



भारतीय प्रौद्योगिकी संस्थान इंदौर
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IIT Indore

Ref. No.: IITI(MM)/CE/1/1A/499/PS/2023-24

Date: 04/12/2023

PREBID REPORT

The Online Pre-bid meeting discussion was held at IITI on **November 22, 2023, at 11: 00 AM** for procurement of Builder Extendable Laboratory Scale Concrete 3D printer with 4th Axis (Rotational) for Tangential Control for Nozzle, GeM Custom Bid No: **GEM/2023/B/4193281** dated: 14/11/2023.

Following four firms were attended the Online Pre bid meeting attend firms as:

The report of the meeting is as below:

Sl. No.	Reference of the Clause No. of the Tender Document	Query/Clarification/Deviation sought	Response from IITI
M/s Tvasta Manufacturing Solutions Private Limited			
01.	Section-II, part-II technical specifications bid Sl. no. 2	As we understand, the tender specifies a range of printable volumes from 1x1x1 to 10x10x10, and it is evident that the cost to manufacture or build the machine is directly influenced by the printable volume. We are seeking clarification on the evaluation criteria for selecting the L1 (Lowest Bidder) rank, especially when different bidders may propose machines with varying printable volumes. How will the evaluation process account for the diverse pricing structures associated with different printable volume ranges? This clarification will help us ensure that our proposal aligns appropriately with the evaluation criteria outlined in the tender.	The minimum acceptable printable volume for the bidding process is 1000x1000x1000 mm ³ . However, we anticipate future scalability, and the machine should be extendable to a volume of 10000x10000x10000 mm ³ . Regarding the evaluation criteria for selecting the Lowest Bidder (L1), it is important to emphasize that meeting the specified minimum and future extendable printable volumes is a prerequisite. Once this criterion is satisfied, the evaluation process will consider the pricing structures associated with the proposed machines
02.	Section-II, part-II technical specifications bid Sl. no. 11	Motors: The tender mentions the use of Hybrid Stepper Motors, equivalent to servo motors. Could you please confirm if this specific motor type is a requirement, or if there is flexibility in choosing between servo and stepper motors? Additionally, for our better understanding, could you provide more details on the expectations for	While the tender does emphasize the use of this specific motor type, there is flexibility in the choice between servo and stepper motors. Proposals using either Hybrid Stepper Motors or equivalent servo motors will be considered.

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		Hybrid Stepper Motors and how they align with the project's objectives?	<p>To provide a clearer understanding, Hybrid Stepper Motors combine the features of traditional stepper motors and servo motors, offering the benefits of both. They provide high precision, reliability, and the ability to maintain position without feedback, like stepper motors. Simultaneously, they offer the improved performance and dynamic response associated with servo motors.</p> <p>In alignment with the project's objectives, the use of Hybrid Stepper Motors or their equivalent is likely specified to ensure a balance between accuracy and dynamic performance. This choice may contribute to achieving the project's precision requirements while maintaining the advantages of stepper motors. If you have further questions or need additional details, feel free to ask for clarification.</p>
03.	Section-II, part-II technical specifications bid SI. no. 13	Motion Mechanism: Could you please confirm if adherence to these exact specifications is required, or if there is flexibility in the choice of racks and pinions, provided they meet or exceed the stability requirements mentioned in the tender?	The emphasis is on achieving the necessary stability, and if alternative mechanism can fulfill or surpass the stability criteria, they are acceptable.
04.	Section-II, part-II technical specifications bid SI. no. 14	Material Delivery System: Are we required to adhere strictly to the specified MDS specifications, or is there room for customization while ensuring that the chosen components meet or exceed the outlined performance criteria?	The specifications outlined for the tender serve as a guideline, and while they provide a clear expectation, there is room for customization. Bidders have the flexibility to propose variations or customizations to the MDS, as long as the chosen components and modifications meet or exceed the performance criteria detailed in the tender.
05.	Section-II, part-II technical specifications bid SI. no. 21	Electronic System: Our standard systems at Tvasta utilize a more advanced electronic system than a 32-bit Microprocessor. Are we required to adhere strictly to the specified electronic system specifications, or is there flexibility in the choice of components, provided they offer equal or	

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		superior performance and safety features?	
06.	Section-II, part-II technical specifications bid Sl. no. 25	Robust Gantry Structure: We would like to inquire if the use of Carbon steel and the inclusion of a Counterweight mechanism are mandatory requirements, or if there is flexibility in material choice and balance mechanisms. Our standard machines at Tvasta may utilize different materials and balance mechanisms that will meet the performance criteria, and we want to ensure that our proposed alternatives align with the expectations outlined in the tender.	
07.	Financial Turnover: (Section 1: Page 5 and 6 of 23, Point No: 13)	We appreciate the financial turnover requirements outlined in the tender, including the stipulation that vendors/bidders should not have incurred any loss during the last three years (as of 31st March 2022), with a positive Profit after Tax for the specified period. We would like to seek clarification on the significance of the 'no loss' criterion in the evaluation process. Is it a mandatory requirement, and how will compliance or non-compliance with this criterion impact the overall assessment of bids? Understanding this aspect will help us ensure that our proposal aligns accurately with the expectations outlined in the tender.	The financial turnover should be positive, and it will be verified through ITR return file and Profit and loss statement.
M/s. Trivima Solutions Pvt Ltd			
08.	Section-II, part-II technical specifications bid Sl. no. 2	The tender specifies a range of printable volumes from 1x1x1 to 10x10x10, and it is evident that the cost to manufacture or build the machine is directly influenced by the printable volume. We are seeking clarification on the evaluation criteria for selecting the L1 (Lowest Bidder) rank, especially when different bidders may propose machines with varying printable volumes. How will the evaluation process account for the diverse pricing structures associated with different printable volume ranges? This clarification will help us ensure	Please refer to the pre-bid report sl.no. 1

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		that our proposal aligns appropriately with the evaluation criteria outlined in the tender.	
09.	Section-II, part-II technical specifications bid Sl. no. 11	<p>Motors: In the tender using of Hybrid Stepper Motors, equivalent to servo motors. : Request you please confirm if any specification of motor type is a requirement, or if there is flexibility in choosing between servo and stepper motors? Additionally, for our better understanding, request you to provide more details on the expectations for Hybrid Stepper Motors and how they align with the project's objectives, so we can process accordingly.</p>	Please refer to the pre-bid report sl.no. 2
10.	Section-II, part-II technical specifications bid Sl. no. 13	<p>Motion Mechanism: Could you please confirm if adherence to these exact specifications is required, or if there is flexibility in the choice of racks and pinions, provided they meet or exceed the stability requirements mentioned in the tender?</p>	Please refer to the pre-bid report sl.no. 3
11.	Section-II, part-II technical specifications bid Sl. no. 14	<p>Material Delivery System: Is there any requirement to adhere strictly to the specified MDS specifications, or any room for customization while ensuring that the chosen components meet or exceed the outlined performance criteria?</p>	Please refer to the pre-bid report sl.no. 4 to 6
12.	Section-II, part-II technical specifications bid Sl. no. 21	<p>Electronic System: Our standard systems utilize a more advanced electronic system than a 32-bit Microprocessor. Are we required to adhere strictly to the specified electronic system specifications, or is there flexibility in the choice of components, provided they offer equal or superior performance and safety features?</p>	Please refer to the pre-bid report sl.no. 4 to 6
13.	Section-II, part-II technical specifications bid Sl. no. 25	<p>Robust Gantry Structure: We would like to inquire if the use of Carbon steel and the inclusion of a Counterweight mechanism are mandatory requirements, or if there is flexibility in material choice and balance mechanisms. Our machines may utilize different</p>	Please refer to the pre-bid report sl.no. 4 to 6

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		materials and balance mechanisms that will meet the performance criteria, and we want to ensure that our proposed alternatives align with the expectations outlined in the tender.	
M/s. Safew Tech Systems			
14.	Regarding Technical aspects - Can we add micro force sensors in technical specification to measure threshold of concrete nozzle Micro-force Sensing Probes are micro-force sensors capable of measuring forces from 0.2 N down to sub 10 -9 N along the sensor's probe axis. Both compression and tension forces can be measured. The outstanding long-term stability and low signal drift guarantees significantly higher measurement accuracy than any other force sensing system in this force range. • Sensor probe length: 3mm • Sensor probe thickness: 50 µm • Material of probe tip: Tungsten	Yes provided it meets or exceeds the performance criteria / expectation detailed in the tender.	
15.	Regarding commercial aspects - If different bidders have the same specifications but offer different print volume, so do we consider volume size as well while making a decision for L1.	Please refer to the pre-bid report sl.no. 1	
16.	Regarding commercial aspects - As the required product is a assembly of different parts. And we are a system integrator taking different parts from different principals and going to build your system to make it more cost effective to IITI. So as a system integrator do we need to submit an EMD against it or if we are having MSME Udyam Certificate (enclosed herewith) do we get exemption to it? As we also need to submit ePBG. Submitting both EMD and ePBG makes the system somewhat costly. Kindly suggest. Thanks in anticipation.	The all exemption will be applicable as per GeM General terms and conditions page no. 16 point no. (i)	

The date of bid submission is extended upto: 15/12/2023 @ 03:00 PM

The date of opening of bids is extended upto: 15/12/2023 @ 03:30 PM

All prospective/willing bidders are requested to take note of this report as part of the Tender document. All other parts of the tender including the terms and conditions of the tender will remain Unchanged.



**Assistant Registrar
MM Section
IIT Indore**

**सहायक कुलसचिव
(सामग्री प्रबंधन विभाग)
Assistant Registrar
(Materials Management Section)**

1. Identifying the problem
 (what's the issue?)
 2. Identifying the cause
 (what's the problem caused by?)