



प्रो. वी. जगदीश कुमार  
Prof. V. Jagadeesh Kumar  
अध्यक्ष/Head

दिनांक/Dated: 22/02/2021

**INVITING QUOTATIONS for SMT in line Automated Optical Inspection (AOI)**

Ref.No. 

CEC	20-21	005	VJK	AOI	CSR
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**DUE DATE : 12.03.2021**

1. Quotations are invited in duplicate for the **SMT in line Automated Optical Inspection (AOI)** in Two Bid System (specification attached in **Annexure - 1**).
2. The Quotations are to be in **Two bid system** as: Technical bid and Commercial bid. Two parts of the offer are to be clearly marked on the envelopes. The two parts of the offer in a separate envelop must enclosed in the one bigger envelop duly sealed and superscribed with reference number and due date and, should be addressed to the undersigned so as to reach him on or before the due date stipulated above. A blank price quote (identical to the Commercial bid with numbers removed) should be enclosed with the Technical Part.
3. The Quotations should be valid for **one hundred and twenty days (120 days)** from the due date and the period of delivery required should also be clearly indicated.
4. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for, should be submitted free of charges, and collected back at the supplier's expenses.

**5. VENDOR ELIGIBILITY CRITERIA**

- (1) The bidder should submit OEM authorization for all Make/brand of item for which they are submitting the bid.
  - (2) The bidder should have a least 5 years experiences in Govt. Institutions/any of Central PSU's / any of central Government/ autonomous bodies/reputed firms in executing the works.
  - (3) The suppliers should have already supplied and installed a minimum of 3 numbers of similar configuration machines of same make in India during the last five years
  - (4) Supplier shall be able to provide service / spare support / AMC for minimum of 07 years from date of Installation and Commissioning.
  - (5) Copies of the documents listed below should be submitted as a proof for the above work experience:
    - a) Purchase Order
    - b) Work Completion Certificates
    - c) User Performance Certificate from customer end
  - (6) The bidder shall have an annual financial turnover of not less than Rs. 2 Crores (Rupees Two Crores only) during the last three financial years i.e. 2017-18, 2018-19 and 2019-2020 (each year).
  - (7) Only 'Class-I local suppliers' and 'Class-II local suppliers', as defined under DIPP, MoCI Order No. P-45021/2/2017-PP (BE II) dated 16<sup>th</sup> September 2020 and other subsequent orders issued therein, shall be eligible to bid in this tender. Declaration for Class-I and Class-II local suppliers should be submitted in the prescribed proforma format as per **Annexure-2A & Annexure -2B**.
  - (8) Bidder should confirm their acceptance that they comply with the provisions with report to "Guidelines for eligibility of a bidder from a country which shares a land border with India as detailed at **Annexure-3**. Bidder should also submit the required certificate as mentioned.
6. The prices quoted must be nett. per unit as per the technical specification mentioned in **Annexure-1** and must include all Packing & Forwarding and other charges, etc.. **The prices quoted by the Tenderer should be inclusive of GST and other statutory levies** (and should be clearly stated to be so) which will be paid by the Purchaser/if legally **leviable** at the rate ruling on the date of supply as specified in the Acceptance of Tender. **The percentage of tax etc. included in the price should be indicated in clear terms. If the inclusive price is not given, we will treat your offered rate as inclusive rate and comparison be made with others.** If at the time of comparison



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of your offer without taxes etc. is happen to be lowest, you are bound to supply as per the offered rate, i.e. without taxes etc.

7. **Concessional GST** : IIT Madras is eligible for concessional GST @ 5% on IGST and @ 2.5% for CGST and SGST as per Notification No. 45/2017 – Central Tax (Rate) Dated 14th November 2017 & Notification No.47/2017 – Integrated Tax (Rate) Dated 14th November 2017, for procurement of Equipments and Consumables for research purpose. At the time of Invoicing, please state the concessional GST accordingly. During the supply of item, a certificate to this effect will be issued to your firm.
8. **Concessional Customs Duty**: IIT Madras is eligible for Concessional Customs Duty in accordance with the Notification No. 51/96 Customs dated 23.07.1996 and DSIR Registration No. TU/V/RG-CDE (21)/2016, dated 31.10.2018.Hence, you are requested to quote accordingly for this tender. Necessary Essentiality Certificate will be issued in this regard. The customs duty will be payable / reimbursable by us at the time of clearance on production of necessary proof.
9. The rate quoted for indigenous purchase should be upto IIT Madras (cost should include item cost, packing, freight and delivery charges) and for imports, the quote should be for CIP Chennai.
10. **Discount percentage** for bulk purchases should be mentioned specifically in the technical bid. Any purchase of 5 units and above will be considered as bulk purchase.
11. **No Advance Payment will be made for Indigenous purchase.** 100% Payment against Delivery on satisfactory installation for local purchase can be agreed to. For Imports normally payment will be made by Letter of Credit only (**Terms 90 % Payment will be released against dispatch of shipping documents and 10 % will be released after satisfactory installation**). Sometimes The Rule 159 GFR may be allowed (i.e.)30 % Advance Payment against B.G. (Bank Guarantee) and 70 % Payment after supply (All the B.G. Charges will be borne by the supplier only). **Demurrage charges (if any) will be borne by the supplier & it will be deducted from the balance 10%.** Initial opening of Letter of Credit charges will be borne by us. If any amendment is requested for, the charges for the amendment will be borne by the supplier only. Hence, care should be taken in all respects before opening of Letter of Credit.
12. **Evaluation of Bid and Award of Contract:**
  - (1) **Bid I - Technical Bid** : The online technical bid will be opened first and evaluated the *Vendor Eligibility Criteria and technical bid* as per **Annexure – 1**. The price bid of the vendor who have complied all points as per the technical bid alone will be considered for price bid opening.
  - (2) **Bid II - Price Bid**: The tender will be awarded to the overall L1 bidder.
13. Goods should be supplied carriage paid and insured.
14. Goods shall not be supplied without an official supply order.
15. **Payment**: Every attempt will be made to make payment within 30 days from the date of receipt of bill/acceptance of goods, whichever is later.

Yours faithfully,

**Prof. V. Jagadeesh Kumar**  
Head, Central Electronics Centre



**Technical Specification for SMT in line Automated Optical Inspection (AOI) Qty – 1 No**

SNo	Description	Specification
1	Technology	3D reconstruction
2	PCB size	50mm x 50 mm to 400x 400mm (L & W)
3	PCB Thickness	0.4 mm to 4 mm
4	PCB weight	$\geq 2kg$
5	Top Side Clearance	$\geq 25$ mm
6	Bottom Side Clearance	$\geq 25$ mm
7	Inspection required	3D Inspection: Missing, Offset, Billboarding, Tombstone, Coplanarity, Solder Joint (insufficient, excessive), Lifted Leads, Bridging, "No-Pops" Polarity
8	Components Type Inspected	Standard SMT (chips, J-lead, gull-wing, BGA, etc.), through-hole, odd-form, clips, connectors and header pins
9	Minimum Component Inspection size	01005 with 10 micron resolution
10	Camera	$\geq 8M$ Pixel Camera
11	Camera Resolution	$\leq 10\mu m$
12	Fine Pitch Inspection Size	0.20mm
13	Maximum Height Measurement Range	$\geq 25mm$
14	Height Accuracy	$\leq \pm 50\mu m$
15	Transport height	900mm $\pm$ 20 mm (SMEMA Standard)
16	Conveyor width adjustment	Automatic
17	PCB Flow Direction	Left to Right
18	Offline Programming	Should be Available
19	Machine Control	PC Control
20	Communication and Interface	As per SMEMA Standard.
21	Inspection machine type	Inline – Automatic
22	Light Source	Color highlight illumination consisting of red, green and blue LEDs as well as projectors that project striped lighting
23	Power supply	AC 230 V $\pm$ 10% (Single Phase), 50 Hz



**SELF-CERTIFICATION FORMAT FOR CLASS-I LOCAL SUPPLIER**

**Tender No. CEC/2021/005 /VJK/AOI/CSR**

**Format for Affidavit of Self certification regarding Minimum Local Content in line with PPP-MII order, 2017 if applicable, to be provided on a non-judicial stamp paper of Rs. 100/-**

Date: \_\_\_\_\_

I / We \_\_\_\_\_ S/o, D/o, W/o, \_\_\_\_\_ Resident  
of \_\_\_\_\_ hereby solemnly affirm and declare as under:

That I/we will agree to abide by the terms and conditions of the Public Procurement (Preference to Make in India) Order, 2017 (hereinafter PPP-MII order) of Government of India issued vide Notification No: P-45021/2/2017 -BE-II dated 15/06/2017, its revision dated 28/05/2018 and any subsequent modifications/Amendments, if any and

That the information furnished hereinafter is correct to the best of my knowledge and belief and I/we undertake to produce relevant records before the procuring entity/IIT Madras or any other Government authority for the purpose of assessing the local content of goods/services/works supplied by me for ..... (Enter the name of the Equipment/Item for Project).

That the local content for all inputs which constitute the said goods/services/works has been verified by me and I am responsible for the correctness of the claims made therein.

**I/We .....[name of manufacturer]hereby confirm in respect of quoted item(s) that Local Content is equal to or more than 50% and come under 'Class-I Local Supplier' Category. As being 'Class-I Local Supplier', we are eligible for Purchase Preference under 'Make in India' Policy videGoI Order no. P-45021/2/2017-PP (B.E.-II) dated 15.06.2017 (subsequently revised vide orders dated 28.05.2018, 29.05.2019and 04.06.2020)**

That the value addition for the purpose of meeting the 'Minimum Local Content 'has been made by me at ..... (Enter the details of the location(s) at which value addition is made).

That in the event of the local content of the goods/services/works mentioned herein is found to be incorrect and not meeting the prescribed Minimum Local Content criteria, based on the assessment of procuring agency (ies)/IIT Madras/Government Authorities for the purpose of assessing the local content, action shall be taken against me in line with the PPP-MII order and provisions of the Integrity pact/ Bidding Documents.

I/We agree to maintain the following information in the Company's record for a period of 8 years and shall make this available for verification to any statutory authority.

- i. Name and details of the Local Supplier (Registered Office, Manufacturing unit location, nature of legal entity)
- ii. Date on which this certificate is issued
- iii. Goods/services/works for which the certificate is produced
- iv. Procuring entity to whom the certificate is furnished
- v. Percentage of local content claimed and whether it meets the Minimum Local Content prescribed
- vi. Name and contact details of the unit of the Local Supplier (s)
- vii. Sale Price of the product
- viii. Ex-Factory Price of the product
- ix. Freight, insurance and handling
- x. Total Bill of Material
- xi. List and total cost value of input used to manufacture the Goods/to provide services/in construction of works
- xii. List and total cost of input which are domestically sourced. Value addition certificates from suppliers, if the input is not in-house to be attached
- xiii. List and cost of inputs which are imported, directly or indirectly

For and on behalf of..... (Name of firm/entity)

**Authorized signatory (To be duly authorized by the Board of Directors)**

<Insert Name, Designation and Contact No.>



**SELF-CERTIFICATION FORMAT FOR CLASS-II LOCAL SUPPLIER**  
**Tender No. CEC/2021/005 /VJK/AOI/CSR**

Format for Affidavit of Self certification regarding Minimum Local Content in line with PPP-MII order, 2017 if applicable, to be provided on a non-judicial stamp paper of Rs. 100/-

Date: \_\_\_\_\_

I / We \_\_\_\_\_ S/o, D/o, W/o, \_\_\_\_\_ Resident of \_\_\_\_\_ hereby solemnly affirm and declare as under:

That I/we will agree to abide by the terms and conditions of the Public Procurement (Preference to Make in India) Order, 2017 (hereinafter PPP-MII order) of Government of India issued vide Notification No: P-45021/2/2017 -BE-II dated 15/06/2017, its revision dated 28/05/2018 and any subsequent modifications/Amendments, if any and

That the information furnished hereinafter is correct to the best of my knowledge and belief and I/we undertake to produce relevant records before the procuring entity/IIT Madras or any other Government authority for the purpose of assessing the local content of goods/services/works supplied by me for ..... (Enter the name of the Equipment/Item for Project).

That the local content for all inputs which constitute the said goods/services/works has been verified by me and I/we am/are responsible for the correctness of the claims made therein.

**I/We ..... (name of manufacturer) hereby confirm in respect of quoted item(s) that Local Content is more than 20% but less than 50% and come under 'Class-II Local Supplier' Category.**

That the value addition for the purpose of meeting the 'Minimum Local Content' has been made by me at ..... (Enter the details of the location(s) at which value addition is made).

That in the event of the local content of the goods/services/works mentioned herein is found to be incorrect and not meeting the prescribed Minimum Local Content criteria, based on the assessment of procuring agency (ies)/IIT Madras/Government Authorities for the purpose of assessing the local content, action shall be taken against me in line with the PPP-MII order and provisions of the Integrity pact/ Bidding Documents.

I/We agree to maintain the following information in the Company's record for a period of 8 years and shall make this available for verification to any statutory authority.

- i. Name and details of the Local Supplier (Registered Office, Manufacturing unit location, nature of legal entity)
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Annexure - 3

(To be given on the letter head of the bidder)

No. \_\_\_\_\_

Dated: \_\_\_\_\_

**CERTIFICATE**

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and hereby certify that this bidder is not from such a country.

OR (*whichever is applicable*)

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and hereby certify that this bidder is from \_\_\_\_\_ (Name of Country) and has been registered with the Competent Authority. I also certify that this bidder fulfils all the requirements in this regard and is eligible to be considered.

*(Copy/ evidence of valid registration by the Competent Authority is to be attached)*

Place:

Date:

Signature of the Tenderer  
Name & Address of the  
Tenderer with Office Stamp