

## Enquiry Note

Date: 09.12.2020

Enquiry Ref. No.: CWS/2020-2021/Enquiry/200

Due date: 22.12.2020

### List of items required

| Sl. No. | Description  | Quantity |
|---------|--|----------|
| 1.      | CNC ROUTER for 2D and 3D profile cutting.<br>Technical Specifications as per Annexure. | ONE      |

- Please submit your quotations as two bids, technical and commercial bids separately.
- Please send the technical and commercial bids in two separate sealed envelopes.
- Note that IIT Madras is eligible for 5% concessional GST for its purchases for research purpose. Relevant certificate will be issued upon production of Tax Invoice prepared with 5% GST.
- Please attach the product catalog of the CNC router which is submitted for this enquiry.
- Submit the list of industries / Institutions where the quoted product has been supplied along with their contact details.
- If necessary, technical evaluation will be carried at your factory/your customer premises.
- Technical bids will be shortlisted after stringent technical evaluation for the technical specifications and performance of the machine as well as after sales technical support.
- Please mention electrical and civil installation requirements for installing the quoted machine.
- Please mention standard terms and conditions like taxes, delivery / unloading charges, delivery period, insurance, warranty and validity.
- Please send details of standard accessories covered with the quoted cost. Please quote your cost separately for standard / optional accessories that are not covered in annexure.
- Items need to be supplied only after clear purchase order from us.
- Every attempt will be made to settle payment within 30 days after supply, installation and commissioning of ordered items.
- Quotations to be submitted in the name of  
**“The Professor – in – charge  
Central Workshop,  
Indian Institute of Technology Madras  
Chennai – 600 036.”**

## Annexure

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Technical specification of CNC ROUTER for 2D and 3D profiles:

|                           |  |
|---------------------------|--|
| Maximum job size:         | 2400mmx1200mmx100mm or Standard size plywood or metals equal or close to this size   |
| XYZ Positioning accuracy: | ±0.1 mm / 300 mm   |
| Job materials             | Wood, plastics, composites and non-ferrous metals (aluminium, copper, graphite etc.)   |
| XYZ axis traverse         | 2400x1200x100mm  |
| Table surface             | T slot table   |
| XY structure              | Spring loaded rack and pinion drive with linear bearings.  |
| Collet                    | 12 mm, 6 mm and 3 mm.  |
| Spindle motor             | 2HP air cooling, 0-24000 Rpm.  |
| Feedrates                 | Rapid: upto 4000mm/min, feed: up to 2000 mm / min.   |
| Driving system            | Stepper motors.  |
| XY resolution             | 10 microns.  |
| Operating system          | DSP 3 axis CNC controller, PC based HMI  |
| Working voltage           | Single phase, 220 – 230 V  |
| Interface                 | USB  |
| Features                  | 3D tool path generation software<br>Pen plotter attachment for part program verification<br>Camera for part verification, sheet alignment<br>Touch probe for 3D measurement, reverse engineering<br>Dust collector<br>4 <sup>th</sup> axis rotary milling attachment |
| Tools and accessories     | Two sets of cutting tools for cutting wood, plastics, composites and non-ferrous metals (aluminium, copper, graphite etc.)   |