



भारत प्रतिभूति मुद्रणालय/INDIA SECURITY PRESS

नासिक - 422101(महाराष्ट्र)/NASHIK - 422101 (MAHARASHTRA)

सिक्वोरिटी प्रिंटिंग एंड मिंगिंग कॉर्पोरेशन ऑफ इंडिया लिमिटेड की इकाई

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मिनिरत्न श्रेणी-I, सीपीएसई / Miniratna Category - I, CPSE



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Date: 01/07/2026

1. Name of the organization: India Security Press, Nashik (a unit of Security Printing and Minting Corporation of India Limited)
2. Type of the organization: Wholly owned by Government of India.
3. EOI Reference No: 13/EOI/2026 dated 01.07.2026.
4. EOI Title: Expression of Interest for **“Procurement of State-of-the-Art Inline Vision Inspection System with Integrated Error Marking Capability to be Installed on the Vinsak USAR-550 Machine”**.
5. Category: Non-Security
6. Sub-category: Capital Item.
7. Date of Announcement: 01.07.2026.
8. Pre-bid conference: The pre-bid conference will be conducted on 14.07.2026 at 11.00 Hrs. IST. The prospective bidders interested to Submit Expression of Interest are requested to attend the pre-bid conference for clarifications on technical issues at Conference Hall, India Security Press, Nashik Road. The queries of pre-bid conference, if any, shall reach to CGM, ISP Nashik on or before 11.07.2026 via email on purchase.isp@spmcil.com; priyanka.sharma@spmcil.com; Preetam.Chaki@spmcil.com; Satyanarayan.patro@spmcil.com; Arindam.Biswas@spmcil.com;
9. Last date for submission: 14:30 Hrs. (IST) on 31.07.2026.
10. The Chief General Manager, India Security Press, Nashik invites Expression of Interest for the **“Procurement of State-of-the-Art Inline Vision Inspection System with Integrated Error Marking Capability to be Installed on the Vinsak USAR-550 Machine.”**

11. SCOPE OF EXPRESSION OF INTEREST :

A. OBJECTIVE : To install and integrate a robust, state of the art Inline Vision Inspection, Data Verification and Error marking System with the Vinsak USAR-550 machine. The system will deliver 100% real-time inspection of Excise Adhesive Labels (EAL), ensuring variable data integrity (number, text, 2D code, base colour), prevention of duplication, detection of defects, and automatic error marking.

B. SCOPE OF WORK: The scope includes-

- Supply of complete hardware and software solution.
- Integration with the existing Vinsak USAR-550 printing line.
- Installation, testing, and commissioning.
- Operator training and documentation.
- Post-installation support and warranty.

C. TECHNICAL REQUIREMENTS:

a) Hardware Specifications :

1. Camera System: High-resolution line-scan or area-scan camera with proper illumination for full web coverage.
2. Print Width: 510 mm or higher (expandable to machine web width).
3. Synchronization: High-precision synchronisation with dedicated hardware for accurate web speed tracking and image capture synchronization up to 120 meters per minute or higher.
4. Error Marking Device: Inline inkjet marker synchronized with the inspection system for real-time marking of faulty labels.
5. Industrial PC: Rugged, high-performance IPC with SSD storage, suitable for 24/7 industrial environment.
6. Mounting & Integration: Custom mounting brackets compatible with USAR-550 machine geometry, with minimal footprint and easy access for maintenance.

b) Inspection & Label Detection Capabilities :

1. Variable Data Inspection:
 - Reading and verification of 1D/2D barcodes (min. 5×5 mm, max. 15×15 mm).
 - Alphanumeric text (6 pt to 18 pt), including telescopic/style fonts and special characters.
 - Numbers (6 pt to 18 pt), including telescopic/style fonts.
2. Defect Detection:
 - Missing labels.
 - Base colour verification and consistency.
 - Unprinted or partially printed labels 1D/2D code/text/number/alphanumeric.
 - Print quality defects wrt 1D/2D code/text/number/alphanumeric.
 - (blur, smudge, distortion, incomplete print).
3. Master Template Management: Easy upload and management of job-specific master templates (including colour-specific references).
4. Inspection Speed: Full inspection at production speeds up to 120 m/min or higher with no compromise on accuracy.

c) Data Validation & Verification :

1. Duplicate Prevention:
 - Automatic comparison of content of top 2 rows of current print job with historical database of previously printed files.
 - Operator alert + mandatory user validation for any suspected duplication.
 2. Real-time Validation:
 - Compare printed data (barcode, number, text) against master database.
 - Flag faults for: missing labels, mismatched data, improper printing, or non-scannable codes.
 3. Data Logging: All printed data recorded in structured Excel/SQL format with timestamp, job details, and operator information.
- d) Report Generation & Analytics
1. Fault Report (Excel): Detailed excel file with Row No., Column No., File No., Fault Reason, and image snapshot of defective label including the date and time detail in same format as master file.
 2. Production Log Report: Job summary including file name, first & last row data with start and end time, print date/time, total labels, total faulty labels, and efficiency metrics.
 3. Dashboard: Real-time production dashboard showing inspection statistics, reject rate, and trend analysis.
- e) Additional Technical Features
- Accuracy & Performance: Configurable thresholds with low false reject rate.
 - User Interface: Intuitive touchscreen GUI with multi-level user access (operator, supervisor, administrator).
 - Data Security & Traceability: Audit trail, role-based access control, Database Management: Local + backup storage with search/retrieval functionality for historical jobs.
 - Alarm & Rejection Logic: Real-time audio-visual alarms and automatic stop/signal to press on critical faults.
 - Calibration & Maintenance: Easy self-calibration tools and remote diagnostic capability.
 - Power backup: UPS as per machine design and load factor.
- f) Communication & Error Marking System
1. Real-time bidirectional communication between Inspection System and Error Marking System.
 2. Marking of faulty/missing labels with "INVALID" or any custom message.
 3. Tally Reconciliation: Automatic verification that the number of faulty labels detected equals the number of labels marked. Any discrepancy shall trigger an alarm.
- D. OTHER REQUIREMENTS
- The interested bidder should give complete technical literature & detailed drawing of machine offered.
 - The bidder has to give detailed presentation of the machine and technology offered by them either through VC or in person at ISP premises.
 - On discretion of ISP, bidder must allow ISP officials to visit manufacturing site/customer site.

- The bidder firm may also submit financial standings, experience, past performance, capacity & manufacturing capability of their firm.
- Warranty: Minimum 12 months comprehensive onsite warranty and remote services
- Compliance: The system should comply with relevant international standards for machine vision and print inspection (e.g., ISO barcode grading where applicable).

12. Pre-Qualification Criteria:

- The bidders should give a declaration that they have not been blacklisted or debarred for dealing by Government of India or any Government / PSU/ Reputed organisation in the past.
 - The documents in support of Expression of Interest need to be submitted duly signed by authorized representative of the company.
 - The bidder (manufacturer or principal of authorized representative-hereinafter referred simply as 'The Bider') should have manufactured and supplied '**State-of-the-Art Inline Vision Inspection System with Integrated Error Marking Capability**'.
 - The interested bidders shall also submit copies of Audited financial statement for the last Five (05) years ending on 31.03.2025.
 - The firms should provide the following details:
 - i. Brief description of the company.
 - ii. Local/Indian Content as per Make in India Policy.
 - iii. Previous Experience & Annual Capacity of Production.
 - iv. Detailed Technical Specifications.
13. The bidder should also confirm specifically that:
- (a) Applicant is competent and legally authorized to submit and/ or to enter into legally binding contract.
 - (b) Applicant will absolve the purchaser against any infringement of patent rights & other contract provisions.
14. The duly filled details along with supporting documents & budgetary offer(s) with respect to **State-of-the-Art Inline Vision Inspection System with Integrated Error Marking Capability to be Installed on the Vinsak USAR-550 Machine**.
15. The above may be submitted (in a sealed/closed envelop mentioning the name, no. & date of this EoI in Person or through Courier/registered post/speed post so as to reach the following address on or before the prescribed date & time as mentioned above:
The Chief General Manager,
India Security Press,
Nashik-422 101
Phone No 0253 240 2219, 0253 240 2321/2319
Fax No 0253 2462718; Email: purchase.isp@spmcil.com

16. Last date and time for receipt of Expression of Interest: 31.07.2026 at 14:30 Hrs. (IST).
17. Date and time of opening of Expression of Interest at 15:00 Hrs. (IST) on 31.07.2026.
Place of opening of Expression of Interest
India Security Press,
Nashik Road 422 101
Maharashtra, India.
18. Delay due to postal/Courier etc. will not be entertained. Expression of Interest received after the due date and time will be rejected.

Jt. General Manager (TO) I/c Purchase
For Chief General Manager
India Security Press,
Nashik Road-422101