

ML-Based Ejection System

Frequently Asked Questions from User[Client Side]

Getting Started and Basic Use

1. **How do I start the machine?**

Answer:

Step 1: Open the desktop application

Step 2: Select the product variant

Step 3: Set the RPM as per the product requirement

Step 4: Click the “Start” button

2. **How do I stop the machine?**

Answer:

Click the “Stop” button on the software interface. It will safely halt the operations.

3. **Do I need any technical knowledge to use the software?**

Answer:

No, the interface is user-friendly and designed for non-technical users.

4. **How do I choose the correct biscuit type?**

Answer:

Select the correct product variant from the dropdown menu or product selection panel in the interface.

5. **Can I operate this system with no training?**

Answer:

Basic instructions are enough, and the UI is intuitive. A short demo session is recommended.

6. **Where can I see if a biscuit is defective?**

Answer:

Live camera feed shows the production line. Defects are highlighted, and counts are displayed on the side panel.

7. **Can I monitor the current production status?**

Answer:

Yes, the live monitoring screen shows real-time operations and defect counts.

8. **How do I know which product is currently running?**

Answer:

The product name and variant are displayed at the top of the interface once selected.

9. **How can I change the product type during a shift?**

Answer:

Click “Stop”, select a new product variant, set RPM, then click “Start”.

10. What is RPM and how do I set it?

Answer:

RPM stands for Revolutions Per Minute of the conveyor.

Set it in the product selection panel before starting the machine.

Real-Time Monitoring and Alerts

11. What does the live camera feed show?

Answer:

It shows the production line and biscuits in real time for visual inspection.

12. How often is the defect count updated?

Answer:

It updates live as biscuits pass through the detection zone.

13. What if the defect count looks too high?

Answer:

Step 1: Pause the system

Step 2: Inspect product input quality

Step 3: Check if the correct product variant is selected

Step 4: Contact technical support if needed

14. How can I confirm the system is rejecting properly?

Answer:

Check the ejection section physically or view the rejection status on screen.

15. What should I do if defects are not being ejected?

Answer:

Step 1: Stop the system

Step 2: Check air ejector mechanism

Step 3: Ensure air pressure is active

Step 4: Restart the system

Step 5: Contact maintenance if the issue persists

16. Is there an alert if the system stops detecting?

Answer:

Yes, alerts or abnormal behavior in defect count or camera feed indicate a detection issue.

17. How can I access logs for past runs?

Answer:

Click the “Logs” or “Reports” tab in the software to view all past production sessions.

18. Does the system give alerts for hardware issues?

Answer:

Basic alerts are shown on-screen if the camera or ejection unit is not functioning.

19. What happens if power is lost during operation?

Answer:

The system halts and resumes safely when restarted. Logs will show the interruption time.

20. Can I mute alert sounds or pop-ups?

Answer:

Some versions may have sound controls. Check the settings section of the application.

Product Selection and Variant Handling

21. How many product types can I run on this machine?

Answer:

The system supports all trained variants like Bourbon and Pure Magic. You can add more through updates.

22. Can I run two products at the same time?

Answer:

No, only one product variant can be selected per session to ensure accuracy.

23. How do I add a new product to the system?

Answer:

This requires model retraining. Contact the technical team for adding new product variants.

24. Will the system work if I use untrained biscuits?

Answer:

It may misclassify or show inaccurate defect counts. Only use trained products.

25. How do I switch between Bourbon and Pure Magic?

Answer:

Step 1: Click "Stop"

Step 2: Select the new variant

Step 3: Adjust RPM

Step 4: Click "Start"

26. Can the system detect undercooked biscuits?

Answer:

Yes, if such defects were included during training. Otherwise, accuracy may vary.

27. Does the system recognize broken edges or missing cream?

Answer:

Yes, such features are detectable if part of the training data.

28. Will different lighting affect detection?

Answer:

Yes. Stable lighting is necessary for accurate detection.

29. Can I save custom RPM settings for each product?

Answer:

Yes, the system saves the last used RPM per product or allows you to set it manually.

30. Is biscuit size important for detection?

Answer:

Yes. Each model is trained on specific sizes and shapes.

Logs, Reports, and Tracking

31. How do I view logs of rejected items?

Answer:

Open the “Logs” section in the application. It shows date, time, product, and defect counts.

32. Can I export data from the logs?

Answer:

Yes, some systems allow export in Excel or PDF format.

33. What data is stored in logs?

Answer:

Start/stop times, product variant, total runtime, defect counts, and rejection timestamps.

34. Can I check who operated the machine last?

Answer:

Yes, if the system has user login features.

35. Can I reset daily logs?

Answer:

Yes. Use the “Reset Logs” button or clear data at the end of the shift.

36. Can I compare shift-wise rejection rates?

Answer:

Yes, logs can be filtered by date and shift for analysis.

37. Can I track machine downtime?

Answer:

Yes. The total running time and breaks are logged.

38. How can I calculate efficiency?

Answer:

Use:

$\text{Efficiency} = (\text{Accepted Items} / \text{Total Items}) \times 100$

39. Does the system show which defect was detected?

Answer:

Only if labeled. Otherwise, it just shows “Defective” as a category.

40. Can I integrate this data with ERP systems?

Answer:

Yes, through custom APIs or reporting exports.

Troubleshooting and Support

41. Why is my defect count always zero?

Answer:

Step 1: Check if the camera is working

Step 2: Ensure correct product is selected

Step 3: Restart the application

Step 4: Check lighting and product placement

42. The ejection is delayed, what should I do?

Answer:

Ensure timing sync between detection and air jet is correct. Contact maintenance if the delay persists.

43. Why is the interface not responding?

Answer:

Restart the software. If the issue continues, check system RAM or contact IT support.

44. How do I update the software?

Answer:

Contact the support team. Updates are usually done through installers or over-the-air if enabled.

45. How often is model retraining needed?

Answer:

When product visuals change significantly or accuracy drops.

46. Is internet required for daily use?

Answer:

No, it runs offline after installation.

47. How do I request a product addition?

Answer:

Email the technical team with sample images and specifications.

48. What if biscuits get stuck during inspection?

Answer:

Stop the system, clear the jam, and restart after checking alignment.

49. Can I pause the system temporarily?

Answer:

Yes. Use the "Pause" button if available, or click "Stop" and resume later.

50. Who should I contact for technical issues?

Answer:

Refer to the support contact given in the application or documentation.

Extra Functionality and Client-Specific Questions

51. Can I request a custom feature?

Answer:

Yes. Customizations can be discussed with the vendor based on feasibility.

52. Can I connect multiple cameras?

Answer:

Some versions support it. Contact support to enable multi-camera mode.

53. Is it possible to automate reports daily?

Answer:

Yes, auto-reporting can be configured through scheduled tasks or scripts.

54. Can I integrate this with my factory's SCADA system?

Answer:

Yes, integration can be done using data connectors or APIs.

55. Does it support different languages in the interface?

Answer:

Language localization can be enabled based on request.

56. Is there a mobile version of the software?

Answer:

Not by default. But remote viewing features can be developed if needed.

57. Can I train staff on this system quickly?

Answer:

Yes, basic training takes under 30 minutes for operations.

58. Can I simulate biscuit flow without real products?

Answer:

Yes, some systems have test/simulation mode for training purposes.

59. Does the system support barcode or QR integration?

Answer:

Yes, if additional modules are installed.

60. What if air pressure drops mid-process?

Answer:

Defective biscuits may not be ejected. Check air compressor and resume only after restoring pressure.

Basic Chatbot Idea

Purpose:

A chatbot to assist factory staff or supervisors in operating and troubleshooting the ML-Based Ejection System.

Core Capabilities:

1. **Start/Stop Machine Guidance**
2. **Product Variant Selection**
3. **Defect Monitoring FAQs**
4. **Real-time Issue Resolution**
5. **Basic Troubleshooting**
6. **Log & Report Access**
7. **Support Contact Help**

Sample Intents and Responses:

Intent	Sample User Question	Bot Response
Start_machine	How do I start the machine?	Click “Start” on the app after selecting the product and setting RPM.
View_defects	How can I view defect counts?	The interface shows live defect count on the right panel.
Troubleshoot_ejection	Ejection is not working	Check air pressure, clean nozzle, restart. Need help? Contact support.

Tools We Can Use:

- Dialogflow
- [Rasa](#)
- Microsoft Bot Framework