

## **INDIA SECURITY PRESS**

(A Unit of Security Printing and Minting Corporation of India Limited)  
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1. Name of the organization: India Security Press (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: EOI/ Automatic & Integrated e-Passport Booklet Inspection Machine/2024 dated 13/09/2024.
4. EOI Title: Expression of Interest (Eoi) for the procurement of State-of-the-art fully Automatic & Integrated e-Passport Booklet Inspection Machine.
5. Category: Non-Security
6. Sub-category: Capital Item
7. Date of Announcement: 13/09/2024
8. Last date for submission: 14:30 Hrs (IST) on 15/10/2024.
9. The Chief General Manager, India Security Press, Nashik invites Expression of Interest from experienced and reputed manufacturers for Automatic & Integrated e-Passport Booklet Inspection Machine.

**TECHNICAL REQUIREMENTS FOR procurement of State-of-the-art fully Automatic & Integrated e-Passport Booklet Inspection Machine.**

**PRODUCT CONFIGURATION OF e-PASSPORT BOOKLET:**

Input Booklet	: 125 mm x 88 mm ± 0.3 mm
Output Booklet	: 125 mm x 88 mm ± 0.3 mm
Thickness of the folded booklet	: 2 to 7 mm (4 pages to 64 pages)
Corner Rounding Radius	: 3.18 mm ± 0.02 mm
Minimum final output	: 60 booklets per minute

**GENERAL FUNCTIONAL REQUIREMENT & PROCESS FLOW:**

- i. The Machine should be designed ergo dynamically; smooth & sturdy Fully automatic & non-stop Feeder shall be provided to handle Blank Numbered e-Passport Booklet consisting RFID/UID Chip & Antenna.
- ii. The machine should have Golden Color stamping/embossing quality inspection & camera monitoring.
- iii. The machine should have teaching & storing provision of standards templates of different kind of Travel Documents. The Machine shall have a TEACH-IN-MODE for selection of Templates of Golden color stamping and template storage facility for at-least 1000 nos. of templates.
- iv. The machine should be able to inspect the casing (cover of passport booklet) of passport booklet and should reject the booklet having scratched or torn casing/booklet or as the case may be.
- v. The machine should be able to detect following defects and reject the booklets
  - a. Booklet cutting is not sharp
  - b. Black spots on any part of booklet

- c. Alignment of micro lines on visa pages is not proper.
- d. Creasing on Inner Cover, Data & Visa page etc
- vi. The system should be capable of thread/ seam/sewing quality inspection.
- vii. The machine should have provision of smooth, separate and trouble-free Cover/Page/ Polycarbonate/Film/Sheet opening stations.
- viii. The booklet transport & holding mechanism shall be designed in such way that the booklet shall not be wedged /damaged during the process.
- ix. Page scanning and monitoring provision through Camera/Vision Sensor for quality inspection & verification of printing quality, orientation of pages & collation sequencing of the Inner Cover, HAUV film, Data & Visa Pages.
- x. The machine should have provision for quality inspection of HAUV film, thin film, and for Polycarbonate, as the case may be. The quality inspection machine should be able to detect and reject following defects:
  - a. Scratch and torn HAUV film, thin film, and Polycarbonate.
  - b. Wrong collation of HAUV film, thin film, and Polycarbonate.
  - c. More or less than two HAUV film.
  - d. Gothic numbering on HAUV film, thin film.
  - e. Absence of HAUV, thin film, and Polycarbonate.
- xi. The machine should be capable of rejecting wrong stitched passport booklets i.e. half stitched booklets, booklets having open thread etc.
- xii. The machine should be capable to check UV (different wavelength) printing quality of each Cover/Page/ Polycarbonate/Film/Sheet etc.
- xiii. The machine shall have provision of quality inspection & verification Passport Numbering & rejecting passport booklets which have broken printing in numbering, tilted orientation of numbering and wrong position of gothic numbering etc or the case may be.
- xiv. The machine shall have provision of through hole quality inspection & verification of Laser Perforation of at least Back Cover and inner most perforated page i.e. third page except Top Cover, Data page & Film (after and before data page)/ Polycarbonate sheet. The machine should be able to reject the passport booklets which have missing laser perforation and laser perforation is not readable on page no.3 and the case may be.
- xv. The machine shall have provision of quality inspection & verification of Barcode label Numbering and ensuring correct mapping of Gothic, Laser and Barcode Number of each and every passport Booklet. The machine should be able to reject the passport booklets which have mismatch in any one of gothic numbering, laser perforation and barcode on the backside of passport.
- xvi. There should be provision of Checking, Verification, and mapping of RFID/UID-Chip at various locations through highest quality RFID/UID Chip readers.
- xvii. The Machine shall be designed to monitor, read & store the exact parameter as well as verify & ensure that the exact mapping Gothic Number, Laser Perforation Number, Barcode Number and the respective UID & Supplier Code in the booklet. Further the number on the Passport shall be in the form of Bar code and Alpha-Numerical Number and UID shall be in HEX Code
- xviii. The entire machine should have end-to-end RFID/UID-Chip Track& Trace System to track the RFID/UID-Chip of the e-Passport booklets at various stages during the process and to maintain data in the Central Database (CDB). The basic essence of the Track and Trace server is to keep track, trace, accounting of each Inlay and e-Passports processed through the entire machine and available throughout the life time and shall have required storage facility with suitable RAID storage to record data for at least 150 million e-Passports. The Entire Machine shall have Centralized Database Server connected suitably with all the stations of the machine for the Real

- Time Track and trace and accounting of each and every e-Passport being processed through the the machine.
- xix. All software and hardware of the 'Track & Trace System with Central Database (CDB)' must be of latest version. The above machine shall have facility of printer, key board/mouse/Monitor, SAP/ SAP-HANA/ Separate Server integration facility for migration of data as per requirement. The machine shall have authentication based separate Quality Checking workstation for the e-Passports during quality examination. To have real time processing, the processing time of the UID Reader shall be fast enough and shall not affect the full rated speed of the machine.
  - xx. The suitable nos. of Reject Gates with Reject boxes/trays shall be provided at suitable places before the delivery of the booklet. In those there should be separate reject gate for especially RFID/UID bad booklets.
  - xxi. There shall be provision to upload all machines information data on MIS like SAP-HANA / Separate Server system being used in ISP.
  - xxii. A delivery System shall be designed in preferably such a way that the Passport booklets are stacked in sets of 5/10/20 booklets as selectable, or as the case may be, brought in suitable arrangements for easy handling by the operator.
  - xxiii. A Conveyor System of the delivery shall be capable to stack at least 200 booklets in vertical orientation on it. A set of 5/10/20 booklets, or as the case may be, shall be collected by the operator from the delivery stack.
  - xxiv. The machine shall be programmed in such a way that only good booklets shall be delivered in the delivery and the booklet rejected by various monitoring systems shall be rejected through the relevant Reject Gates provided before delivery.
  - xxv. The entire machine shall be provided with Industrial grade Control Consoles / HMIs, conforming to international standards with latest OS and User friendly.
  - xxvi. The Application Software shall be user friendly and open-ended. The Machine shall be equipped with Graphical User Interface (GUI) combined with touch screen menu driven self-explaining operation interface with audible & visible warning and error signals & messages on the Control consoles/HMIs.
  - xxvii. Service Field Master' (Service Lap Top) complete with integration software and back up of all the software & all license copies shall be supplied along with the machine for fault diagnostic, repair/modification purpose etc.
  - xxviii. Remote Access facility shall be provided for remote services as well as software updates from the OEM, as & when required by the user. In case if 27(xxvii) is abrogated, the remote access service and maintenance guidance shall be free-of-cost at least for the period of 10 years, after acceptance of the machine.
  - xxix. All the Control Consoles/ Computers/ Servers/Mini PCs/ Controllers of the Machine shall be provided at least with RAID Level -1 Disk System.
  - xxx. All the Control Consoles/ Computers/ Servers/Mini PCs/ Controllers shall be equipped with suitable capacity of UPS with software interface for defined start-up and shutdown process of the system.
  - xxxi. The Machine shall have data import/export facility of Inlay data in EXEL format etc. The machine shall have provision generate customize reports, the format/ templates/file type shall be given to the successful bidder.
  - xxxii. The Machines & Machines shall be suitable to operate 3 Phase, 415 V +/-6%, 50Hz, TPN power supply.
  - xxxiii. Provision for easy and quick changeover facility on varied products (4 pages to 64 pages booklet).
  - xxxiv. 3(Three) ISP/SPMCIL officials will carry out pre-dispatch inspection of the entire machine for a period of 5 (Five) working days excluding journey period / holidays, at the worksite of the successful bidder at Purchaser's cost. The purchaser will bear the cost of to & fro journey and accommodation.

- xxxv. The firm shall arrange to provide Operational & Maintenance (Electrical, Mechanical & IT) training to at-least 6 (Six) officials of ISP to cover the entire machine for a period of 12 working days excluding journey time / holidays at the worksite of the successful bidder. The Purchaser will bear the cost of to & fro journey and accommodation.
- xxxvi. The firm shall depute their Engineers / Technicians to India Security Press, Nashik for installation and commissioning of the machines for the required period of time at their own cost. The firm has to impart training to Operational & Maintenance personnel of ISP after commissioning for minimum 15 working days at ISP's worksite.
- xxxvii. After successful installation, commissioning and training of the machine and their auxiliary equipment's, the FAT (Final Acceptance Test) will be carried out for a period of 21 working days consisting of 8 hours shift per day, conforming to the machine configurations, rated machine speed, output etc.

#### 11. Pre-Qualification Criteria:

The intending bidders shall submit all technical details, capabilities, and experience for Design, Supply, Installation, Testing and Commissioning of similar type of Automatic & Integrated e-Passport Booklet Inspection Machine.

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 interested bidders should also submit along with Expression of Interest a list of parties to whom they have supplied similar types of "Automatic & Integrated e-Passport Booklet Inspection Machine" with details and performance report from their clients.

The interested bidders shall also submit copies of Audited financial statement for the last five years i.e. 2020-2021, 2021-2022, 2022-23, 2022-23 & 2023-24.

#### 12. 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) The details Supply and Installation of similar type of "Automatic & Integrated e-Passport Booklet Inspection Machine" by them during last five years i.e. 01<sup>st</sup> January 2020 to 31<sup>st</sup> May 2024.

(c) The firm should confirm their annual installed capacity for supply of "Automatic & Integrated e-Passport Booklet Inspection Machine".

(d) Applicant will absolve the purchaser against any infringement of patent rights and other contract provisions.

- 13. The duly filled details along with supporting documents and budgetary offer with respect to supply of "Automatic & Integrated e-Passport Booklet Inspection Machine" should be sent in a sealed envelope superscribing

“Expression of Interest for “Automatic & Integrated e-Passport Booklet Inspection Machine”.

14. The bidder has to give the detailed presentation on their offered product either through VC or in person of ISP Premises.

The same may be submitted in person or through courier/ registered post/ speed post so as to reach the following address on or before the prescribed date and time as under:

The Chief General Manager,  
India Security Press,  
Nashik-422 101  
Phone No 0253 2402219/ 0253 2402435  
Fax No 0253 2462718  
Email: [purchase.isp@spmcil.com](mailto:purchase.isp@spmcil.com)

Last date and time for receipt of Expression of Interest: 15/10/2024 at 14:30 Hrs. (IST).

Date and time of opening of Expression of Interest at 15:00 Hrs. (IST) on 15/10/2024.

Place of opening of Expression of Interest

India Security Press,  
Nashik Road 422 101  
Maharashtra, India

15. Delay due to postal/Courier etc, will not be entertained. Expression of Interest received after the due date and time will be rejected.

Addl. General Manager (M)  
for Chief General Manager  
India Security Press,  
Nashik Road-422101