

Addendum 02

The Pre – Bid Meeting was held on 01/10/2019 at 3.45 p.m. in the Board Room, NITK Surathkal for the purchase of “**Micro Machining Unit-Hybrid Micro EDM**” (Tender Notification No.: NITK/CRF/MHEDM/04/2019-20 Dated: 28/08/2019). The following queries were discussed & the Reply/Clarification given to the prospective bidders.

Queries & Reply/Clarification

Sl. No.	Questions asked by the vendor	Reply/Clarification
1	I would need more clarifications and details on the use of closed loop system for your requirement in machining setup. Which feature or process demands the need for closed loop feedback and to what percentage or level of feedback is need for your specific R&D, as we have supplied multiple machines in the Country without closed loop system and have found them to work for their research with many published papers , masters and PhDs.	Based on the position accuracy +/- 1 micron / 100mm or better mentioned in the specification it is required to go for closed loop system to ensure the dimensional accuracy in the micro machined parts.
2	There are no specifications of Micro EDM power supply in the tender document and which I understand is the heart of this machine and is the functional parameter for conducting any R&D using Micro EDM, Micro WEDM, Micro WEDG. Only the stage specifications of the machine are highlighted in the tender.	The tender clearly states the dimensional specs that should be easily achieved by EDM processes on page 31 and 32. These outputs are desired via RC relaxation circuit. Bidders are requested to provide specs to reach the end machining goals.
3	As per your tender the requirement of EDM Power supply is RC Relaxation. Will you be open for considering Switched RC based EDM power supply.	To achieve high dimensional accuracy and high surface quality RC Relaxation circuit is necessary.

4	Is touch screen system very critical.	A touch screen makes the GUI interaction and overall user experience better, as is seen with many CNC machines. It is not critical, but desirable.
5	Keeping the space constraint and the feature requirement, we have reduced the foot print of the machine and made a setup which can fit on a table and hence the travel is smaller as compared to tender requirement. Can we offer a systems with smaller travel as for us smaller the travel, better it is for micro machines.	There is no change in the specifications mentioned in the tender.
6	Is there a possibility of having a lower range High Speed Spindle compared to the specifications mentioned keeping in mind the functional use.	There is no change in the specifications mentioned in the tender.
7	Will there be a priority given to Indian Manufacturer, MSME to build economy and strengthen our engineering, machine manufacturing capability.	We will be happy to support make in India theme, however subjected to fulfilment of given tender specifications.
8	We will provide mechanical micro machining option with 60000 rpm spindle, granite bed, etc	This specification is ok as it is more than what is there in the tender document, but other specifications must match or better than tender document.
9	Integrating a 200 watt high performance laser from Trumpf-SPI for Laser micro machining and Laser assisted machining applications.	This specification is ok

It was also discuseed about the quote for optional capabilities mentioned in the tender and based on these points below points are arrived at to be included in the Addendum 02

Following points to be included in the Addendum 02:

1. EDM power supply : The discharge circuit is RC relaxation with discharge pulse frequency range of 1MHz to 10MHz.
2. Provisional Capabilities
 - Below capabilities must be quoted as provision in the machine
 - Micro LASER machining having class IV laser with 100W or better for machining slot width of 40 micron or better
 - Material thickness, at least 1 mm depth for Copper, Aluminium, Nickel and Stainless Steel
 - Micro Wire EDM
 - Micro Simultaneous chemical –electro discharge machining

3. The supporting accessories for the machine such as machine calibration tools, filtered air compressor uptill 10 bar, UPS power backup for 1 hour, nitrogen gas cylinder with trolley and any other accessories supporting the machine must be quoted along with the machine quote.
4. The Process Wise Machining Capabilities as mentioned in the tender must be demonstrated during installation otherwise machine will be rejected

5. Please note the following amendments in the tender document:

- Under Tender Document, Please read everywhere,

Contact Details of Buyer : Contact No. : +91 9449058052

E-mail : navinkaranth@gmail.com

It is decided to extend the Bid submission date by four weeks after displaying Addendum 02

Last date for request tender document : 13/11/2019, before 3.00 p. m.
Last date for Bid submission : 13/11/2019, before 4.00 p. m.
Bid opening date(tentative) : 19/11/2019 @ 3.00 p.m.

Sd/-
Buyer
(Dr. Navin Karanth P)

Sd/-
Chairman
Central Research Facility
NITK, Surathkal