

**TECHNICAL SPECIFICATION OF AUTOMATED DISPENSER FOR POLYMER ACTIVITIES -
3-AXIS AUTOMATIC JETTING SYSTEM**

SI No.	Parameter	Technical Specification	Compliance Yes/No	Offered Spec
1.	Tabletop automated dispensing system with 3-axis (X/Y/Z) simultaneous control intended to use for the precise non-contact jet dispensing of polymer materials like CONATHANE CE-1155 on assembled PCBs.			
2.	Quantity	1 Unit		
3.	Construction features from 3.1 to 3.5			
3.1	Machine base/Structure material	Casted Aluminium (Powder coated)		
3.2	Machine overall Weight	<70 kg		
3.3	Work piece Load (including fixture)	10 kg or more		
3.4	Tool Load	5 kg or more		
3.5	Dimension WxHxD	800mm X 700mm X 700mm \pm 10%		
4.	Functional Parameters from 4.1 to 4.13			
4.1	X - Travel	0 to 350mm or higher		
4.2	Y - Travel	0 to 350mm or higher		
4.3	Z - Travel	5mm to 100mm in steps of 0.5mm		
4.4	Speed of X Axis	Min \leq 1 mm / sec Max \geq 500 mm / sec		
4.5	Speed of Y Axis	Min \leq 1 mm / sec Max \geq 500mm / sec		
4.6	Speed of Z Axis	Min \leq 1 mm / sec Max \geq 100 mm / sec		
4.7	Repeatability (X/Y/Z)	\pm 0.010 mm or less		
4.8	Drive System	DC Servomotor		
4.9	All axes travel & speed	Programmable		
4.10	Interpolation	All 3-axes simultaneous		
4.11	Tip auto aligner	Mandatory		
4.12	Auto purge with interval & duration (programmable)	Mandatory		
4.13	Closed-Loop X & Y axis encoder	Mandatory		
5.	Programming features from 5.1 to 5.7			
5.1	Should support vision guided programming	Mandatory		
5.2	Additional provision for execution of programs using a QR code scan	Mandatory		
5.3	Provision for running a program without Jetting (Dry Run)	Mandatory		
5.4	Upload & download of programs through USB	Mandatory		
5.5	Provision for CAD file import	DXF file or Gerber file or ODB++		
5.6	Provision to capture, register & detect fiducial marks	Mandatory		
5.7	Automatic adjustment of XY & Z axes offset	Mandatory		

6.	Controller system Features from 6.1 to 6.7			
6.1	Programming System	Controller with Embedded OS (Windows) with user friendly software interface		
6.2	Programming Software Features	Programming with advanced vision-guided software using camera On-screen preview of the dispensing path Easy USB file upload and download		
6.3	Display	19" or more TFT/LCD/LED high resolution colour monitor		
6.4	SSD capacity	60GB or more		
6.5	RAM	4GB or more		
6.6	Peripherals	ASCII Keyboard & Mouse (wireless)		
6.7	Vision Camera	CCD Smart camera with 1 MP or better resolution		
7.	Fixture Parameters from 7.1 to 7.2			
7.1	Fixture dimension	400 X 400mm or bigger		
7.2	Fixture material	Aluminium base with standoff for PCB		
8.	Jetting System Parameters from 8.1 to 8.8			
8.1	Dispenser Type	Non-Contact Jetting System		
8.2	Dispenser Electronic pressure regulation with monitoring	Mandatory		
8.3	Fluid input pressure Max	7 Bar or higher		
8.4	Jetting Microdot volume	Min \leq 1nL Max \geq 2000 uL		
8.5	Jet Valve type	Piezo actuation		
8.6	Fluid reservoir size (Qty to be supplied)	5 cc + 10% (50 nos.) 10 cc + 10% (100 nos.) 30 cc + 10% (100nos.) 50 cc + 10% (50 nos.)		
8.7	Cycle rate	\geq 1000 cycles/sec		
8.8	Fluid body material	Stainless steel (passivated)		
9.	Interfaces/ Operational Requirements from 9.1 to 9.9			
9.1	Laser height detection	Mandatory; Class-B LASER		
9.2	General Purpose I/O Ports	8 inputs / 8 outputs or more		
9.3	External Interface	USB , RS232, Ethernet		
9.4	Input Power Supply	220 to 240 VAC, 50Hz		
9.5	Approvals	Compliance to CE, RoHS, WEEE		
9.6	Emergency Stop Button	Should be in the front with easy access		
9.7	Power On and Off switch	Must be in the front panel		
9.8	ESD Compliance	Mandatory		
9.9	Warranty	1 year		

Terms & Conditions:

1. Both the machines shall be sourced from the same vendor and a single Purchase order will be placed covering both the systems.
2. Vendor should indicate the part no. of the item clearly. The part numbers & description of the items in the offer should match the part numbers & description of the items mentioned in the manufacturer's specification sheets.
3. Detailed product catalogue/technical literature answering all the required specifications shall be sent along with the offer.
4. Vendor shall provide the details of the customer/s to whom the offered equipment has been supplied. Proof for the same shall be enclosed along with the quotation.
5. Specifications of the major items have been provided in this document. In case any additional accessories/software media/licenses are required to complete the configuration for full functionality and/or better manageability, vendor should include such hardware accessories and related software elements or plug-ins with licenses in their offer.
6. The bidder should be OEM or OEM certified partner. Bidder shall enclose certificates from the respective manufacturers that bidder is authorized to quote for the offered product and that the manufacturers will support the delivery and subsequent warranty. Technical bids without authorization letter will not be considered.
7. The Vendor shall execute an interest free Security Deposit for 3% of the Contract value to ensure due Performance of the Contract.
8. Vendor shall install the equipments at URSC/ISITE, Bengaluru & shall provide detailed training on operation and maintenance of the system.
9. Minimum of one-year of warranty shall be provided against any manufacturing defects/ faulty workmanship, from the date of installation is mandatory.
10. Vendor/Supplier is responsible for the servicing of the equipment during the warranty period.
11. Any fault reported shall be attended within 48 hrs. during the warranty period.
12. This is a two-part bid; hence, vendors are instructed to bid separately for Technical and commercial parts and not to mention the price information in the technical bid.
13. Country of Origin (Manufacturing, Assembly, Testing/Inspection) certificate shall be provided in case of import.
14. Supply/Delivery of the equipment including installation, commissioning and technical training shall be done within 4 months from the date of acceptance of PO.
15. Delivery terms: FOR, URSC/ISITE, Bengaluru basis only.
16. Payment Terms for Supply: 100 % Payment towards the procurement of the equipment will be done within 30 days after successful completion of Installation, Commissioning and acceptance by URSC including the technical training needed for operating the equipment.