

Government of India
Bhabha Atomic Research Centre
Post Irradiation Examination Division, Radiological Laboratories
Trombay, Mumbai 400 085

Tel: 25594561

Ref: PIED/AB/2022/357A

26.05.2022

To,

Sub: Design, fabrication and installation of high precision XZ Linear Stage and its control system

Dear Sir,

Please send us your lowest quotation for the design, fabrication and installation of high precision XZ Linear Stage and its control system as per the technical specification and terms and condition given below:

Scope of work:

Design, fabrication and installation of high precision XZ Linear Stage and its control system as per following specification

S/No.	Specification	Requirement
1.	X axis Stroke (Horizontal)	2000mm
2.	Z axis Stroke (Vertical)	500mm
3.	Resolution @ each axis	1micron
4.	Positional error X axis	< 5micron in 1000mm travel
5.	Positional error Z axis	< 5micron in 500mm travel
6.	Load capacity each axis	5Kg
7.	Speed Limits for both axis	10 to 1000mm per min
8.	Drive	Suitable Stepper / Servo motor
9.	Linear Guides	Stainless steel LM Guide THK HSR 35
10.	Ball Screw	Stainless steel Pre-loaded Ball Screw THK make
11.	Position feedback	Suitable magnetic resolver of minimum 5000PPR Optical encoder can't be used
12.	Drive Control	Suitable controller with Gigabit Ethernet connectivity Controller shall accept G-Codes
13.	Control Panel	Control panel shall have suitable motor driver, controller, resolver counters with re-transmission, power supply. Panel shall have ON/OFF, emergency stop and connectors for motors and resolver.
14.	Cables	All the cables shall be shielded cables of 15m length Distance between Panel and Stage will be 12m
15.	Software	Software to operate the stage shall be compatible with Windows 10 operating system. Head can be moved continuous / jog Head can be moved definite position using software Motion can be given using G-Codes

		Speed can be changed using software
16.	Limit Switch	Snap action limit switches shall be used for both axis limits
17.	Data logging	Displacement and speed shall be logged in computer
18.	Pre-dispatch inspection and testing of system	
19.	Safe delivery to RLG Zonal Stores, BARC, Mumbai	
20.	<p>Installation and commissioning of system at BARC, Mumbai 400085 Cost of installation shall be mentioned in separately in the quotation The fabricator has to arrange medical fitness certificate for all the working personnel at site. TLD and Dosimeter will be issued to all working personnel. Since the work is in radioactive area, all working personnel shall strictly follow the instruction of health physicist and dept. supervisor. The fabricator has to arrange all materials, welding machine, welding consumables, grinders, sanders, hand trolley and other tools for site work by him. Department will not provide any machines or tools for the site work. Since the scope of work involves site work, you shall obtain clearance from police and CID for all staff who may be deputed for site work at PIED, RLG, BARC. This is mandatory and the responsibility of obtaining such a clearance is within your scope of work</p>	

Please note the following :

1. The work is to be completed within 30 days of receiving the firm work order from us.
2. The sealed quotations shall reach the office of the Head PIED, New Hot Cells Facility, RLG, Mumbai – 85 on or before **08.06.2022 by Registered Post of Indian postal services.**
3. Please address your offer to: **Anil Bhandekar, SO/G, Post Irradiation Examination Division, RLG, BARC, Trombay, Mumbai-400 085.**
4. The quotations are to be sent in a sealed envelope with the following information marked on top of the envelope: "Quotation for XZ Linear stage"
5. Offers sent by telegram, telex, fax or e-mail will **not** be considered.
6. All taxes should be mentioned clearly.
7. Good & Services Tax @ 5%. The goods proposed to be fabricated on this work order are meant for research purpose of Research Institution under Department of Atomic Energy and are exempt from payment of GST in terms of Notification No. 47/2017 integrated tax (rate) dated 14.11.2017 issued by Ministry of Finance, Department of Revenue of Government of India. In the event of order, the Purchaser will make available the GST exemption certificate duly signed by the authorized officer in the Department of Atomic Energy
8. For installation GST will be 18%.
9. Quotation should be in the printed letter head /quotation format which should consist of Sales Tax Registration Number, PAN Number of the firm, Service Registration Number, etc.
10. **Quotation shall be signed by proprietor or authorized person and affix company seal.**
11. Computer generated quotation form will not be accepted.
12. Income Tax @2% will be deducted at source from your bill
13. Delivery period should be mentioned with all the possible consideration.
14. Payment will be made within 30 days from the date completion.

Yours sincerely,

ANIL BHANDEKAR
Scientific Officer
Government of India
P.I.E. Division, B.A.R.C.
Trombay, Mumbai - 400 085.

Anil Bhandekar
SO/G, PIED