

**Neutron and X-ray Physics Section
Technical Physics Division
PURNIMA Laboratories**

Ref: TPD/NXPS/MF/SBP/123

**Date: 28-07-2017
Due Date: 11-08-2017**

Sub : Minor Fabrication - invitation of quotations.

1. Quotations are invited for the minor fabrication job, as per the enclosed specifications.
2. Bidder shall quote for fabrication of these components with material.
3. Taxes and excise duties shall be quoted separately.
4. The quotations must reach to the Head, Neutron and X-ray Physics Section, Technical Physics Division, Purnima Labs, BARC within 15 days of the date of this letter and must be sent by ***Indian Speed post / Indian Post*** only in a sealed envelope superscripted with the above reference number and due date given above
5. The address on the envelope should read :
**Head
Neutron and X-ray Physics Section
Technical Physics Division
Bhabha Atomic Research Centre
PURNIMA Labs., Trombay, Mumbai 400085.**
6. The bidder shall have to take an insurance policy against any material issued to him by the purchaser
7. The fabrication work shall be subject to inspection by our representative. The finished components shall not be dispatched prior to approval by our representative at the bidder's works. Necessary inspection facilities should be provided to our engineers during fabrication at bidder's premises.
8. The bidder shall deliver the finished components and install it after approval by our representative, within 60days from the date the firm purchase order issued to the bidder. The finished components and the scrap from the free issue material shall be delivered by the bidder at PURNIMA Laboratory, Neutron and X-ray Physics Section, Technical Physics Division (Near Plutonium Plant), Bhabha Atomic Research Centre, Trombay, Mumbai 400085.
9. Head, Neutron and X-ray Physics Section, Technical Physics Division, BARC, reserves the right to accept/reject any or all quotations without assigning any reason.
10. The bidder should furnish the VAT, PAN and TIN numbers in their quotations without which the quotations will be rejected.
11. Quote for each part separately.
12. Detailed drawing will be made available after issue of order.
13. Clarifications for executing the order can be sought after issue of order.

Head,
NXPS/TPD

Description and specification of different items of

Work order ref: TPD/NXPS/MF/SBP/ 123

Fabrication and supply of motorized heavy duty rotation stage along with controller and software

Specifications:

I. Motorized heavy duty rotation stage

- 1. Quantity: 1no.**
- 2. Material : Aluminum**
- 3. Diameter : 300 mm +/- 1mm**
- 4. Width : 250 mm +/- 1mm**
- 5. Height : 60 mm +/- 1mm**
- 6. Maximum speed : 10 degree/sec**
- 7. Actuator: Stepper Motor**
- 8. Load Capacity : 300 Kg**
- 9. Actuator: Stepper Motor**
- 10. Control Type: Closed loop using rotary encoder**
- 11. Encoder resolution : 200 ppr**
- 12. Graduated rotary scales must be provided for visual reference of positions.**

II. Motorized Lab jack

- 1. Quantity: 1 no.**
- 2. Material : Aluminum alloy (Black Ionized)**
- 3. Parallelism : 0.1mm for entire travel**
- 4. Travel : 125 mm**
- 5. Load Capacity : up to 20kg**
- 6. Actuator: Geared Stepper Motor**
- 7. Length: 300 mm**
- 8. Breadth: 150 mm**
- 9. Height (min,max):105,270 mm**

III. Compatible Single Axis Controller

- 1. Compatible with single axis stepper motor**
- 2. Motor torque: 1.5kg/cm**
- 3. Typical payload:20kg**
- 4. Serial Port connectivity**
- 5. Microprocessor controlled**
- 6. Micro step configuration:1/16**
- 7. Operation : PC based**

Note: Single axis controller provided must be compatible with above (i) stepper motor of heavy duty rotation stage and (ii) lab jack. The required software must also be provided.