunctioning or errors. mblies required for water jet cutting system should be of	<u> </u>								
ii.	high quality, robust, resi	stant to heat and oil and suitable for tropical									
	environment. Any safety measures as deemed necessary by OEM/vendor for safety of										

14	Machine lubrication system- necessary proof to be attached	
15	Installation, Commissioning and Prove out	
i.	Installation, commissioning and proving out any 5 test samples of various raw materials as per IIT, Madras CAD data should be carried out by the vendor.	
ii.	Foundation kit like epoxy, fasteners, etc., required for completion of installation process to be supplied by vendor.	
iii.	Necessary requirements like isolation, vibration criteria, air-conditioning, dust free atmosphere, flooring, civil works, etc., to be clearly specified by vendor before shipping of machine.	
iv.	The vendor should carryout erection & commissioning of the machine, Purchaser will provide material handling & manpower at site.	
16	Quality Acceptance/ Quality Test Plan	
i.	On completion of installation and commissioning of the machine, vendor to demonstrate cutting capabilities of machine on Five test samples as per IIT- Madras CAD data. Dimensional inspection will be carried out to qualify cut test samples.	
ii.	Proving out standard system and program features to be done at IITM. Test charts/methods adopted for confirming the geometrical accuracies of the machine is to be furnished by the vendor as per ISO 230 standards.	
17	Documentation: Two sets of following manuals to be supplied in English language	
i.	Machine layout details with detailed drawings of machine, assemblies, sub- assemblies, parts	
ii.	Operating instructions of the machine & control	
iii.	Programming manuals	
iv.	Maintenance manuals including list of spare parts, troubleshooting details, etc.,	
٧.	Electrical, Total connected load of machine (kVA), electronics, pneumatic and hydraulic circuit diagrams of machine and control system	
vi.	Test charts of the machine	
18	<b>Software updates:</b> Free software updates during lifetime of the machine to be provided.	

\* Reference page number is mandatory and should be mentioned in the technical compliance

## SIGNATURE OF TENDERER ALONG WITH SEAL OF THE COMPANY WITH DATE

## PROFORMA FOR FINANCIAL BID (BoQ)

## Tender No. IITM/SPS/ Waterjet Cutting Machine/030/2023-24/SPL

## Supply and installation of Waterjet Cutting Machine 3/5 axes at IIT Madras

SI.No.	Item Description	Unit	Qty	Rate per Unit	Total cost(with out GST)	GST (in %)	Total value incl. of GST
1	Supply and installation of Waterjet Cutting Machine 3/5 axes as per technical specification in Annexure-A	No	1			ENTER AND SUBMIT THE FINANCIAL BID IN THE CPP(e- PROCORMENT PORTAL)	
2	OPTIONAL : AMC of all the equipment for a period of 2	years	after t	he standar	d warrant	У	
	AMC for the year				Cost	GST in %	Total value Incl. of GST
	a) 1 <sup>st</sup> Year					ENTER AND SUBMIT THE FINANCIAL BID IN THE CPP (e- PROCURMENT	
	b) 2 <sup>nd</sup> Year					POTAL)	

NOTE:

The prices quoted should include Transport, loading, unloading at the site, erection (necessary foundation), commissioning, electrical cabling and training of our personnel and any additional charges like packaging, freight, insurance, interconnecting piping, etc.

The financial bid evaluation will be based on price quoted by the bidder in financial bid (BoQ) for SI No.1 viz. Supply and installation of Waterjet Cutting Machine 3/5 axes will alone be taken up for arrival of lowest bid (L1) value. SI No.2 Optional item will not be taken for financial bid evaluation.

Place: Date:

#### SIGNATURE OF TENDERER ALONG WIT SEAL OF THE COMPANY WITH DATE

#### (To be given on the letter head of the bidder)

#### Tender No. IITM/SPS/ Waterjet Cutting Machine/030/2023-24/SPL

#### CERTIFICATE

#### (Bidders from India)

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and hereby certify that I am not from such a country.

#### OR

#### (Bidders from Country which shares a land border with India)

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and hereby certify that I am from \_\_\_\_\_\_\_\_\_ (Name of Country) and have registered with the Competent Authority. I also certify that I fulfil all the requirements in this regard and am eligible to be considered. *(Copy/ evidence of valid registration by the Competent Authority is to be attached)* 

Place: Date: Signature of the Bidder Name & Address of the Bidder with Office Stamp

Dated: \_\_\_\_

#### FORMAT FOR AFFIDAVIT OF SELF-CERTIFICATION UNDER PUBLIC PROCUREMENT POLICY (PREFERENCE TO MAKE IN INDIA) 2017

#### Tender Reference No. IITM/SPS/ Waterjet Cutting Machine/030/2023-24/SPL

#### Name of the item / Service: Supply and installation Waterjet Cutting Machine 3/5 axes at IIT Madras

Date:

I/We \_\_\_\_\_\_S/o, D/o, W/o, \_\_\_\_\_\_

Resident of \_\_\_\_\_\_ Hereby solemnly affirm and declare as under:

That I will agree to abide by the terms and conditions of the Public Procurement (Preference to Make in India) Policy vide Gol Order no. P-45021/2/2017-PP (B.E.-II) dated 15.06.2017 (subsequently revised vide orders dated 28.05.2018, 29.05.2019and 04.06.2020) MOCI order No. 45021/2/2017-PP (BE II) Dt.16th September 2020 & P-45021/102/2019-BE-II-Part (1) (E-50310) Dt.4th March 2021 and any subsequent modifications/Amendments, if any and

That the local content for all inputs which constitute the said item/service/work has been verified by me and I am responsible for the correctness of the claims made therein.

Tick (√) a	nd Fill the Appropriate Category
	I/We[name of the supplier] hereby confirm in respect of quoted items
	thatLocal Content is equal to or more than 50% and come under "Class-I Local Supplier" category.
	I/We[name of the supplier] hereby confirm in respect of quoted items
	that Local Content is equal to or more than 20% but less than 50% and come under "Class-II Local
	Supplier" category.

The details of the location (s) at which the local value addition is made and the proportionate value of local content in percentage

: %\*\*

Percentage of Local content

Location at which value addition done

For and on behalf of ......(Name of firm/entity)

Authorized signatory (To be duly authorized by the Board of Directors) <Insert Name, Designation and Contact No.>

[Note: In case of procurement for a value in excess of Rs. 10 Crores, the bidders shall provide this certificate from statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.]

#### This letter should be on the letterhead of the quoting firm and should be signed by a competent authority.

\*\* Services such as transportation, insurance, installation, commissioning, and training and after sales service support like AMC/CMC cannot be claimed as local value addition

#### (To be given on the letter head of the bidder)

## Self-Declaration that the Service Provider has not been Black listed

I S/o	
R/o District	Director
/ Partner/ sole proprietor (Strike out whichever is not applicable) of	
(Firm or Company) do hereby declare and solemnly affirm:	

- I. That the Firm ...... has not been Blacklisted or declared insolvent by any of the Union or State Government / Organization.
- II. That none of the individual / firm / Company Blacklisted or any partners or shareholder thereof has any connection directly or indirectly with or has any subsistence interest in the deponent business / firm company.
- III. That neither the Firm nor any of its partner has been involved / convicted in any criminal case / economic offence nor any criminal case / economic offence is pending against firm or any partner of the Firm before any Court of Law / Police.

Place: Date: Signature of the Tenderer Name & Address of the Tenderer with Office Stamp

## Tender No. IITM/SPS/ Waterjet Cutting Machine/030/2023-24/SPL

#### **OEM CERTIFICATION FORM**

## (In Original Letter Head of OEM)

Tender No: [								Date	d:				
We are Original Equipment Manufacturers (OEM) of									(Nar	ne of	the com	pany)	
Ms					(Name	of	the	ven	dor)	is	one	of	our
Distributors/Dealers/Resellers/Partners (tick one) for the									a	nd is			
participating	in	the	above	me	ntioned	tend	ler	by	offe	ring	our	pro	oduct
model(Name of the product with model number).													

..... is authorized to bid, sell and provide service support warranty for our product as mentioned above.

Name and Signature of the authorized

Signatory of OEM along with seal of the company with Date