

BROAD PARAMETERS OF PROPOSED CNC VERTICAL MILLING MACHINE

PURPOSE : Profile machining of Blades for Runner / Impeller and machining of other suitable components.

MATERIAL : Mainly Stainless steel (13 % Cr. 4 % Ni.) to ASTM A743 CA6 NM and High tensile steel.

TRAVERSE :

- a) X – Axis \geq 3000 mm
- b) Y – Axis \geq 2000 mm
- c) Z – Axis \geq 1200 mm

MAXIMUM LOAD ON TABLE: 10 Tonnes

TABLE SIZE (X x Y) \geq 3000 mm x 2000 mm

SPINDLE RPM RANGE : 0 – 6000 rpm (However rpm greater than 6000 is also acceptable)

NOTE:

- 1) Sketch is for the purpose of clarity of requirement to potential bidders. Size, profile & weight of blade may vary with design requirements.
- 2) Potential Vendor can visit to BHEL's shop floor for any clarification, discussion & to have more idea about our blade machining requirement.
- 3) Vendor to submit complete technical specification such as machine configuration (spindle, traverse, feeds & drive system), constructional details, accuracy, any special attachment, tooling and any other relevant/necessary data pertaining to machine.
- 4) Vendor to submit details of operation & control system, CNC system (Make : Siemens / Fanuc only) & features.
- 5) After placement of order, Vendor shall submit the GA Drawings along with necessary reports for getting BHEL's approval. Vendor shall also submit detailed civil foundation drawing, mentioning the details of concrete and reinforcement for construction. BHEL shall construct complete foundation. Vendor should arrange equipment required for the testing of foundation, if required by the vendor. The vendor shall also indicate detailed specifications of grouting compound and Grouting procedure, etc.
- 6) Only those OEM's or Authorised vendor (OEM experience may be considered if they have not supplied directly) to quote who have supplied and commissioned at least two CNC vertical milling machine of same or higher size in past 10 years (on date of opening of EOI) & such machine is presently working satisfactorily for more than one year after commissioning (on date of opening of EOI). In compliance to above, vendor to submit following documents:
 - i) Name of the customer along with contact details & commissioning details where machine is installed.

ii) Performance certificate from the customers regarding satisfactory performance of machine supplied to them.

SKETCH FOR UNDERSTANDING PURPOSE ONLY (REFER NOTE 1 ON PAGE 1)

