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ENQUIRY No.EC/EMSD/PUR/2900/4406/1115

DATE: 17.10.2014

DUE DATE: 15.10.2014

ELECTRONICS CORPORATION OF INDIA LIMITED
(A Govt. of India Enterprise)
Electronic Manufacturing Services Division
Industrial Development Area, Phase-II,
Cherlapally,
HYDERABAD – 500 051

PLEASE SUBMIT YOUR QUOTE IN SEALED ENVELOPE SUPERSCRIBING RFQ ENQUIRY & DUE DATE BY POST / COURIER TO THE UNDERSIGNED. QUOTE YOUR BEST PRICE ETC., FOR THE FOLLOWING ITEM/S SO AS TO REACH US ON OR BEFORE DUE DATE AND TIME.

NOTE: QUOTATIONS RECEIVED THROUGH EMAIL / FAX WILL NOT BE CONSIDERED

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- 01. “COMPUTERIZED SELECTIVE WAVE SOLDERING MACHINE (LATEST VERSION)”
- 01 NOS
(TECHNICAL SPECIFICATIONS AS PER ANNEXURE-I)**
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GENERAL TERMS AND CONDITIONS:

THE QUOTE IS TO BE SUBMITTED BY HAND/POST/COURIER DULY SUPERSCRIBING OUR REFERENCE OF OUR “REQUEST FOR QUOTATION”.

THE BID SHALL BE IN TWO- PARTS:

TECHNICAL BID AND PRICE BID ENCLOSED IN SEPARATE SEALED ENVELOPES EACH SUPERSCRIBED WITH THE REFERENCE OF REQUEST FOR QUOTATION. THESE TWO PARTS SHOULD BE TOGETHER PUT IN A SINGLE SEALED ENVELOPE SUPERSCRIBED WITH REFERENCE OF REQUEST FOR QUOTATION AND SUBMITTED. THE PRICE BIDS WILL BE CONSIDERED FOR ONLY THOSE OFFERS WHICH QUALIFY IN TECHNO-COMMERCIAL BID EVALUATION.

OPENING OF TENDER:

TECHNICAL BIDS WILL BE OPENED ON 17th NOVEMBER, 2014, THE MONDAY AT 10 AM BEFORE THE BIDDERS PRESENT.

ANNEXURE -I				
Technical Specifications for selective wave soldering Machine				
S.NO	PARAMETER		SPECIFICATION REQUIRED	Complied
A	Basic features			
1.1	Type of Wave		Selective Wave	
1.2	Handling of Assemblies	1.2.1	Maximum Board Size : X=500 mm, Y=500 mm	
		1.2.2	Minimum Board Size : X=100 mm, Y=100 mm	
		1.2.3	Height Clearance : Min. Above / Below 25 mm	
		1.2.4	PCB edge clearance should be min 3mm	
1.3	Key Functional requirements	1.3.1	Inline Machine with conveyor system	
		1.3.2	Multiple Soldering heads	
		1.3.3	Traditional Wave soldering module required	
		1.3.4	Repeatability : +/- 0.05 mm	
		1.3.5	Resolution : 0.15 mm	
1.4	Fluxing module	1.4.1	Micro Drop Jet Fluxer	
		1.4.2	XY Servo control fluxing module required	
		1.4.3	Minimum 5 liters pressurised Fluxing tank	
		1.4.4	Vacuum system should be available to remove over spray and fumes	
		1.4.5	Automatic level control with sensor	
		1.4.6	Both fluxing frequency and spray time should be controllable through software for proper fluxing	
		1.4.7	Transport speed should be min. 0.6m/sec	
		1.4.8	Flux frequency micro drop should be 2 - 500Hz	
		1.4.9	Flux volume Micro drop 135 to 270 Micron	
		1.4.10	Should be capable of using two different flux types like water based and alcohol based as a mix in same tank	
1.5	Preheat Module	1.5.1	Top & Bottom side Preheat Flexibility	
		1.5.2	Low Mass Forced convection Preheat is preferred	
		1.5.3	Depending on the above machine configuration, please quote for the suitable pre-heating modules	
1.6	Mini and Traditional Wave Modules	1.6.1	Soldering Pot compatible for lead free soldering	
		1.6.2	Wettable and Nonwettable Quick change Nozzles	
		1.6.3	When multiple mini wave units are installed, each should be controlled separately	
		1.6.4	Close loop Frequency Converter to keep the wave height consistent with real time feedback	
		1.6.5	Automatic solder pot level maintenance	
		1.6.6	Changing the inserts is should be very fast and easy	

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1.6	Continue.. Mini and Traditional Wave Modules	1.6.7	Solder Pot capacity should be Minimum 50kg	
		1.6.8	Standard nozzles from 2.5mm - 30mm should be quoted along with machine	
		1.6.9	Applications up to nozzle height of 100mm should be supported	
1.7	Gripper unit and Fixture	1.7.1	Should be capable of handling customers existing fixture in Gripper unit	
		1.7.2	Should be capable of designing new fixture for the new boards	
		1.7.3	Top & Bottom pre-heat should be accomadated in the gripper unit for proper board preheat before soldering	
1.8	General requirement	1.8.1	Easy Access to all parts of the machine required	
		1.8.2	Simple programming using teach mode or optional offline software is needed	
		1.8.3	Should be easy to operate	
		1.8.4	Multiple mini waves atleast two to be quoted along with standard machine	
		1.8.5	Independent control required for both mini waves	
		1.8.6	Closed loop control required for mini waves	
		1.8.7	Minimum two mini waves along with single traditional wave module to be quoted	
		1.8.8	Endoscopic camera should be provided as option for assisting fine tuning of selective soldering process during proto	
		1.8.9	Inline Pin chain conveyor system required for handling Bare PCB's or Fixtures with maximum load weight up to 4kg's	
		1.8.10	Simple and user friendly software must be required	
		1.8.11	Creating programs should support all types of input gerber files	
		1.8.12	Soldering control required for paramaters like Z height, Dwell time, Dip Speed, Pull away speed etc..	
		1.8.13	Color code fine tuning assist should be required	
		1.8.14	Automated program assist should be required	
		1.8.15	Automated step and repeat must be supported	
		1.8.16	Automated optimization routing to reduce cycle time is required	

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1.9	Air supply requirement		5 - 6 bar	
2.0	Air exhaust requirement	2.0.1	200m/hr for fluxing	
		2.0.2	600m/hr for soldering unit	
		2.0.2	Control signal voltage should be integrated in PLC for exhaust	
2.1	Power requirements	2.1.1	Connection type 32Amps	
		2.1.1	Voltage 400VAC 3 Phase 50Hz	
B	Optional			
3.1	Automatic wire Solder Feeder to be quoted as Option			
3.2	Optional Nitrogen environment should be quoted as Option to chose			
3.3	Required to read 1D/2D barcode on PCB			

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4	QUALIFICATION DOCUMENTS	4.1	Bidders must be the original equipment manufacturers or their authorised agents only.	
		4.2	Only one bid must be submitted either by the manufacturer or their authorised agent.	
		4.3	The authorised agent should submit documentary evidence to that effect along with the bid.	
		4.4	In case multiple bids are submitted by manufacturer or their authorised agents, the bids would be liable for rejection.	
		4.5	The bid must be accompanied by documentary evidence of similar equipment having been supplied to customers in India in the last 3 years along with the performance certificates from the users. In case such equipment has not been supplied to Indian customers, details of customers in other countries to whom such equipment has been supplied, in the last three years, should be provided along with the performance certificates from such users.	
		4.6	The manufacturer should have their authorised service agent in India. Service engineer training & experience certificate form OEM should also be enclosed.	
5	BID DOCUMENTS	5.1	The bid must be submitted in two parts.	
		5.2	The first part, marked "Techno-commercial" should contain all technical, commercial and qualification documents except the price. The commercial terms and conditions should also be part of the Techno-commercial bid.	
		5.3	The second part, marked "Price Bid" should contain the unit rate and total price. No other information should be included in the price bid.	
		5.4	Price should not be mentioned anywhere in the techno-commercial bid. Failure to comply with this requirement would render the bid liable for rejection.	

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5	CONTINUED.. BID DOCUMENTS	5.5	Clause-wise compliance statement of technical specifications	
		5.6	Clause-wise compliance of commercial conditions	
		5.7	Deviations from technical specifications and commercial conditions, if any	
		5.8	Technical data and catalogues	
		5.9	a) List of international standards to which the equipment conforms along with documentary evidence. b) Machine should comply with CE / UL certification	
		5.10	List of customers to whom similar equipment has been supplied in the last 3 years	
		5.11	Performance certificates from the customers	
		5.12	The list of tools, accessories, calibration and preventive maintenance kits that will be supplied along with the equipment.	
		5.13	Copy of the price bid with the values replaced with "xxx"	
6	SPARE PARTS	6.1	List of basic spare parts and consumables kit required for operation and maintenance of the equipment up to the warranty period	
		6.2	List of spares recommended for 5 years operation after the warranty period which should include all parts prone to wear-and-tear, all printed circuit boards and consumables.	
		6.3	Confirmation of availability of spares and service for a period of 10 years beyond the warranty period.	
7	GENERAL TERMS	7.1	Prices should be quoted CIF Hyderabad, India.	
		7.2	The bids should be valid for a period of 120 days from the due date of the tender.	
		7.3	The equipment quoted should be brand new.	
		7.4	The price bids of only technically qualified bidders would be opened and considered for placement of order.	

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8	INSTALLATION AND COMMISSIONING	8.1	Special requirements for installation and commissioning including power, civil works, clean room, air-conditioning and ventilation.
		8.2	Installation and commissioning of the equipment at ECIL should be carried out by the supplier at no additional cost . The supplier should demonstrate the full capabilities of the equipment during commissioning.
		8.3	The supplier's representative should visit the site and indicate the works to be carried out to make the site ready for the installation and commissioning of the equipment
		8.4	In case of delay in supply and/or installation and commissioning of the equipment beyond the agreed schedule, penalty would be levied at 0.5% of the equipment value per week or part thereof, subject to a maximum of 10% of the order value.
9	TRANING		One week training on operation, maintenance, programming and basic troubleshooting to be provided to ECIL engineers at the time of commissioning.
10	MANUALS	10.1	Two sets (each set comprising of one hard copy and one soft copy) of operation, programming and maintenance to be supplied with machine
		10.2	Machine drawings should contain Mechanical assembly details, Electrical drawings (including schematic & wire drawings) and Spare part list (including mechanical & electrical parts) for the model offered.
11	DELIVERY		The equipment should be delivered preferably within 12 weeks of the release of order.
12	COC		Certificate of conformance along with test results should be furnished along with invitation for pre-despatch inspection.

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13	INSPECTION	13.1	List of tests that would be conducted during pre-despatch inspection.	
		13.2	The travel and living expenses for pre-despatch inspection would be borne by ECIL.	
		13.3	The equipment should be despatched only after satisfactory completion of pre-despatch inspection at manufacturer’s site for the full range of operations and to be witnessed by ECIL	
14	SOFTWARE UPGRADATION	All software updates should be sent at free of cost		
15	PAYMENT TERMS	Payment terms would be as follows: a. 80% of the supply value through irrevocable letter of credit with a usance of 60 days. b. Balance 20% upon acceptance of the equipment post installation and commissioning at ECIL. However, all bank charges inside India will be borne by ECIL and outside India to your account only.		
16	BANK GUARANTEE	The successful bidder should submit a performance bank guarantee equivalent to 10% of the order value before the final 20% payment is released. The performance bank guarantee should be valid till the end of the warranty period and should have a claim period of 1 month		
17	WARRANTY	18.1	Availability of warranty and post-warranty support	
		18.2	Confirmation of availability of AMC for a period of 5 years post-warranty, the prices for which should be included in the price bid.	
		18.3	The equipment warranty should be for a period of 42 months from the date of supply or 3 years from the date of commissioning whichever is earlier. The warranty should be comprehensive on-site warranty inclusive of all charges towards spares, labour, freight, insurance, taxes and levies. Preventive maintenance should be carried out as per schedule during the warranty period. The preventive maintenance schedule should be detailed in the techno-commercial bid.	

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18	SERVICE SUPPORT	18.1	Breakdown calls should be attended to and the equipment restored to running condition within 48 hours of intimation during warranty and AMC. Any delay would result in a penalty of 0.1% of the equipment value per day or part thereof.	
		18.2	Details of their authorised service agent who should be contacted for service requirements.	
19	LIQUIDATED DAMAGES	In the event of any delay in supply beyond the stipulated delivery schedule, Liquidated damages will be recovered at the rate 0.5% per week of delay subject to maximum of 10% of the value of the order.		
20	RISK PURCHASE	In case of failure to deliver the goods within the delivery date stipulated in the purchase order, unless prior extension of delivery period is obtained, ECIL will be at liberty to obtain such items as necessary from other sources and recover the additional costs incurred from the supplier		
21	ORDER CANCELLATION	21.1	ECIL will be at liberty to cancel the order if the equipment is not delivered within the delivery date specified in the order including any extensions granted.	
		21.2	ECIL has the right to close the tender without placing the order without assigning any reasons.	

1. Please provide point-wise compliance to all our above terms and conditions/notes.
2. All further clarifications regarding this tender and all communications including e-mails and letters and minutes of meeting shall be treated as part of the tender.
3. For any clarifications, please contact Shri. K.P Reddy, Senior Manager, EMSD, and ECIL, e-mail: puremsd@ecil.co.in , Phone: 9949079313/040-27260071.