Invitation of National Expression of Interest

भारत सरकार टकसाल/**INDIA GOVERNMENT MINT**

(सेक्युर्टी प्रिंटिंग अँड मींटिंग कार्पोरेशन ऑफ इंडिया लिमिटेड की इकाई)

(A unit of Security Printing and Minting Corporation of India Limited)

(भारत सरकार की पूर्ण स्वामित्वाधीन)

wholly owned by Government of India

शहीद भगत सिंह मार्ग, फोर्ट, मुंबई - 400001

SBS Marg, Fort, Mumbai – 400001

Tel : 022 22600253/254/215 **Website : www.spmcil.com**

Email : purchase.igmm@spmcil.com

Date of issue : 09.09.2026

1.	Name of the Organization	:	India Government Mint, Mumbai (A unit of Security Printing and Minting Corporation of India Limited)
2.	Type of the Organization	:	Wholly owned by the Government of India
3.	EOI Reference No.	:	XIX-2/092/P&S/2026 dated 09.09.2026
4.	EOI Title	:	Expression of Interest for the indigenous development, design, engineering, manufacture, testing, supply, installation, commissioning, and lifecycle support of **fully automated Secondary Packaging Line for packaging of Ready-Filled and Sealed Primary Coin small Sachet.**
5.	Category	:	Security
6.	Sub-Category	:	Machinery
7.	Date of Announcement	:	**09.09.2026.**
8.	Last date of submission	:	**01.10.2026 at 2.30 pm.**
9.	Broad Description of work	:	Indigenous development, design, engineering, manufacture, testing, supply, installation, commissioning, and lifecycle support of **fully automated Secondary Packaging Line for packaging of Ready-Filled and Sealed Primary Coin small Sachet.**

10. STATEMENT OF REQUIREMENTS (SOR): AS PER EOI DOCUMENT (attached).

11. The interested bidders shall also submit copies of Audit Financial Statement for the last five years - 2020-2021, 2021-2022, 2022-2023, 2023-2024 and 2024-25.

12. The interested bidder should submit the Budgetary Quotation for the work mentioned in EOI.

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 of services of providing services mentioned in the EOI documents during last five years i.e. ending of March 31, 2025.
    c) Applicant will absolve the purchaser against any infringement of patent rights and other contract provisions.

13. Bid Documents (if any): Not applicable.

14. EOI should be submitted to: The Chief General Manager,
India Government Mint,
Shahid Bhagat Singh Road, Fort,
Mumbai - 400001.
Email: purchase.igmm@spmcil.com
Phone: 022-22600253/254/215

15. Delay due to postal/courier etc, will not be entertained. EOI tender received after the due date and time will rejected.

हस्ता/-

(प्रभाकर चौधरी)
मुख्य क्रय एवं भंडार अधिकारी
कृते मुख्य महाप्रबंधक

Expression of Interest (EOI) for Indigenous Development, Design Manufacturing, Testing, Supply, Installation, Commissioning of fully Automated Secondary Packaging Line for Packaging of Ready-Filled and Sealed Primary Coin Small Sachets :

1. **Introduction**

India Government Mint, Mumbai (unit of Security Printing and Minting Corporation of India Limited) invites Expressions of Interest (EOI) from eligible Indian companies, engineering organizations, machine tool manufacturers, research institutions for the indigenous development, design, engineering, manufacture, testing, supply, installation, commissioning, and lifecycle support of **fully automated Secondary Packaging Line for packaging of Ready-Filled and Sealed Primary Coin small Sachet.**

This initiative aims to establish a robust indigenous capability for manufacturing world-class **fully automated Secondary Packaging Line** under the **Make in India and Atmanirbhar Bharat initiatives**, reducing dependence on imported equipment while ensuring long-term technological self-reliance.

2. **Objective**

The primary objective of this EOI is to identify technically capable organizations that can develop and manufacture **fully automated Secondary Packaging Line** in India with performance comparable to internationally recognized equipment.

The objectives of this EOI are to:

- Develop an indigenous **fully automated Secondary Packaging Line** to meet the operational requirements of India Government Mint, Mumbai.
- Achieve self-reliance in packaging technology under the Atmanirbhar Bharat initiative.
- Enhance production capacity, machine reliability, and packing quality.
- Reduce dependence on imported machinery, spare parts, and foreign technical support.

3. Existing Infrastructure:

India Government Mint, Mumbai is engaged in the production, packing and dispatch of circulation coins. At present, it is undertaking packaging of coins in small primary sachets. The primary sachets are already filled with the prescribed quantity of coins and heat-sealed/closed. The existing primary packaging system is designed for automatic collection of coins and preparation of small primary coin sachets.

The existing primary packaging line is a fully automated system comprising, inter alia, coin collection from hopper, controlled coin feeding, counting, filling of specified quantity of coins into small sachets, sachet sealing, weighing/check weighing and discharge of ready-filled and sealed primary coin sachets.

The present requirement is for **Design, Development, Manufacturing, Testing, Supply, Installation, Commissioning and Performance Demonstration of a fully automatic secondary packaging line** suitable for receiving these ready-filled and sealed primary coin small sachets and packing them into suitable secondary packages i.e. in big pouches/packets or other approved secondary packaging configurations.

The proposed system shall be capable of integration with the existing primary packaging line or shall have suitable interface arrangements for receiving primary coin sachets either continuously or in a controlled batch mode.

The existing **fully automated Primary Packaging Line** having approximately the following characteristics:

Parameter	**Requirement**
Machine Type	Fully automated Primary Packaging Line
Application	Circulation Coin Packaging
Product	Small Coin Pouches
Primary/Small/ pouch weight	150 gm - 900 gm (approx.)
Small/ Coin Pouch Size:	120mmx 100mm (W x L) At present but may vary time to time.
Operation	Automatic
Feeding	Automatic Coin Feeding
Coin Discharge	Automatic
Automation	PLC Controlled

Note: The successful bidder shall study the existing primary packaging line, its output characteristics, sachet dimensions, production rate, discharge arrangement, communication/interface requirements and available space before finalising the detailed design.

4. Scope of Work

The participating firms shall undertake:

- Detailed design and engineering of a complete automated secondary packaging line suitable for receiving ready-filled and sealed primary coin small sachets from the existing primary packaging line, including mechanical, electrical, pneumatic, automation, safety and interface engineering.

- Design, development, manufacturing, assembly and integration of all equipment, machinery, conveyors, accumulation/buffer systems, counting and grouping arrangements, secondary packing/sealing systems, inspection systems, check weighing, coding and rejection arrangements required for the complete line.

- Provision of suitable conveyors, transfer and buffering arrangements for smooth receipt of ready-filled and sealed primary coin sachets from the existing fully automated primary packaging system. The secondary line shall be suitably interlocked with the existing primary line for coordinated operation and controlled stoppage.

- Automatic counting, collation and grouping of primary coin sachets as per the specified packing configuration, followed by automatic packing into secondary pouches/packets or other approved secondary packaging with provision for programmable packing quantities and changeover between different configurations.

- Provision of online inspection, counting verification, check weighing, package/seal inspection, coding/label verification and automatic rejection of defective, underweight, overweight, incomplete or incorrectly packed secondary packages.

- Supply and integration of PLC, HMI, sensors, drives, safety systems and communication interfaces for fully automatic operation. The system shall provide production monitoring, quantity counting, rejection monitoring, alarm/fault indication, recipe management and provision for future SCADA/ Industry 4.0 integration.

- Development of PLC/SCADA-based control systems.

- Factory Acceptance Test (FAT), Site Acceptance Test (SAT), and performance validation.

- Installation, commissioning, and operator training.
- Supply of technical documentation, software, drawings, and maintenance manuals.
- Warranty support and post-warranty technical assistance.
- Provision for future technology upgrades and lifecycle support.

5. Technical Requirements:

The proposed shall be a **fully automated Secondary Packaging Line** designed for continuous packaging of small sachets/pouches generated from primary packaging line and shall be capable of integration with the existing primary packaging line or shall have suitable interface arrangements for receiving primary coin sachets either continuously or in a controlled batch mode.

Quantity to be packed: 50 Nos. small pouches in one Big Bag Pouch At present but may vary time to time.

Package style: Centre Sealed pillow pouches (horizontal and vertical sealing),

Pack Size Range for Big Bag pouch:

Maximum pack size: 400 mm (W) x 600 mm(L).

Seal Type: Serrated type seal at top and bottom and plain LAP seal on Vertical.

Seal width: 15mm.

Conveying Speed: 5 Big bag /packets per minute or above.

Electrical Load: Suitable capacity to cater the requirement efficiently

Packing material: LDPE film roll (710mm X 150-micron, core dia-75mm, O/D-300mm, thickness of core 6 to 8 mm).

In-Feed conveyor arrangement for product handling and transportation: Conveyor must synchronize with existing primary packaging line for handling small coin pouches generated from this primary packaging line.

Small/baby pouches shall be packed in one Big Bag Pouch: Quantity of pouches in a Big Bag may vary time to time. Suitable automatic counting system for counting Small pouches with FLAP mechanism to be provided for packing in Big Bag/packet.

Conveyor Belt Type: PU Belt:

Bucket Elevator: Suitable bucket elevator to feed the small pouches in secondary/ Big Bag packing machine with Counting sensor and VFD operated for proper synchronization of Small primary pouches from the existing Packaging lines.

Product to be handled: Small coin pouches.

Weighing Scale Capacity: 30 kg max.

Label Applicator Punch for Big Bag Pouch Labelling (Automatic):

Label : 100mm x 100mm , in the form of rolls consisting 1500 labels in a roll.

LPA Ribbon: Black Vertical Arrangement with Print Recipe in Gumming label roll– Programmable.

Paper Type: Gumming label Roll.

Label Applicator (Automatic): shall have provision for marking/printing suitable identification information such as: Batch number, Lot number, Date of packing, Shift identification, Quantity, QR code/barcode, wherever required.

Accessories:

Pneumatic Auto Push Rejecter,
Rejecter Slant conveyor for reject product discharge
Pilot Lamps: Green (Accept) & RED (Reject)
Load Cells– High Precision strain gauge.

i) General Machine Requirements

- The proposed secondary packaging line shall be a **fully automatic, continuous-duty, industrial-grade system** designed for packing ready-filled and sealed primary coin small sachets received from the existing primary packaging line.

- The complete system shall comprise all necessary equipment, conveyors, feeders, accumulation systems, counting/grouping systems, secondary packaging equipment, sealing systems, inspection systems, check weighing, coding, rejection systems, control panels, PLC/HMI, safety systems and associated accessories.

- The machine shall be designed for reliable operation under the environmental and operational conditions prevailing at India Government Mint.

- The system shall require minimum manual intervention during normal operation and shall be capable of automatic start, operation, stoppage, fault handling and controlled recovery.

- The equipment shall be of robust construction, suitable for continuous industrial operation and designed for minimum maintenance and high availability.
- All product-contact/product-handling surfaces shall be suitably finished to prevent damage, scratching, tearing or deformation of primary coin sachets.

- The machine shall have adequate guarding, safety interlocks, emergency stops, warning indicators and safe access for operation, inspection, cleaning and maintenance.

- The complete line shall be modular and flexible to accommodate different primary sachet sizes, weights and secondary packing configurations within the specified range.

- Incorporate energy-efficient technologies.
- Ensure operator safety in accordance with applicable Indian and international standards.
- Be designed for a minimum service life of 25 years with proper maintenance.
- Facilitate future upgrades through modular hardware and software architecture.

ii) Performance Requirements

1. The secondary packaging line shall be capable of continuously receiving primary coin sachets at the output rate of the existing primary packaging line.
2. The machine shall maintain accurate counting and grouping of primary sachets with no missing or additional sachets in a completed secondary package.
3. The system shall provide controlled accumulation/buffering to accommodate temporary interruptions between the primary and secondary packaging systems.
4. The machine shall be capable of consistent operation for extended periods without frequent stoppages, jamming or manual intervention.

5. The guaranteed performance shall be demonstrated during FAT/SAT and final performance trials i.e. for counting accuracy, packing accuracy, package weight accuracy, sealing quality, rejection accuracy, production capacity.
6. Continuous production with high operational availability.
7. High Overall Equipment Effectiveness (OEE) and Low rejection rate.

iii) Mechanical Design Requirements

1. The machine shall be designed for continuous and reliable operation with adequate structural rigidity and vibration resistance.
2. The design shall ensure easy accessibility for preventive maintenance, inspection, cleaning, replacement of wear parts, breakdown maintenance.
3. Mechanical components shall be selected considering expected operating cycles, loading, wear, fatigue and service conditions.
4. Critical components shall preferably be of reputed make with established industrial service support and availability in India.
5. The machine shall incorporate suitable sensors for detecting product presence, position, accumulation, misfeed, jam and abnormal conditions.
6. All moving and hazardous parts shall be adequately guarded.
7. The machine shall be designed to minimise product damage, noise, vibration and unnecessary energy consumption.
8. Suitable provisions shall be made for quick changeover and adjustment for different sachet/packing configurations.

iv) Receipt of Primary Coin Sachets

1. The secondary packaging line shall receive **ready-filled and sealed primary coin small sachets** directly from the existing primary packaging line.
2. The receiving arrangement shall be suitably designed based on the actual discharge height, conveyor arrangement, sachet dimensions, sachet weight and output rate of the existing primary line.
3. The transfer system shall ensure smooth movement of sachets without dropping from excessive height, tearing, crushing. scratching, overlapping. misalignment.
4. Suitable sensors shall be provided for detection of sachet presence and flow.
5. The system shall have provision for controlled accumulation of sachets during temporary stoppage of the downstream secondary packaging equipment.
6. High-level/low-level accumulation sensors shall be provided wherever required.
7. The receipt and transfer system shall be suitably interlocked with the existing primary packaging line.

v) Feeding and Transfer Mechanism

1. The feeding system shall provide controlled and reliable feeding of primary sachets to the counting/grouping section.
2. The feeder shall be capable of handling the specified range of sachet dimensions and weights without damage.
3. The feeding mechanism shall prevent double feeding, missed feeding, sachet overlap, jamming, uncontrolled accumulation.
4. Variable-speed control shall preferably be provided to synchronise the feeding system with downstream operations.
5. Suitable guides, belts, rollers, conveyors, pneumatic or servo mechanisms may be adopted depending upon the final design.
6. The feeding system shall automatically stop or slow down in case of downstream blockage and restart in a controlled manner after clearance.

vi) Counting, Collation and Grouping

1. The system shall automatically count the primary coin sachets received from the primary packaging line.
2. The required number of sachets shall be automatically grouped/collated according to the approved secondary packing configuration.
3. The system shall ensure that each group contains the specified number of primary sachets.
4. Provision shall be made for programmable group quantities through the HMI/recipe system.
5. The system shall detect and prevent missing sachets, double counting, excess sachets, incomplete groups.
6. Incomplete or incorrect groups shall be automatically diverted/rejected or prevented from entering the final secondary package.
7. The counting and grouping system shall be capable of integration with the line PLC for production monitoring and traceability.

vii) Secondary Packaging Operations

The secondary packaging line shall perform, as applicable to the approved packing configuration:

1. Receipt of primary sachets.
2. Accumulation.
3. Counting.
4. Collation/grouping.
5. Transfer to secondary packaging station.
6. Insertion into secondary pouch/bag.
7. Secondary pouch/bag sealing.
8. Label application.
9. Batch/lot/date/denomination/logo/quantity/no. of small sachet etc. coding.
10. Check weighing.
11. Final package inspection.
12. Automatic rejection of defective packages.
13. Finished package discharge.

Note: The exact secondary packaging format and quantity per package shall be finalised during detailed engineering.

viii) Secondary Package Sealing and Closing

1. The sealing/closing system shall provide uniform and reliable closure of secondary packages.
2. For heat-sealed pouches, the system shall provide controlled temperature, pressure, dwell time.
3. Sealing parameters shall preferably be recipe-controlled.
4. Suitable sensors shall monitor sealing conditions and detect abnormal operation.
5. The system shall prevent dispatch of packages having incomplete or defective closure wherever automatic detection is technically feasible.

ix) Inspection, Check Weighing and Rejection

1. Online inspection shall be provided for verification of the secondary packaging process.
2. The system shall preferably verify number of primary sachets, package presence, weight, label presence, printed information, barcode/QR code readability, where applicable.
3. An automatic rejection mechanism shall be provided for non-conforming packages.
4. Rejected packages shall be collected in a controlled and identifiable rejection arrangement.
5. Rejection quantity shall be recorded and displayed on the HMI.

x) Automation and Control System

1. The complete line shall be PLC controlled.
2. The system shall include industrial PLC, HMI, sensors, drives/servo systems, control panels and safety systems as required.
3. HMI shall display production quantity, good quantity, rejected quantity, machine speed, faults and alarms, recipe, operating status, maintenance indications.
4. Multiple recipes shall be capable of being stored for different packing configurations.
5. Critical operating parameters shall be password protected.
6. The system shall provide suitable communication/interface with the existing primary packaging line.

xi) Buffering and Synchronisation

1. Adequate buffer capacity shall be provided between primary and secondary packaging operations.
2. The buffer shall prevent unnecessary stoppage of the primary packaging line due to short-duration downstream interruptions.
3. Automatic start/stop interlocking shall be provided between the two systems.
4. The system shall provide alarms for buffer full, buffer empty, downstream blockage, upstream interruption.

xii) Packaging Material for Secondary big bag/packet

The bidder shall recommend suitable material for manufacturing the larger secondary bags/packets. The bidder shall specify:

- Material type.
- Thickness.
- Width.
- Roll diameter.
- Film strength.
- Sealing characteristics.
- Printing compatibility.
- Expected consumption.
- Shelf life.

Note: Trials shall preferably be conducted using India Government Mint-approved packaging material.

xiii) Weighing and Verification

Where applicable, the secondary packaging line shall incorporate online check weighing. The check weighing system shall be capable of:

- Verification of secondary package weight.
- Detection of underweight package.
- Detection of overweight package.
- Automatic rejection of packages outside the permissible tolerance.
- Recording of weight data.
- Display of actual weight.
- Recipe-wise weight tolerance setting.

The weighing system shall be suitably protected against vibration and environmental influences.

xiv) Coding and Traceability:

The secondary packaging line shall have provision for marking/printing suitable identification information such as:

- Product identification.
- Batch number.
- Lot number.
- Date of packing.
- Shift identification.
- Machine/line identification.
- Quantity.
- Serial number, wherever required.
- QR code/barcode, wherever required.

Note: The coding system shall be integrated with the line PLC/MES or production monitoring system wherever required.

xv) Pneumatic System

Where pneumatic systems are used, the scope shall include:

- Air preparation unit.
- Filters.
- Regulators.
- Solenoid valves.
- Pneumatic cylinders.
- Pressure switches.
- Tubing and fittings.
- Pressure monitoring.
- Isolation arrangements.

xvi) Electrical System

The electrical system shall include:

- Main electrical control panel.
- MCC.
- PLC-based control.
- Servo drives.

- Variable Frequency Drives.
- Safety PLC.
- Industrial-grade wiring.
- Surge protection.
- UPS for control system.
- Proper earthing.
- Cable trays.
- Panel cooling system.
- Energy metering.

xvii) Safety Requirements

The complete system shall incorporate appropriate safety features including:

- Emergency stop push buttons.
- Safety doors.
- Interlocked guards.
- Safety switches.
- Safe access arrangements.
- Electrical protection.
- Motor overload protection.
- Short-circuit protection.
- Pneumatic pressure monitoring.
- Low-pressure alarm.
- Safety relay/PLC.
- Warning lamps.
- Audible alarms.
- Safe maintenance provisions.
- Fire-resistant cable arrangements where applicable.
- Compliance with relevant safety standards.

NOTE :

A) The technical requirements and specifications mentioned above are indicative and tentative in nature and are intended to outline the broad functional and performance expectations of the India Government Mint, Mumbai. These requirements are not exhaustive and may be refined, modified, or expanded during subsequent stages of the procurement process.

B) Interested firms are encouraged to conduct a detailed assessment of the existing facilities, production processes, and operational requirements. For a better understanding of the project scope and technical requirements, prospective applicants may visit India Government Mint, Mumbai subject to prior approval from the Employer and in accordance with the prescribed security and administrative procedures.

C) The successful bidder shall be expected to propose a comprehensive, optimized, and technically proven solution that fully meets the functional, performance, reliability, safety, maintainability, and lifecycle requirements of India Government Mint, Mumbai.

5. Eligibility Criteria

The participating firms should possess:

- Experience in design, development and manufacture of heavy-duty precision machinery.
- Capability in mechanical, electrical, hydraulic, pneumatic, and automation engineering.
- Adequate manufacturing infrastructure, testing facilities, R&D facilities and quality management systems.
- Experience in executing large engineering projects for Government, Defence, Railways, Heavy Engineering, automobile or similar sectors.
- Availability of qualified design engineering and project management teams.
- Adequate Financial capability to undertake design, development, prototyping, testing, and commissioning.
- Commitment to provide long-term technical support, training, and lifecycle maintenance on reasonable terms.
- ISO 9001 certified quality management system (ISO 14001 and ISO 45001 desirable).

6. **Documentation**

Firm should submit the following document to prove their eligibility:

- Details of Design, Development & Manufacturing activities carried out by the firm in the field of heavy-duty precision Machinery, CNC Machines, special purpose machines and other plant & machinery.
- List of manufacturing / testing facilities available.
- List of Design/ Analysis / Simulation software available.
- Number of Qualified Designers/ Managers/ Engineers / Technicians available with the firm.
- List of projects executed of similar plant & machinery and customers.
- Satisfactory project completion certificate given by the customers.
- Balance Sheet & P&L Account Statement for last 3 years, Credit rating, Net worth, Turnover etc.
- List of QMS certifications.

7. **Project Deliverables**

The selected bidder shall deliver:

- Fully automated Secondary Packaging Line for packaging of Ready-Filled and Sealed Primary Coin small Sachet.
- Design and engineering documentation.
- Complete manufacturing documentation.
- Installed and commissioned machine.
- FAT and SAT reports.
- Performance guarantee reports.
- Training and technology transfer package.
- Recommended spare parts.
- Warranty and post-warranty support.

8. Evaluation

- EOIs will be evaluated based on technical capability, Design and R&D expertise, Manufacturing infrastructure, Past Experience in similar equipment, financial strength, Quality assurance systems, Indigenous development plan and Long-term support capability.

- Shortlisted Applicants shall be invited for technical presentations and further discussions during pre-bid meeting.

9. Warranty and Life- cycle Support

The successful bidder shall provide:

- Comprehensive warranty for a minimum of 24 months from the date of installation & commissioning.
- Preventive and breakdown maintenance support during the warranty period.
- Availability of critical spare parts.
- Software updates and technical assistance.
- Optional Annual Maintenance Contract (AMC) and long-term lifecycle support for continued reliable operation.

Note:

Interested firms shall submit Budgetary Quotation (BQ) and tentative Delivery Period (DP) along with their proposal.