

# Indian Institute of Technology, Delhi

## Notice Inviting Quotation

Date: 1<sup>st</sup> March, 2013

Sealed quotations are invited for an item “**ULTRASONIC PLASTIC WELDING MACHINE**”. The quotations for item should be submitted in a sealed cover (separate bids: technical and commercial) to Dr. S. Mukhopadhyay, Assistant Professor, Room No. TX105, Textile Department, Indian Institute of Technology Delhi, Hauz Khas, New Delhi 110016 on or before 25.03.2013 (Monday). Late submission will not be entertained.

The sealed Quotations are to be submitted in two separate envelopes;

For Technical Quote (specification)

For Financial Quote

Both these envelopes should be enclosed in an outer envelope, which should be sealed and addressed to, clearly mentioned on top right of the envelope "Quotation for Ultrasonic plastic welding machine."

Institute reserves the right to accept or reject any of the offers without assigning any reasons.

The item “Ultrasonic plastic welding machine” comprises of major components such as  
The detailed specifications of each individual component of the item are given below.

Item Name	ULTRASONIC PLASTIC WELDING MACHINE	
S.No.	Parameter	Description
1	Pneumatic Pressure	With a maximum closing force of 3000 N with digital proportional valve
2	Ultrasonic-generator	<ul style="list-style-type: none"><li>• Range of 500 W to 4500 W</li><li>• Amplitude regulated power system (ARP)</li><li>• Electronic booster by means of electronically selecting amplitude-range of 100/90/80/70 %.</li><li>• Fully automatic tuning and frequency control under all load conditions.</li><li>• Builtin circuit protection for all possible fault and load conditions.</li></ul> <p>Power:- Min. 3000 W Frequency:- Min. 20 KHz</p>
3	Controller	Microprocessor Controlled
4	Converter	Fully enclosed converter with standard integral cooling system and connection hood for full turning capacity of 360 Degree

5	Booster	At least Five standard boosters with transformation ratio of: 0.5/1/1.5/2/2.5
6	Titanium horn, frequency	At least 20 KHz
7	Size	At max. 180 mm x 20 mm

**The Supplied “MICROPROCESSOR CONTROLLER” should have the following facilities:**

- (1) Welding by distance trigger (using encoder)
- (2) Welding by force trigger
- (3) Welding by pressure trigger
- (4) Welding by time delay
- (5) Welding control by distance, energy, power, time.
- (6) Welding distance least count possible to set is 0.01mm
- (7) Weld time least count possible to set at 0.001sec
- (8) Welding by maximum peak power – ultrasonic remains on till a preset max. Power is reached
- (9) Setting of pressure through display (using proportional valve)
- (10) Welding graph can be seen in display of last 10 nos weld. No need to connect PC or printer

**Envelope A: Technical Quote: The following details are to be enclosed**  
*(Mention clearly on this envelope – **Technical Quote**)*

1. Letter from the manufacturer specifically to quote for this tender is to be attached for authenticity of dealership/ agency and the dealer should be authorized service provider.
2. Technical brochures mentioning all details with complete address of the principals.
3. A compliance statement for required specifications should be attached.
4. Firm **MUST** provide a compliance statement vis-à-vis specifications in a “tabular form” clearly stating the compliance and giving justification, if any supported by technical literature with clear reference of page number, paragraph or lines. This statement must be signed, with the company seal, by the tendered for its authenticity and acceptance that any incorrect or ambiguous information found submitted will result in disqualification of the tender. The quotation should be complete in all respects. (as per IIT-Delhi rules).
5. Any optional equipment / accessory advised to be included separately.
6. a) List and addresses of organizations [in India and abroad – with contact landline numbers] where the equipment has been supplied in last 5 years. b) Address in India where a live demonstration of the instrument can be arranged, if possible.
7. a) Details of similar equipment supplied to preferably Indian Institute of Technology/ National Institute of Technology,/Indian Institute of Science, India specifying the Department/centre/lab to which the equipment was supplied, with references. b) Mention if the equipment is being maintained by your organization. Address of the technical office, in India, with telephone and FAX numbers. Please clarify the type of support available in India.
8. If quote is for imported equipment, Sole Agency-ship certificate on the letterhead of the principal company, if quotation is from an Indian Agent.
9. In the case the items are proprietary products of the company, a proprietary item certificate stating the same may be provided.
10. Specifications form should be similar to the given specifications sheet.

**Envelope B: Financial Quote: The following details are to be enclosed/ensured. (*Mention clearly on this envelope – Financial Quote*)**

1. The quotations for the equipment in foreign exchange, if it is to be imported. The cost of spares and optional equipment to be quoted separately. The cost should be based on FOB, Factory. If equipment is indigenous, the quote should be in INR.
2. Taxes, terms and conditions should be clearly mentioned.
3. Institute makes payment after delivery and successful installation. In case the payment terms are different, it should be mentioned clearly. If equipment is to be imported, the address of the company in whose name the LC is to be opened should be stated.
4. Payment terms and conditions should be clearly mentioned. No advance payment is encouraged by IIT Delhi.
5. Vendor should get a fresh certificate directly from their product principal's clearly mentioning about terms of warranty of the equipment to be delivered from the date of installation.
6. The details of the AMC after the warranty period.
7. Cost for Installation and training at site, if needed, to be provided.
8. Validity of the quotation should be at least three months. Vendors will do the installation and demonstration of the equipment at IIT Delhi premises without additional charges.
9. The delivery period to be clearly specified.