

INDIA SECURITY PRESS
(A Unit of Security Printing and Minting Corporation of India Limited)
Wholly owned by Government of India
Nashik Road – 422 101 (Maharashtra)

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Date of Issue: 30.01.2026

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	EOI No. 06/2025-26 dated 30.01.2026
4.	EOI Title	Expression of Interest for procurement of “Post printing machines”
5.	Category	‘Non-security Item’
6.	Sub-category	Capital Item
7.	Date of Announcement	30.01.2026
8.	Last date for submission:	1430 Hrs (IST) on 20.02.2026
9.	Date of EOI Opening	1500 Hrs (IST) on 20.02.2026

10. The Chief General Manager, India Security Press, Nashik invites Expression of Interest from firms for procurement of following “Post printing machines”:

- i)** Inspection System for Base Printing and die cut rolls
- ii)** Variable Data Printing (VDP) Drop on Demand with Inking System, Inspection and Nonstop Turret Rewinder
- iii)** Shrink Wrap/Sealing Machine
- iv)** Labelling Machine
- v)** Track And Trace System

11. The Brief requirement for above mentioned “Post printing machines” is enclosed as **Annexure-A**.

12. Pre-Qualification Criteria:

- i)** 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.
- ii)** The documents in support of Expression of Interest need to be submitted duly signed by authorized representative of the company.
- iii)** The bidder shall be a manufacturer / authorized supplier of ‘Post printing machines’ for at least last three years and has successfully supplied, installed & commissioned “Post printing machines” with the same or higher specifications of at least one number in last three years ending on “**31.03.2025**”. At least one number of the product offered should be in successful operation for at least one year on the date of bid opening. The bidder should provide the documentary evidence for the same.
- iv)** The interested bidders shall also submit copies of Audited financial statement for the last Five (05) years i.e., 2020-2021, 2021-2022, 2022-2023, 2023-2024 and 2024-2025.

13. The bidder should also confirm specifically that:

- i) Applicant is competent and legally authorized to submit and/ or to enter into legally binding contract.
- ii) The firm should confirm their annual installed capacity for manufacture, supply and install similar type of "Post printing machines".
- iii) Applicant will absolve the purchaser against any infringement of patent rights and other contract provisions.

14. The duly filled details along with supporting documents and budgetary offer(s) with respect to "Post printing machines".

15. Budgetary offers shall clearly mention price of each offered machinery, on FOR 'India Government Mint – Noida' basis. Prices of additional features (if any), shall be indicated separately.

16. 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 and time as under:

The Chief General Manager,
India Security Press,
Nashik Road -422 101.
Phone No 0253 240 2319 / 2419
Email: purchase.isp@spmcil.com;

Place of opening of Expression of Interest:

India Security Press,
Nashik Road, Pin-422 101.
Maharashtra, India.

17. Delay due to postal/Courier etc., will not be entertained.

18. Expression of Interest received after the prescribed due date and time will be rejected.

Dilip
30.01.2016
Addl. General Manager (M)
for Chief General Manager
India Security Press, Nashik Road

TECHNICAL SPECIFICATION OF POST PRINTING MACHINES

A- PRINT INSPECTION SYSTEM:

Machine should be capable for checking the missing labels and registration for die cut labels and integrated in the machine where the machine will stop on missing labels at the inspection table to replace with the good label.

- 1) It is offline inspection system to inspect missing label defects in pre-printed web and to check quality of die-cut
- 2) It Should be able to load-unload with unwind and rewind diameter from 100 mm up to 900mm.
- 3) At unwinding and rewinding, Pneumatic 76 mm mandrel with Servo/pneumatic/motorised tension control with pneumatic/motorised lifting at reel loading.
- 4) It Should be providing with automatic electronic web guide and ultrasonic sensor, enabling guiding of opaque and clear material.
- 5) It Should be provided with adjustable web guide sensor.
- 6) It Should be able to count number of labels or length of web in meter.
- 7) It Should be able to auto calculate the slowdown /stoppage irrespective of machine speed.
- 8) It should be able to display /indicate machine status and error messages and tension settings.
- 9) It should be provided with adjustable silicone rubber nip roller against drive roller.
- 10) There should be suitable hooter shall be provided for alerting operators before inching or running the machine as a safety measure.
- 11) There should be suitable antistatic eliminator(s) & web break sensor should be provided.
- 12) It should cover web width up to 520mm.

B- VDP PRINTING WITH SLITTING & TURRET RE-WINDER

Machines should be suitable for Post Printing operations of VDP Printing and VDP inspection, Slitting & Spool preparation from Printed & Die-cut stock i.e. Pressure sensitive Paper/Hot melt adhesive paper etc. for manufacturing of Self-Adhesive Labels, Stickers etc.

1. SALIENT FEATURES OF MACHINE:

- 1.1 Entire systems on machine must be integrated.
- 1.2 Pneumatic unwind mandrel with servo driven/ pneumatic/motorised tension control. Pneumatic/ Hydraulic/motorised lifting at reel loading.
- 1.3 Suitable Web guide and Automatic web tension control system.
- 1.4 Variable Data Printing Unit (Drop-on-Demand) with UV curing system.
- 1.5 Minimum Operational Speed of the machine should be 50 meters per minute with 600 x 600 DPI of VDP Printing.
- 1.6 Machine must have VDP inspection camera.
- 1.7 It Should have anvil slitting system.
- 1.8 Must have user friendly LED strobe light auto synchronizing with Machine speed.
- 1.9 Turret Re-winder unit.
- 1.10 The functioning of this machine should be compatible with the output of Die-cutting Machine.
- 1.11 Suitable Anti-static eliminator(s) & web break sensor(s) shall be provided.

2. TECHNICAL PARAMETER

2.1 Basic configuration of the machine:

- 2.1.1 Machine Operational Speed should be 50 meter/minimum.
- 2.1.2 Max. unwinding diameter: 700 mm.
- 2.1.3 Max. rewinding diameter: 350
- 2.1.4 Machine should be capable to process Web width, Minimum 205 mm to 520 mm or more and to produce minimum width of spool 41 mm with 12 No. of spools at slitting and Turret rewinding.
- 2.1.5 Input and output reel Core inner diameter: 76 mm.
- 2.1.6 Min. Reel weight: 200 kg
- 2.1.7 Machine should be capable to process Self Adhesive/Gummed Paper, Sticker Paper etc. from 100 to 200-micron thickness with supported release paper.
- 2.1.8 Machine should be equipped with suitable Anti-Static Eliminator(s) & web break sensors.

2.2 Unwinding unit/ Feeding unit:

- 2.2.1 Unwinding Unit must have Pneumatic 76 mm unwind shaft with the use of servo driven/ pneumatics/ motorized tension control. The pneumatic un-wind shaft along with reel should be able to load & un-load with the help of hydraulic lifting arms fitted on both sides of the machine.
- 2.2.2 Machine Should have un-wind capability up to 700 mm diameter.
- 2.2.3 Must have electronic web guidance system with ultrasonic sensor suitable for opaque and clear substrate. The correction shall be within range of ± 15 mm. (left & right side of web).
- 2.2.4 The machine shall be equipped with Auto Tension control (including Unwind, rewind) and capable of identifying machine running speed and ensure stable web feed to the VDP printing for different substrate.
- 2.2.5 Should have programmable end of roll stop and unwind brake control with the use of servo driven/ pneumatics/ motorized tension control.
- 2.2.6 Suitable anti-static eliminator(s) shall be provided wherever required.
- 2.2.7 Should have auto stop mechanism to stop the machine for the break, half cuts etc. in web.
- 2.2.8 There should be web cleaner/dust cleaner equipment.
- 2.2.9 Suitable hooter shall be provided for alerting the operators before inching or putting the machine in running mode as a safety measure.
- 2.2.10 There should be web joint detection and warning system by means of sound and light indicators.

2.3 Variable Data Printing Unit with UV Drier.

- 2.3.1 VDP must be capable of printing on Min. 205 mm and Max. 520 mm across the web width, can consist of seamless stitching printing with multiple/single print heads. No printing defects like blurring, overlapping of characters at the print head junction.
- 2.3.2 Each head must be capable of printing multiple lines of variable data, e.g. numbers, date, time, bar-codes, QR codes etc.
- 2.3.3 It Should be able to print on different kinds of surfaces, e.g. Paper, Adhesive/Sticker Paper etc.
- 2.3.4 It Should have set of sensors (12 No. for 12 columns of labels)/suitable no. of area scan cameras with suitable illumination that guides the VDP Printing unit to skip numbering in case of missing of any label across the web.
- 2.3.5 Printing system shall be of Drop on Demand Technology (DOD). Each print head should be capable to print minimum 108 mm width and total printing web width should be achieved by seamless stitching/printing with such multiple/single Print Heads.
- 2.3.6 Ink for all heads should be supplied from one ink tank (with automatic ink pressure control).
- 2.3.7 06 No. of additional Print Heads has to be provided by the firm.
- 2.3.8 It Should be able to print at min. operational speed of 50 m/Min at 600 X 600 dpi.

- 2.3.9 It Should have VDP Inspection camera to inspect VDP Quality and facility to transfer the data/report to the external data storage device through USB drive and LAN.
- 2.3.10 It Should have the ability to load multiple files which can be printed continuously in a queue system.
- 2.3.11 It Should be able to print various common file formats, e.g. csv, txt, xls, bmp, jpg & PDF etc. The supplier should submit a certificate for the same.
- 2.3.12 It Shall be capable of numbers/Character/word orientation at 0, 90, 180 or 270 degree turn of characters.
- 2.3.13 The system should have capable to operate with unlimited No. of true fonts and facility to print with any languages available in windows - English and Indian Languages like Hindi, Marathi, Panjabi etc. Suitable computer with controller for operations to be provided.
- 2.3.14 It Should be equipped with UV drying system & cover full width of the transport system. The UV unit shall be properly covered to prevent UV light exposure on operators. It Should be providing 02 No. of spare UV lamps.
- 2.3.15 The firm may recommend about Specifications, Grade and various Brands of UV Ink compatible for VDP Printing Heads installed in the machine. The firm will provide the addresses of authorized vendors for the same, if any.
- 2.3.16 Suitable UPS for safe shut down of PC shall be provided with 30 min backup.
- 2.3.17 Data design software for Barcode and Numbering to be provided.
- 2.3.18 Suitable hooter shall be provided for alerting the operators before inching or machine running as a safety measure.
- 2.3.19 The firm shall provide 100 Lt. of UV VDP Ink for FAT and initial trial.

2.4 Inspection System for VDP printing:

- 2.4.1 Inspection System should have high resolution camera Kit.
- 2.4.2 A user-friendly LED stroboscope should be provided in Inspection unit to check the web in high speed running in auto & manual mode. One spare LED stroboscope light should be provided.
- 2.4.3 Inspection accuracy for regular OCR Fonts should be at minimum operational speed of 50 meter/minute.
- 2.4.4 Inspection System should be able to transfer the data/report to the external data storage device through USB and LAN.
- 2.4.5 The Inspection System should be integrated with VDP system
- 2.4.6 It Should be able to inspect VDP Print & inspect web width up to 520mm.
- 2.4.7 It should be able to display /indicate machine status and error messages and tension settings.

2.5 Slitting Unit:

- 2.5.1 It Should be provided with Anvil slitter/cutting system with 13 Rotary slitting wheels. A suitable bow roller or mechanism shall also to be provided for proper separation of spools.
- 2.5.2 Minimum slit width: 41 mm
- 2.5.3 Max. No. of spools: 12
- 2.5.4 It should have fixed measuring scale for adjusting slitting wheels.
- 2.5.5 10 No. of additional complete slitters with assembly has to be provided by the firm

2.6 Automatic turret re-winder:

Turret Re-winder with Servo driven with accurate tension control to be provided. It should have the following features:

- 2.6.1 Maximum Roll diameter: 350mm
- 2.6.2 Web Width: Minimum: 205 mm Max. 520 mm
- 2.6.3 Core ID: 76 mm
- 2.6.4 Minimum Rated Speed: 50 Mtr/Min. (with VDP Synchronization)

- 2.6.5 Labels & Meters counter should provide.
- 2.6.6 Web dividers suitable for making 12 spools at a time.
- 2.6.7 Constant torque tension control on touch screen with PLC
- 2.6.8 Rotational automatic turret re-winder with 4 winding shafts quickly interchangeable, separately motorized, synchronized to the machine. One for make ready of core, second for running the spool and other two for supporting of stream/web.
- 2.6.9 Winding shaft change and cutting cycle fully automatic.
- 2.6.10 02 No. of additional Re-winding shaft shall be provided as spare.

2.7 Read and cut technology: The turret re-winder unit should have provision to provide the required number of VDP printed labels on each slit spool by splicing. After the cancellation command from the file, there will be minimum tolerance of 2 labels to be considered on each spindle after splicing. The system should be programmed to splice between these two extra labels. The counter should count the labels from the first VDP printed label. After completion of each set of spools, the slit reel should remain continue to splice on another core mounted on other turret shaft to complete the task in continuous manner without stopping the machine operation. The continuous re-winder system should work with accuracy of counting of number of labels on each spool and spliced accordingly.

3 OPERATOR INTERFACE/ INDUSTRIAL CONTROL CONSOLE:

- 3.1 Master operator control panel and remote operator control panel should consist touch screen operating interface facilitates for ease in operation.
- 3.2 Safety of operator, machine and electronic modules should be achieved with the help of necessary hardware protection and intelligent software routines.
- 3.3 The control console should have suitable for industrial environments and have latest operating system. The system configuration should be user friendly.
- 3.4 Uninterrupted power supply for defined shut-down process of the software in case of power failure for minimum 30-minute backup.
- 3.5 Extensive control console menus and programs in English for the VDP unit and peripheral equipment (if any) should be provided.
- 3.6 Data storage for job and management with adequate backup system should be provided.
- 3.7 Provision for external data storage or for reading in pre-setting data.
- 3.8 Provision for current machine status and breakdown cause indicator.
- 3.9 Provision for machine speed- indicator and regulator.
- 3.10 Provision for uploading/ downloading of programs.
- 3.11 It Should provide colour touch screen /operator interface.

4. SPOOL SEALER MACHINE:

This will be used for sealing of the spools with the help of heat and LDPE of 50 to 200 micron from three sides one by one spool. There should be auto cut mechanism to control the heat. The speed of the sealer machine should be 05 spools/ minute minimum.

5. LABEL PRINTING MACHINE FOR OUTER LABEL:

This will be used to print the labels for pasting the labels on spools and side of the cartoon box which will give details of labels i.e. nos. of labels, variety of labels, quantity of labels etc.

6. TRACK AND TRACE SYSTEM:

Variable QR Codes on Label Rolls and establishing a parent-child relationship between label rolls and master cartons for enhance traceability, improve supply chain efficiency, and ensure seamless tracking at various levels of packaging.

7 INSTALLATION AND COMMISSIONING:

7.1 The firm has to depute their Engineers / Technicians to IGM NOIDA for Installation and commissioning of the machines at their own cost. The time required for each machine erection, installation, commissioning, may be clearly indicated by the firm.

7.2 The lifting and shifting of the machine from stores to the designated site decided by IGM NOIDA is in the scope of the supplier.

7.3 The labour, lifting & shifting tackles like crane etc. for movement of the machine to the designated site is in the scope of the supplier.

7.4 The supplier should insure the machine till it reaches to the designated site for installation & commission. Any damages during transport, un-loading and shifting is in the scope of the firm.

8. TECHNICAL AND SERVICE AGREEMENT:

8.1 A technical and service agreement would be entered between the Purchaser and the Supplier which shall remain valid for a period of at least ten years. The Supplier would also keep IGM NOIDA updated on latest developments in technologies from time-to-time. They would also respond to queries raised by IGM NOIDA through e-mail, Fax, phone etc.

9. TRAINING:

9.1. Training at Supplier's Site: Training shall also be imparted to purchaser's representatives with running of machine at the Supplier's worksite for 5 officials who shall be deputed for 6 working days. The batches shall comprise of personnel from operations and maintenance. This training shall be provided before the supply/installation. The cost of training related to travel and accommodation will be borne by the purchaser.

9.2. At Purchaser's Site: The supplier shall provide training to 24 authorized persons of IGM NOIDA in the technical skills required to operate and to repair each machine, for 06 working days (8 hours/day) to Supervisory Staff and Industrial Workmen of Technical, Electrical, Mechanical and I.T., as required by IGM NOIDA.

The training part includes the following: -

9.2.1 Operational:

- Detailed working of the entire system(s).
- All precise settings of each machine.
- Details of operation of Control consoles/HMIs of each machine.
- Daily maintenance schedule of each machine.
- Trial run of each machine for actual working.
- Setting of printing jobs, cleaning, overall machine maintenance, safety standard of machine.
- Detailed understanding of principles & working of print/ gap sensor, encoder calculation.

9.2.2 Maintenance (Electrical/Electronic):

- Sequential functions of the machine(s).
- Fault diagnosis method of each machine.
- Testing of systems. Fault diagnosis / Analysis through Control consoles/ HMIs of each machine.
- Suitable service training should be provided including replacement of spares/consumables.
- All the passwords related to software control/console/service should be provided to the purchaser at the time of handing over the machine.
- A set of all software's used in the machine to be given to the purchaser at the time of handing over the machine.
- Debugging/Rectification of each machine.

9.2.3 Mechanical: -

- Complete setting and mechanical timings of all the gears, cams and its synchronization with electrical/electronic system.
- Setting and maintenance of all Safety equipment installed on machine(s).
- Setting of all electro-pneumatic actuators, valves etc.
- Replacement & setting of rotary slitters

9.3 In case of any latest advancement in technology, changes required in the process flow and design for improvement and better efficiency, the same shall be suggested and explained in detail by the firm. However, the final decision will be taken by IGM NOIDA.

10. PRE-DESPATCH INSPECTION:

10.1 The Supplier shall communicate to the Purchaser 15 days prior to the readiness of the new machine to arrange visit of representatives for Pre-Despatch Inspection. The inspection shall be carried out for 04 working days by 04 authorized representatives of IGM NOIDA.

10.2 The machine shall be shown for inspection in running condition. The PDI team will confirm machine configurations like capability of machine. During Pre-Despatch Inspection, the VDP Printing Machine should run at Minimum 50 m/min speed with 600 X 600 dpi.

10.3 During PDI, the firm should demonstrate various aspects like Machine speed (Min. & Max.), Web sizes (Min. & Max.) etc. The firm should demonstrate the rated Speed of the Machine for at least one hour without any interruption.

10.4 The firm should demonstrate functioning of all the modules/and facilities provided in the machine as per Tender Specifications.

10.5 During PDI, Required Trial material like sticker paper, VDP Ink for VDP trial will be arranged by the Supplier.

10.6 After satisfactory running and examining of the machine the inspecting team from IGM NOIDA shall give clearance for dispatch of the machine to IGM NOIDA

10.7 The cost of inspection relating to travel and accommodation shall be borne by the Purchaser.

11. DELIVERY SCHEDULE:

The firm will have to supply all equipment's within 05 months (150 days) from date of issue of LOI. The firm shall start installation, testing, commissioning and training within 30 days after receipt at IGM store. All installation, testing, commissioning and training shall be completed within 30 days.

12. MACHINE WARRANTY: -

Each machine must be warranted for 12 months after Final Acceptance Certificate (FAC).

13. SAFETY AND PRODUCT STANDARD: - The machine(s) shall be conforming International Standard and applicable strength besides Safety regulations/guidelines.

14. GENERAL TECHNICAL SPECIFICATIONS: -

- 14.1 Each Machine should be suitable for 3 phase power supply, 415 V \pm 10%, 3 Phase, 50 Hz \pm 5%.
- 14.2 Each machine shall be designed user-friendly, & have easy access to various operational adjustments.
- 14.3 Suitable safety devices shall be provided at various locations of each machine.
- 14.4 Each machine shall be designed with PLC controlled provided with internationally reputed brands like Siemens/ABB/OMRON make or equivalent.
- 14.5 The sub-units of each machine shall be of reputed make.
- 14.6 The firm shall mention total connected load of the machine.
- 14.7 The firm shall mention requirement of air pressure and air flow.

14.8 The firm shall mention required ambient temperature for the machine (temperature and relative humidity). The machine should be compatible for production in temperature and RH requirements as per standard printing processes.

14.9 The firm shall provide schematic drawing, layout of the machine with detailed dimensions and approximate floor area and load required for the installation of the machine.

14.10 All the electrical cabinets shall be well illuminated.

14.11 Technical Documentation (In English Language only) Hard and soft copies— 3 Sets each.

14.11.1 Entire instruction and operational of the machine(s).

14.11.2 Complete Electrical circuit diagram of the machine(s).

14.11.3 Program of the PLC/ HMI system along with complete access to be provided in the service laptop.

14.11.4 Complete mechanical drawings and sketches of the system(s).

14.11.5 Entire block/location diagram of the machine(s) with position of each and every component.

14.11.6 Complete schematic diagram of pneumatic and hydraulic systems (if any) of each machine.

14.11.7 Hard and soft copies of complete Mechanical, Electrical and Electronic spare parts catalogue and consumables with detailed Technical Specifications and Identification number of the parts.

14.11.8 The firm shall provide Maintenance Manual and/or Service Manual containing the list of fast- and slow-moving parts and Maintenance schedule.

14.12 The manufacturer shall provide provisions of scaling up the machine or adding new print module in future.

14.13 The successful firm need to supply following material along with supply

14.13.1 UV Curable Ink- 40 L

14.13.2 Flush/ cleaning solution – 10 L

14.13.3 Air expandable unwind shaft- 01 no. as spare (in addition to what will be provided with machine)

14.13.4 Nip roller (if any) - 02 no. as spare (in addition to what will be provided with machine)

14.14 The successful bidder has to share detailed specifications of consumables like ink, flush solution, print heads etc that are compatible with machine. Such item shall not be sole proprietary of the supplier and equivalent make shall be easily available in market.

15. ESSENTIAL TERMS AND CONDITIONS:

15.1 The firm shall undertake to provide Service back-up for minimum 10 years from the date of supply of the system.

15.2 The firm shall provide list of essential spare parts along with the technical specifications of original manufacturer and the cost of each spare required for three years after Performance Guarantee.

15.3 The firm shall also give the list of those out-sourced parts fitted on the machine and their original manufacturer with their specifications.

15.4 The firm has to provide back up of all PLC programs, drive program parameters and source code of all customised software for India Govt. Mint along with a dedicated laptop for servicing.

16. FINAL ACCEPTANCE TRIAL:

16.1 FAT (Final Acceptance Test) and FAC (Final Acceptance Certificate):- Upon completion of erection and commissioning work at the Purchaser's premises, Purchaser will conduct testing of the system in presence of supplier's representatives. The FAT will be carried out for a period of 06 (Six) full working days (8Hr. /day) for each machine. The FAT of each machine will be carried out as below:

16.1.1. For each VDP Printing with Slitting & Turret Re-winder Machine

Sl. No	Description	Parameters
1	Total number of working days	6 days
2	Number of shifts in day	1 shift

Sl. No	Description	Parameters
3	Duration of each shift	8 Hours
4	Demonstrating uninterrupted running of Machine at Minimum Rated Speed (50 Mtr./Minute with 600 X 600 DPI Printing)	Minimum 01 hr/shift
5	Minimum Effective production time (Excluding make-ready, operators'-oriented stoppages, cleaning etc.)	6 Hours
6	Total Production in a shift	80% of Min rated speed of Machine X No. of effective Running Hours
7	Minimum Targeted production per shift	14,400 Mtr
8	EAL Quality Check (All good output)	At least 95% of total production

16.1.2 Note: In case of failing to achieve the Daily Target and Demonstration of uninterrupted running of machine at Rated Speed, same will be carried out from the start.

16.2 FAC: Upon satisfactory completion of FAT, Purchaser shall issue FAC (Final Acceptance Certificate), which will be mutually certified by the supplier.

17. MACHINE GUARANTEE:

17.1 Each machine must be guaranteed for 12 months after FAT, as per contractual obligations.

18. PERFORMANCE GUARANTEE:

18.1 The supplier shall guarantee each machine for its best material and satisfactory performance for a period of 12 months from acceptance, as per contractual obligations.

19. MAINTENANCE GUARANTEE:

19.1 The supplier will be liable to modify/ replace the parts free of cost that may fail/ go defective / require modification at their own expenses upto the expiry of the guarantee period i.e., 12 months from the date of Final acceptance Certificate.