

AIC - PONDICHERRY ENGINEERING COLLEGE FOUNDATION

Proc/AIC-PECF/ 2023/077

Dated: 23-01-2023

Call for Limited Tender

Call for Limited Tender for the supply & Installation of **SMT Pick and Place Machine for FAB LAB at AIC-PECF.**

- i. Quotations are invited from reputed registered firms / companies / suppliers for the supply & Installation of **SMT Pick and Place Machine for FAB LAB at AIC-PECF** by Atal Incubation Centre-Pondicherry Engineering College Foundation (AIC-PECF).
- ii. The quotation must be sent in a sealed cover superscribed as “**Quotation/Proc/AIC-PECF/2023/077**” and must meet the conditions mentioned under the title “Terms and Conditions”.
- iii. Bidders should submit the Proforma as given in Annexure-1 and the Quotation as per the format given in Annexure-2.
- iv. The Technical specifications of the items are furnished in Annexure – 3
- v. All the Bid Documents should be addressed to
The Chief Executive Officer,
AIC-Pondicherry Engineering College Foundation
Puducherry Technological University Campus
Pillaichavady, Puducherry-605014.
- vi. All the Bid Documents shall be signed and sealed by the competent authority of the supplier in the official letter head.
- vii. All the Bid Documents shall be sent along with the data sheets of the equipment with make and specifications.
- viii. The Bid Documents should reach on or before **03-02-2023 by 05.00 P.M.**

Chief Operating Officer
AIC-PECF

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Terms and Conditions

- 1) Minimum 1 year of warranty cover for all the items and Service Support for 5 years.
- 2) The rate quoted should be preferably inclusive of all taxes / duties. otherwise the amount of taxes / duties should be mentioned separately, duly specifying the nature of tax / duty with the rate there of.
- 3) The supply should be FOR AIC-Pondicherry Engineering College Foundation, Pillaichavady, Puducherry – 605 014.
- 4) The Supplier will be responsible for the safe delivery of the items at our organization.
- 5) No Insurance Charges will be payable by our Organization.
- 6) All communication should be addressed to the Chief Executive Officer by designation and not by name.
- 7) The selected bidder should submit a Bank Guarantee of 2.5% of the purchase order value along with all deliverables . The bank guarantee shall be released by AIC-PECF only after satisfactory performance of the procured items for a minimum period of one Year. In the event of any non-compliance in the delivered items by the bidder, the entire security deposit shall be forfeited.
- 8) Payment will be made by PFMS after the receipt of procured items in good condition and the Completion of Training/Demo of the Product to AICPECF Technical Staff.
- 9) Under no circumstances should the items be sent under freight to pay.
- 10) Goods not received in good condition and not according to specifications will be rejected outright.
- 11) Manufacturers/Suppliers name their trade mark and brand etc., should be mentioned in the bill.
- 12) Delivery period should be mentioned.
- 13) Quotation received after the due date shall be rejected and will not be considered.

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Annexure – 1

(To be Printed in Supplier Letter Head)

Proforma of Bidder

1	Company Name	
2	Date of Incorporation	
3	Full Address with Pincode	
4	GST	
5	PAN	
6	Email Address	
7	Mobile Number	
8	Website Address	
9	Name of the Authorized Signatory	
10	Experience in Years Supplying similar Items mentioned in Annexure-2	

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Annexure – 2

(The bidders are requested to quote the price in the format given below in Supplier Letter Head)

SI No	Description of Items	Unit Price in INR (A)	Number of Units (B)	Total Price C=AxB	GST INR (D)	Total Price Including Tax (C+D)

Delivery Period : _____

Declaration:

We accept all the terms and condions as mentioned in tender notice. The above rates should be inclusive of all i.e. taxes, packing, delivery transportaon, installation etc.

Place : _____ Name : _____

Date : _____ Designation : _____

(_____)

Authorized Signature
with seal

Annexure – 3

S.NO	Product	Quantity
1	SMT Pick and Place Machine	1

Specifications:

1	Number of Placement heads	6 (high accuracy)
2	Number of IC Trays	48
3	Number of Feeders	64
4	Positioning Accuracy	0.01mm
5	Mounting Angle	0-360Deg
6	Drive Motor	Servo Motor
7	Range of Mounting Speed	9000-10000 Pcs/h
8	Nozzle type	Juki nozzle
9	PCB Thickness	<=2mm
10	Supported Maximum Area of PCB	500 * 370 mm
11	Feeders	pneumatic feeder, vibrating feeder, IC tray, etc.
12	Recognition Devices	mark camera x1, fast recognition camera x6, high-precision camera x1
13	Maximum Height of Applicable Components	<7mm
14	Recognition Methods	simultaneous recognition and picking with six heads
15	PCB Convey Mode	Three-stage entry, the automatic connection from left to right, automatic PCB positioning
16	Mark Positioning	Manual/automatic

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17	Programming Method	automatic programming after manually importing files of PCB coordinates
18	Control System	Japanese CKD Control system
19	Maximum Step Length of XY Axis	629mm * 679mm
20	Tracks of XY Axis	double linear motion guide + double ground ball screw
21	Motion Mode of XY Axis	intelligent linkage of acceleration and deceleration of curve and line, integrated linear interpolation algorithm.
22	Control Computer	industrial control computer with intel high-performance processor
23	Adjusting Method of Tracks	Electric
24	Range of Nozzle Buffer	4.5mm
25	Maximum step length of the z-axis	20mm
26	Range of Angle for components	+180
27	Air Supply Requirements	oil water filter> 60L, dust filter, air pressure stabilizer, etc.
28	Vacuum supply of Nozzle	Japanese CKD vacuum generator integrating the high-speed vacuum burst function
29	Range of Air Supply Pressure	0.5 - 0.6mp
30	OS	Independent research and development of SMT intelligent OS based on Windows
31	Vision Display	17-inch industrial control display
32	Cable	German Igus durable flexible cable (10 million times)
33	Power Supply	220 V 50 / 60 HZ
34	Average Power	600W
35	Machine Dimension	1316*1360*1340mm
36	Weight	438kg

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37	Pneumatic Feeder (8mm – 2P) Suitable for belt width is 8mm, 0402.	21 Nos
38	Pneumatic Feeder (8mm – 4P): Suitable for belt width is 8mm, 0603, 1206, 0805, 3014, 3528, 4148, SOT23.	17 Nos
39	Pneumatic Feeder (12mm)	10 Nos
40	Pneumatic Feeder (16mm)	5 Nos
41	Pneumatic Feeder (24mm)	1 No
42	Pneumatic Feeder(Vibration Feeder) Suitable for ICs that come by stick method.	1 No
43	Air Compressor: Piston Displacement LPM: 205 & CFM: 7.23, Free Air Delivery LPM: 101.9 & CFM: 3.6, Motor Power HP: 1.50 & Kw: 1.10, Compressor RPM: 1440, Tank Capacity in Litres: 50	1 No
44	Software Features:	<ul style="list-style-type: none"> ➤ Feeder Lift Protection ➤ Auto Feeder Adjustment ➤ Camera Algorithm for different package ➤ Auto Fiducial mark adjust for PCB Edit ➤ Individual mark setting for Array Board ➤ Individual component placement ➤ Group component placement ➤ Nozzle Dirty Warning ➤ Door Sensor for the Control Speed / Stop

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S.NO	Product	Quantity
2	Accessories	1 Set

Specifications:

1	IC Tray	4 Nos
2	Demo Boards	10 Nos
3	Solder Paste	2Kg
4	Feeder Trolley (50 Feeder Capacity)	1 No
5	Demo Components	2 Set
6	<i>Conveyor: PCB Size: 1000 x 50-460mm, PCB Transport Direction: Left to Right, Transfer Height: 900±20mm, Transmission Speed: 1-12m/min, Main Motor Power: 15W, Outline Dimension: 1000x670x880mm, Net weight: 49Kg</i>	1 No