System Name: Sealbeat System
Customer: Ajanta Pharma.
Document No: Sealbeat User Manual

Model No: Sealbeat
Manufacturer: SPAN Inspection Systems Pvt. Ltd.

SPAN
Vision Melodies

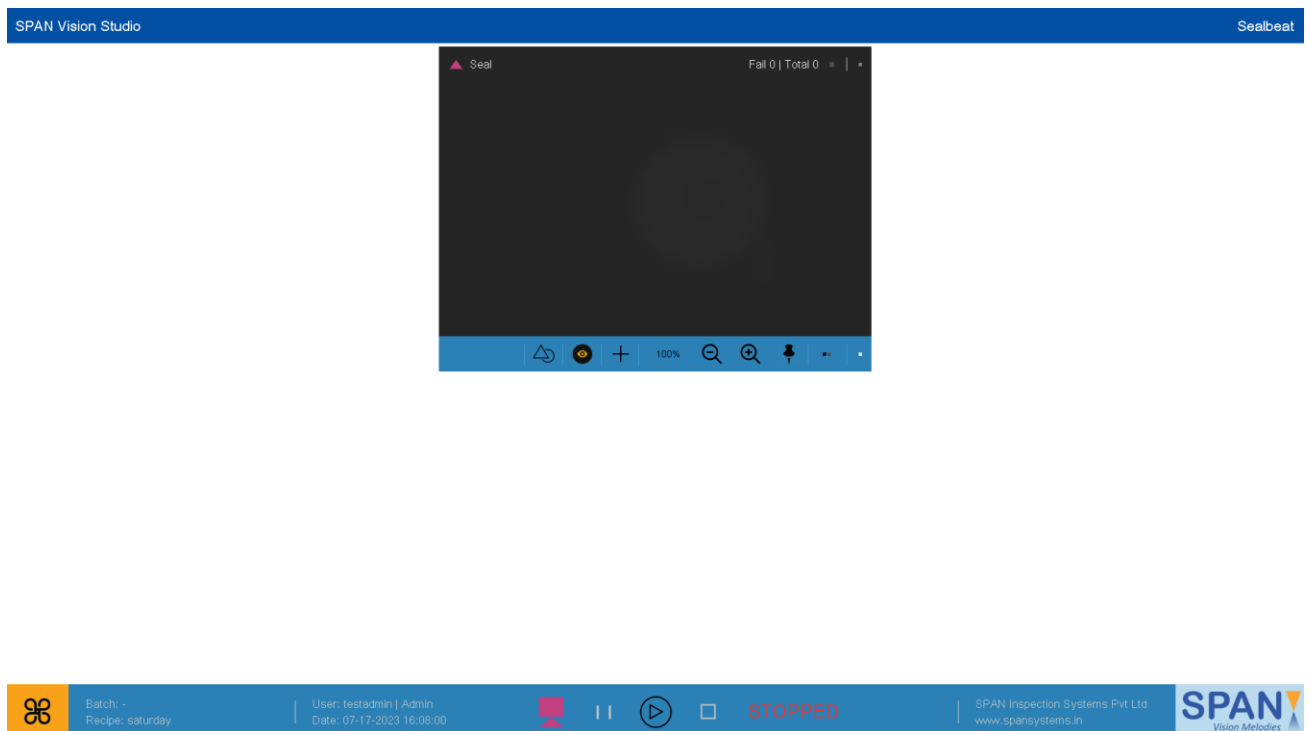# Sealbeat

Seal Inspection System

Sealbeat – Seal Inspection System
User Manual

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SPAN
Vision Melodies

INTRODUCTION TO SPAN VISION STUDIO SOFTWARE

SPAN VISION STUDIO

Vision Studio is like an operating system to run all types of SPAN vision applications. It loads automatically on system logon. Vision Studio will host all the cameras connected to a particular IPC, whereas connected cameras can be attached/assigned to various SPAN Vision Applications i.e. Sealbeat – Seal Inspection System.

VISION STUDIO SCREEN EXPLANATION

Click on Model to load the saved recipe. The recipes are application-wise.

GENERAL MODULES

Some of the modules are common for vision studio application. So any User that has appropriate rights can access following modules:

21CFR, Audit Trail, Scope View, Backup, Share, Utility, log, Config, Language, Video Help, About & Power.

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SPAN Vision Studio
testadmin | 00:53:46

Main
Explore
Report
Stuff
Power

Backup
Share
Utility
Language
Log
About

SPAN Vision Studio
testadmin | 00:55:09

Main
Explore
Report
Process
Stuff
Power

QASimulator
n\a
n\a
n\a
n\a
n\a
SPAN

This task bar is always visible to user whatever the application state is. Use can click on SPAN Logo to come to home screen form any module.

System Name: Sealbeat System
Customer: Ajanta Pharma.
Document No: Sealbeat User Manual

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Run – On pressing Run button software will prompt for batch number and all the applications will go to inspection mode.

 Reset Counters On – When the user selects on option and click on the start button counters for the same recipe and batch number will be reset to zero.

Reset Counters Off – When the user selects the off option and click on the start button counters for the same recipe and the batch number increases

On entering a new batch number, if reset counters are selected off that time also inspection start with counter zero.

NOTE: Reset Counters access is by default limited to Admin and Supervisor though it can be configurable.

Pause – The user can pause the inspection using , on inspection pause user can stop the machine and analyze the previously inspected images.
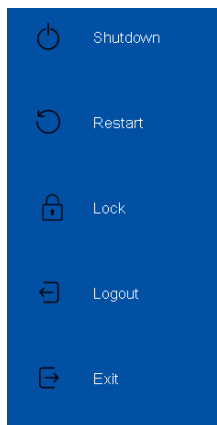
Stop – The user can stop the inspection and end the currently running batch by pressing the

inspection stop button .

Also, it has a Power button; on clicking it various options are available like application Exit, Logout, Lock, System Restart & Shutdown.

This symbol states the current status of the application, namely, there are 3 types of status Running, Paused, and Stopped.

System Name: Sealbeat System
Customer: Ajanta Pharma.
Document No: Sealbeat User Manual

Model No: Sealbeat
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SEALBEAT SYSTEM

INTRODUCTION

"Sealbeat" is inspired by real challenges that user faces during the cap sealing verification. Carefully crafted after analyzing user needs, offering very simple and elegant solutions. It is the most powerful tool for different types of bottles i.e., with CRC and without CRC bottles. Powered by proven image analysis algorithms to inspect the damage of the seal or improperly sealed cap or overheated sealing bottles captured by the industry's most advanced thermal scan camera. Sealbeat consists the multiple sensors to avoid unwanted rejections i.e., loose cap with distance sensor, wad absence with proxy sensor, and overheating with temperature sensor.

Sealbeat is equipped with an Induction Sealer Machine which creates a hermetic induction seal that prevents bottles from leaking, provides tamper evidence, and preserves product freshness.

Supported Product Range
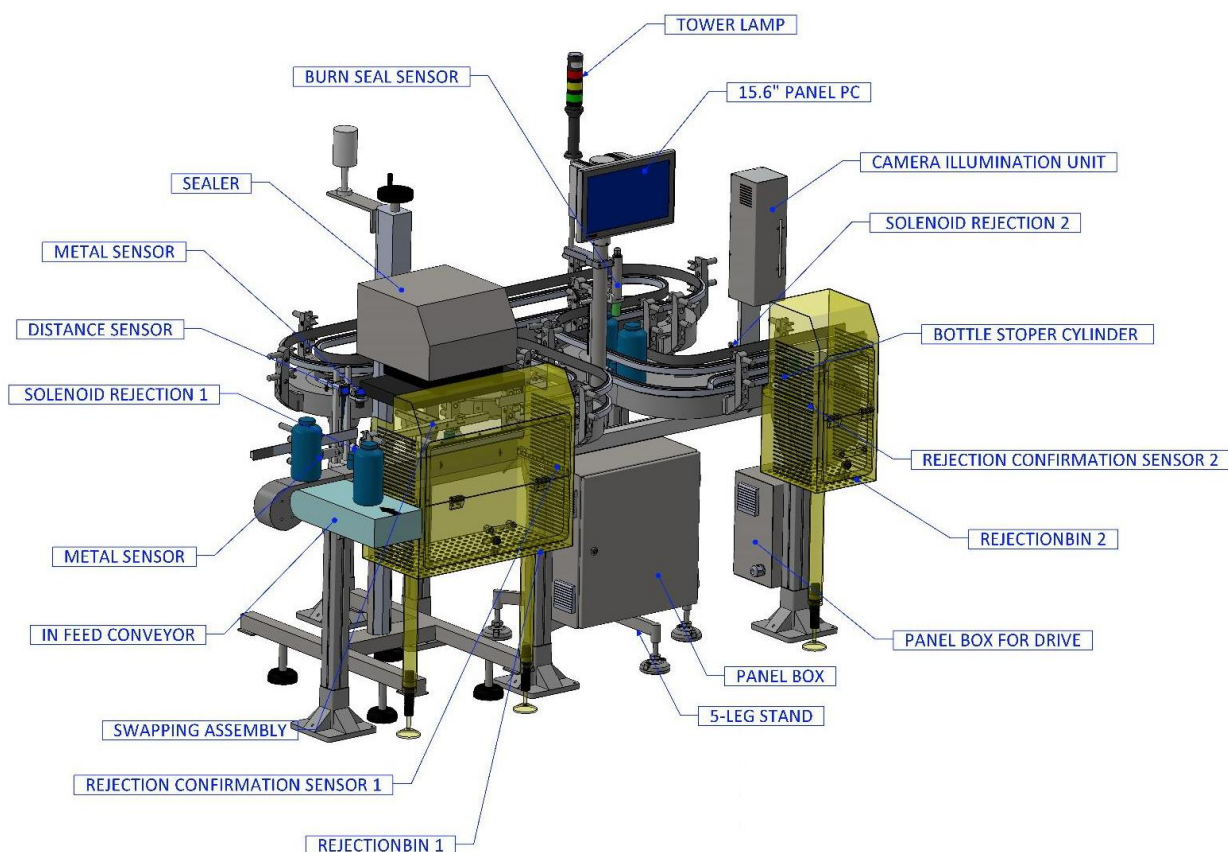- With CRC
- Without CRC

Minimum and Maximum Bottle Height
- Minimum: 50mm
- Maximum: 205mm

Minimum and Maximum Bottle Diameter
- Minimum: 34mm
- Maximum: 98mm

Minimum and Maximum Cap Inner Diameter
- Minimum: 30mm
- Maximum: 51mm

System Name: Sealbeat System
Customer: Ajanta Pharma.
Document No: Sealbeat User Manual

Model No: Sealbeat
Manufacturer: SPAN Inspection Systems Pvt. Ltd.

- User has to do one time setting of teaching the sensors.

System Name: Sealbeat System
Customer: Ajanta Pharma.
Document No: Sealbeat User Manual

Model No: Sealbeat
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TEACH RECIPE

- Select the cap type and set the Diameter(mm) and Height(mm) of the bottle.

System Name: Sealbeat System
Customer: Ajanta Pharma.
Document No: Sealbeat User Manual

Model No: Sealbeat
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- Set the temperature of the sealer from the Machine tab.

System Name: Sealbeat System
Customer: Ajanta Pharma.
Document No: Sealbeat User Manual

Model No: Sealbeat
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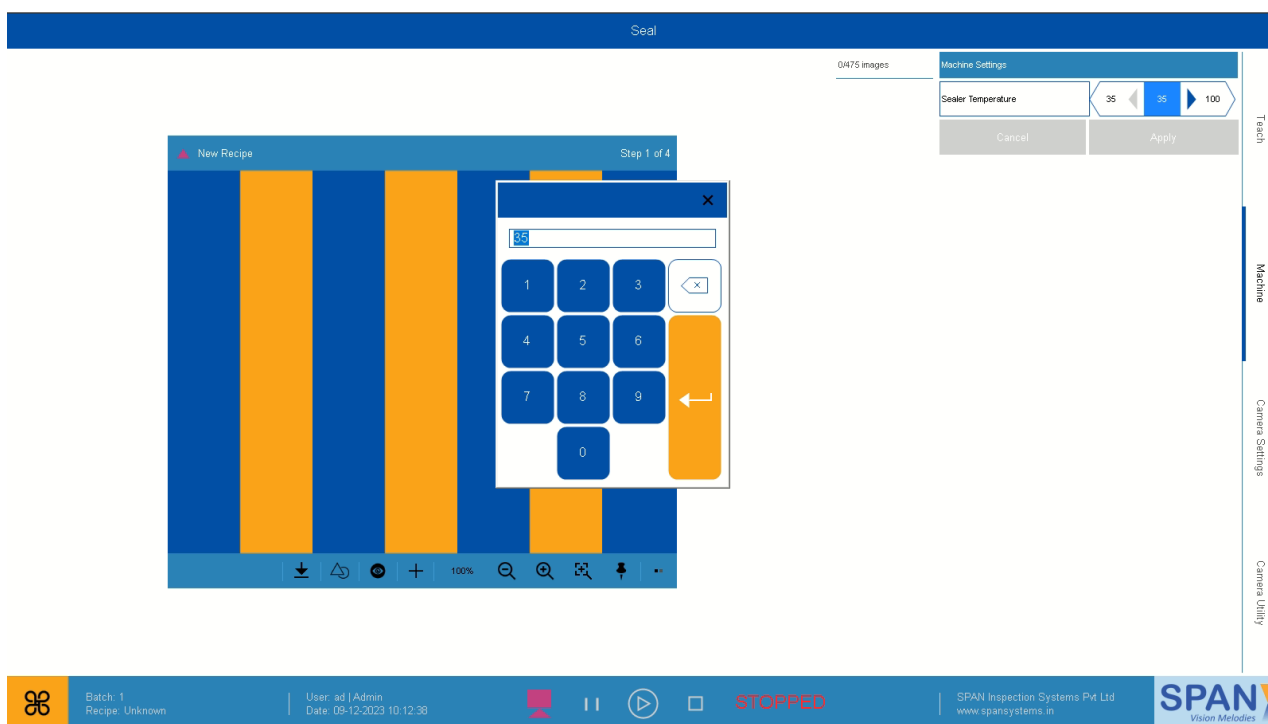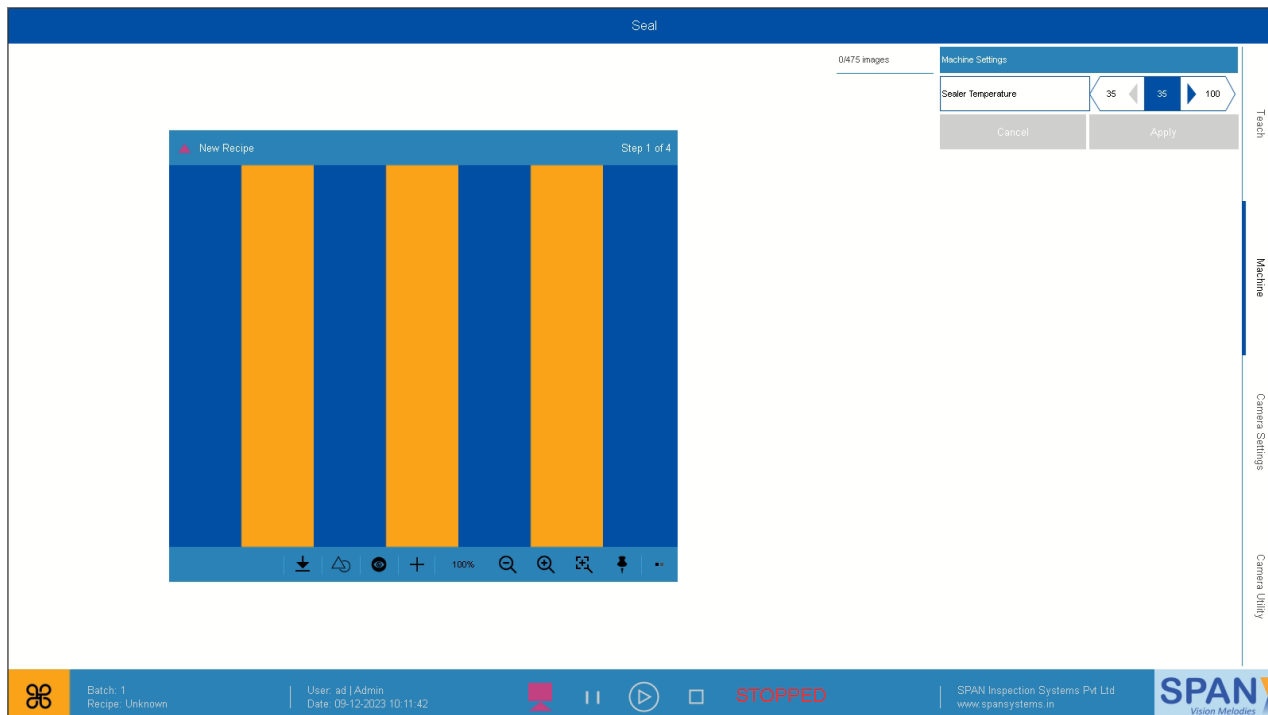
- Press Single grab or Machine grab to grab images.
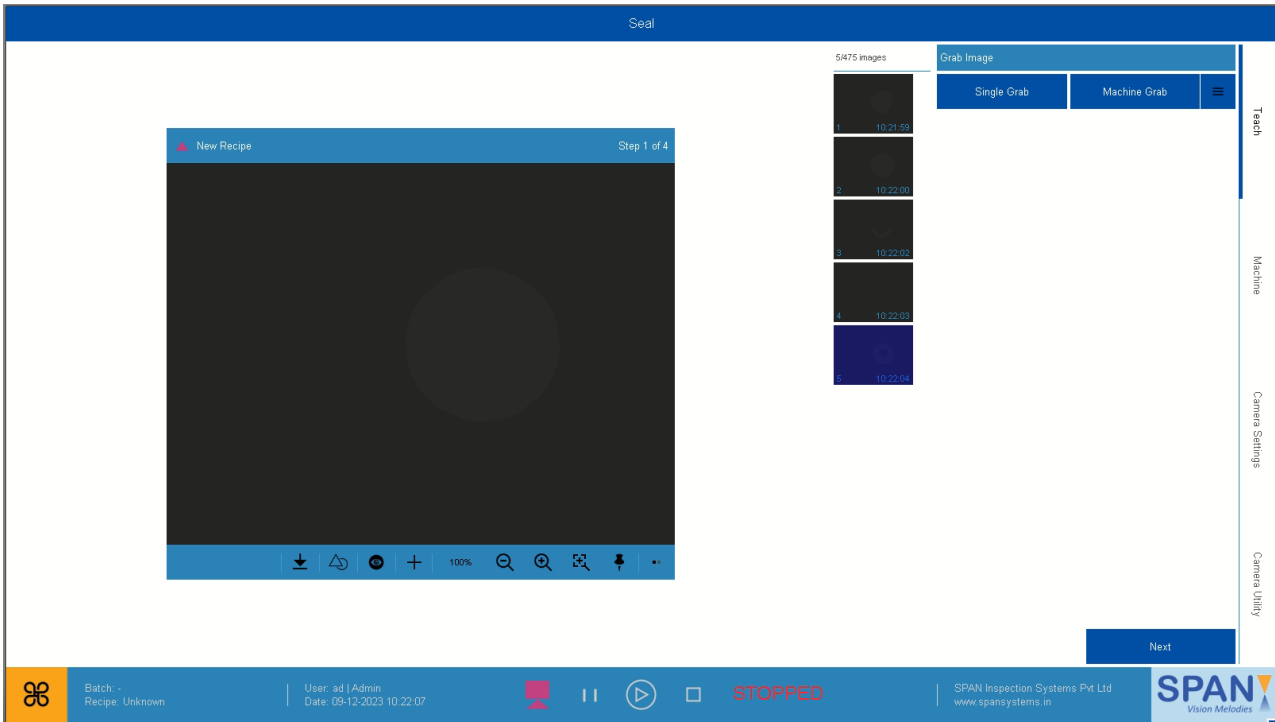
- Click on the Next button to navigate to the next page.

- Click on the Toggle button and switch to toggle 2.

System Name: Sealbeat System
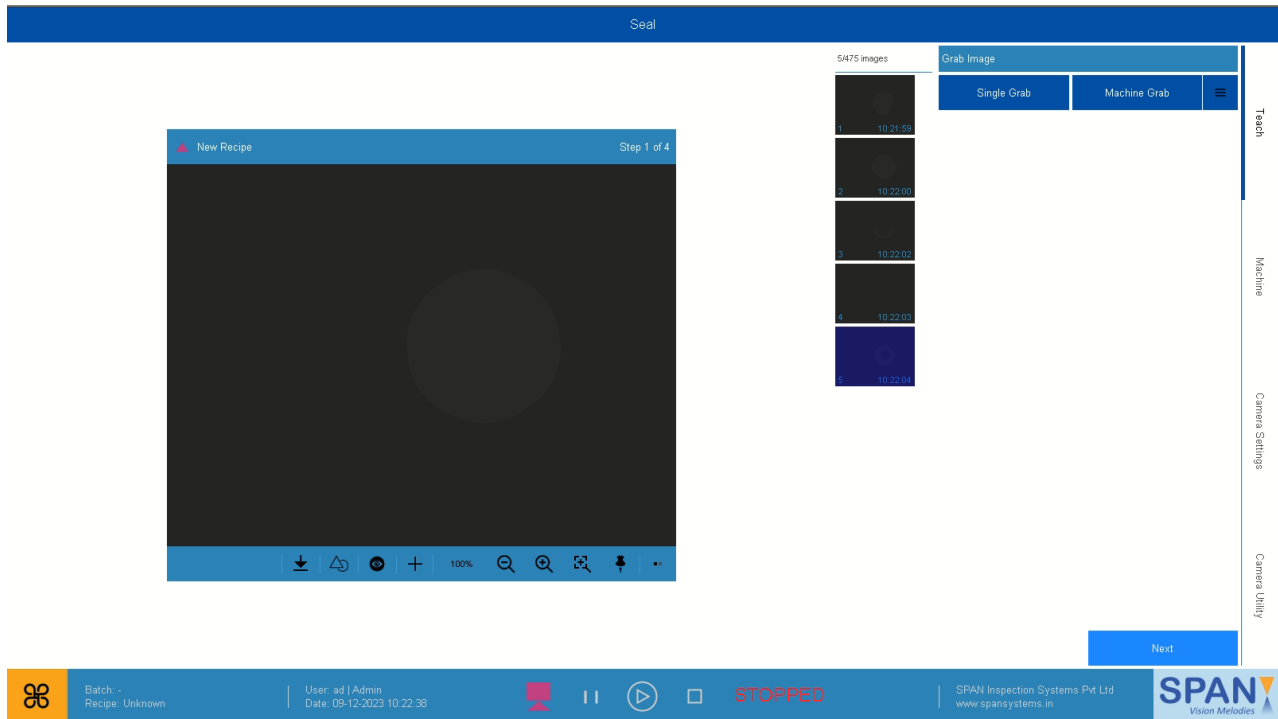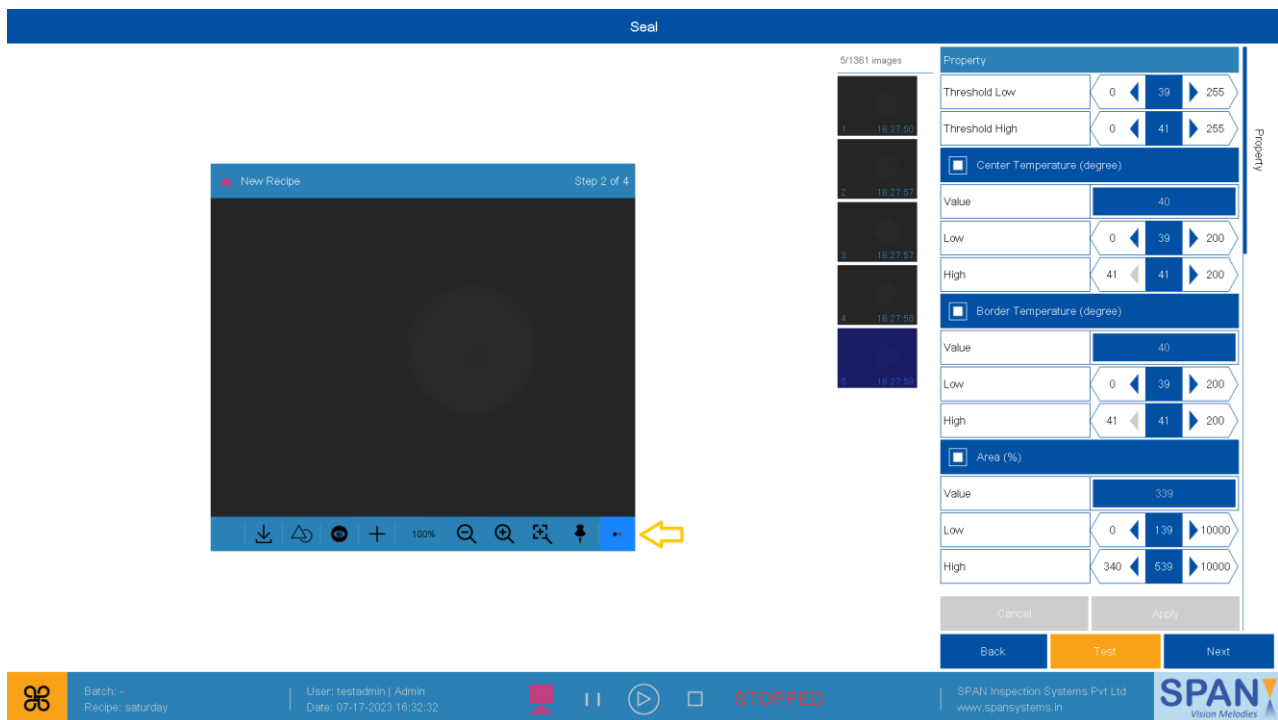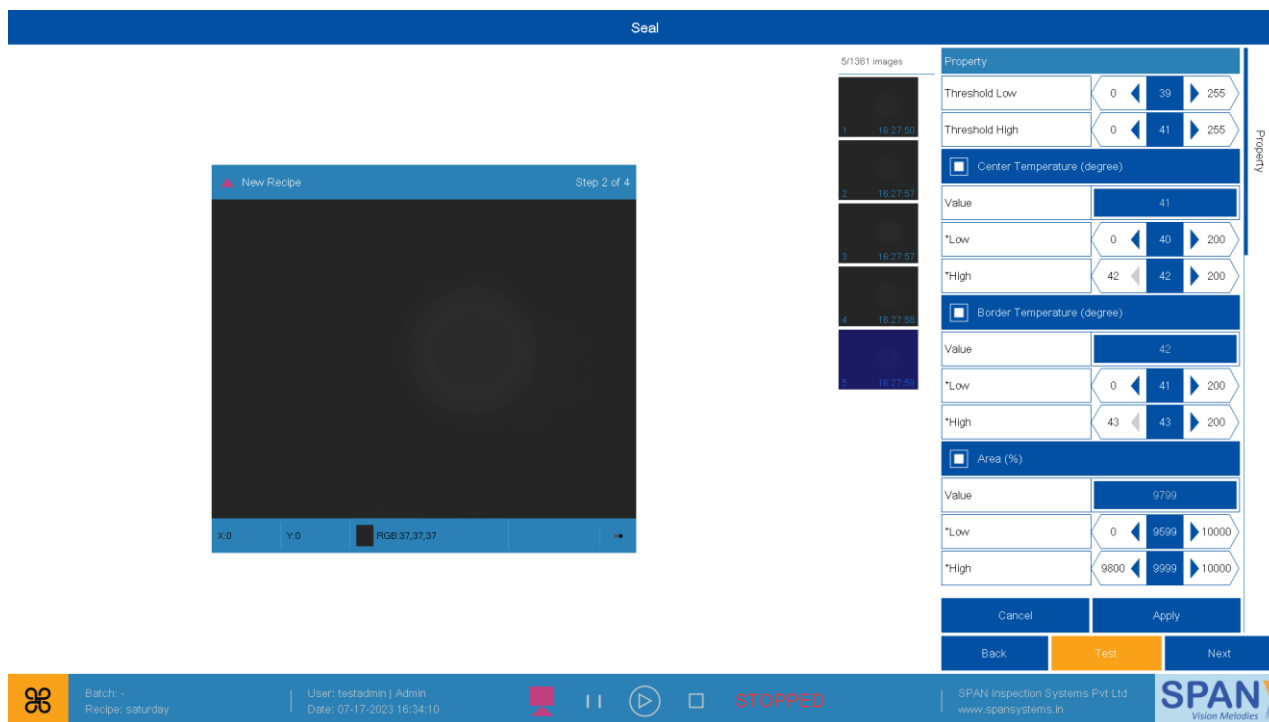Customer: Ajanta Pharma.
Document No: Sealbeat User Manual

Model No: Sealbeat
Manufacturer: SPAN Inspection Systems Pvt. Ltd.

• Click on the tip of the bottle cap and remember the RGB value.

System Name: Sealbeat System   Model No: Sealbeat
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Document No: Sealbeat User Manual
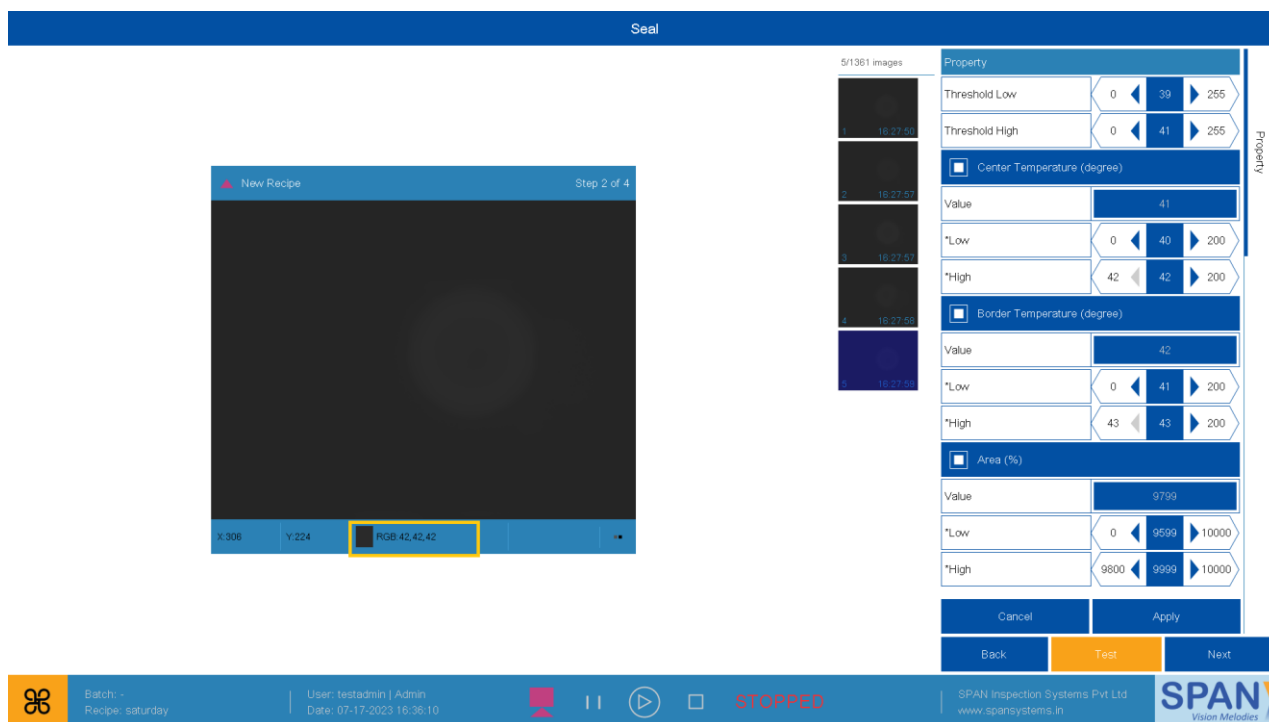
- Set the Threshold Low and Threshold High near the RGB value.
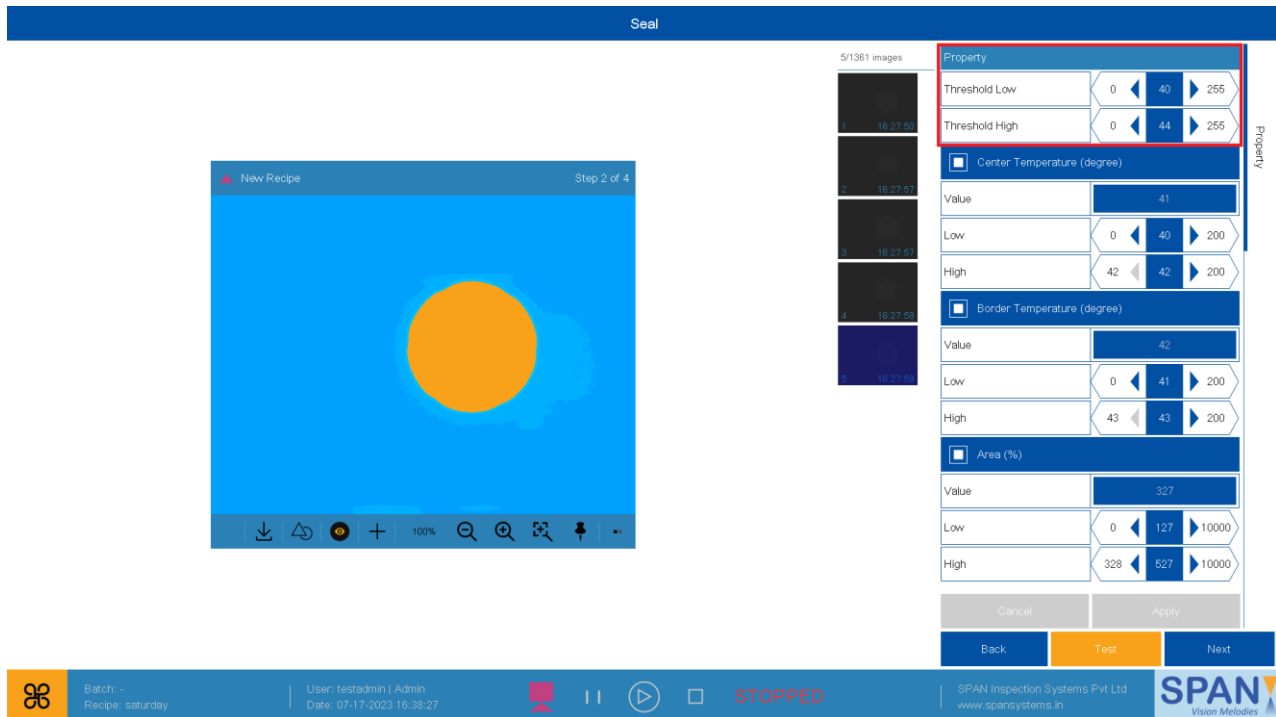
- Center Temperature(degree), Border Temperature(degree), and Area (%) will be set automatically according to the Threshold Low and Threshold High values set by the user.

- If required, User can set the values of Center Temperature(degree), Border Temperature(degree) and Area (%) Low and High value.
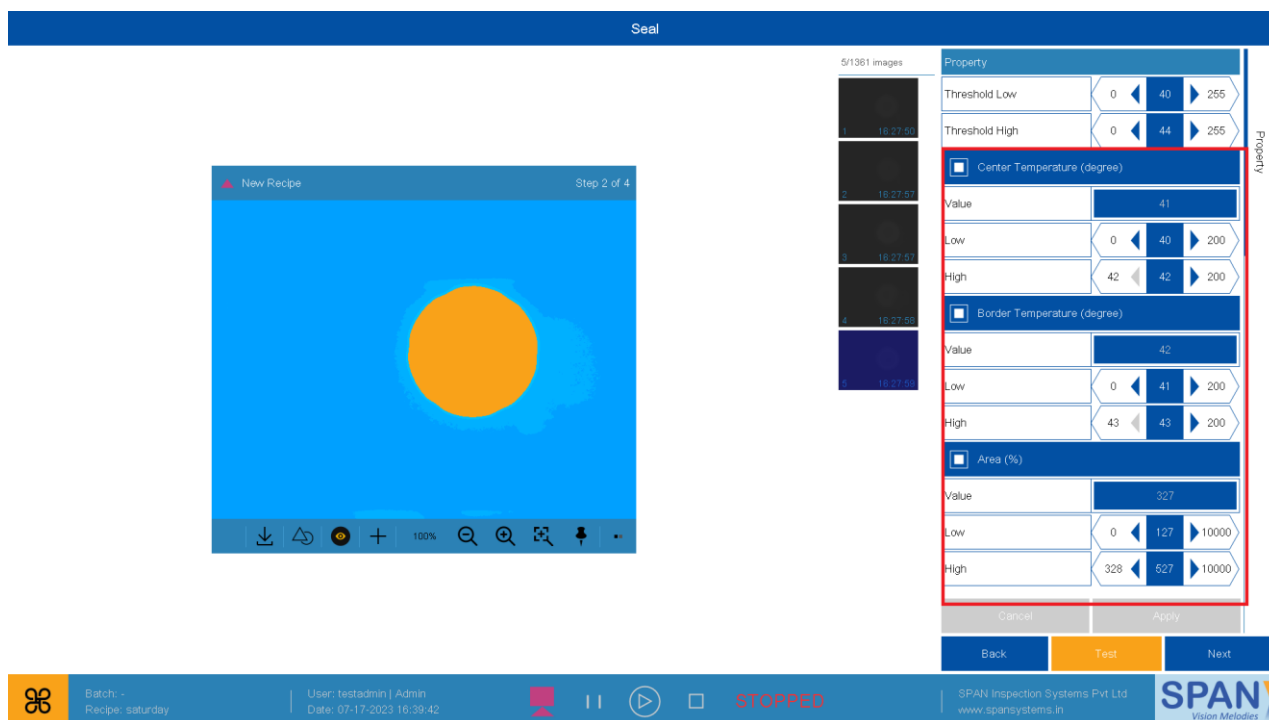
• For distance sensor click on start scan and release one good bottle which will go from under the heater, click on stop when it is out of the heater.

• The value of the distance sensor will be set automatically and based on its value the Low and High will be set automatically.

System Name: Sealbeat System
Customer: Ajanta Pharma.
Document No: Sealbeat User Manual

Model No: Sealbeat
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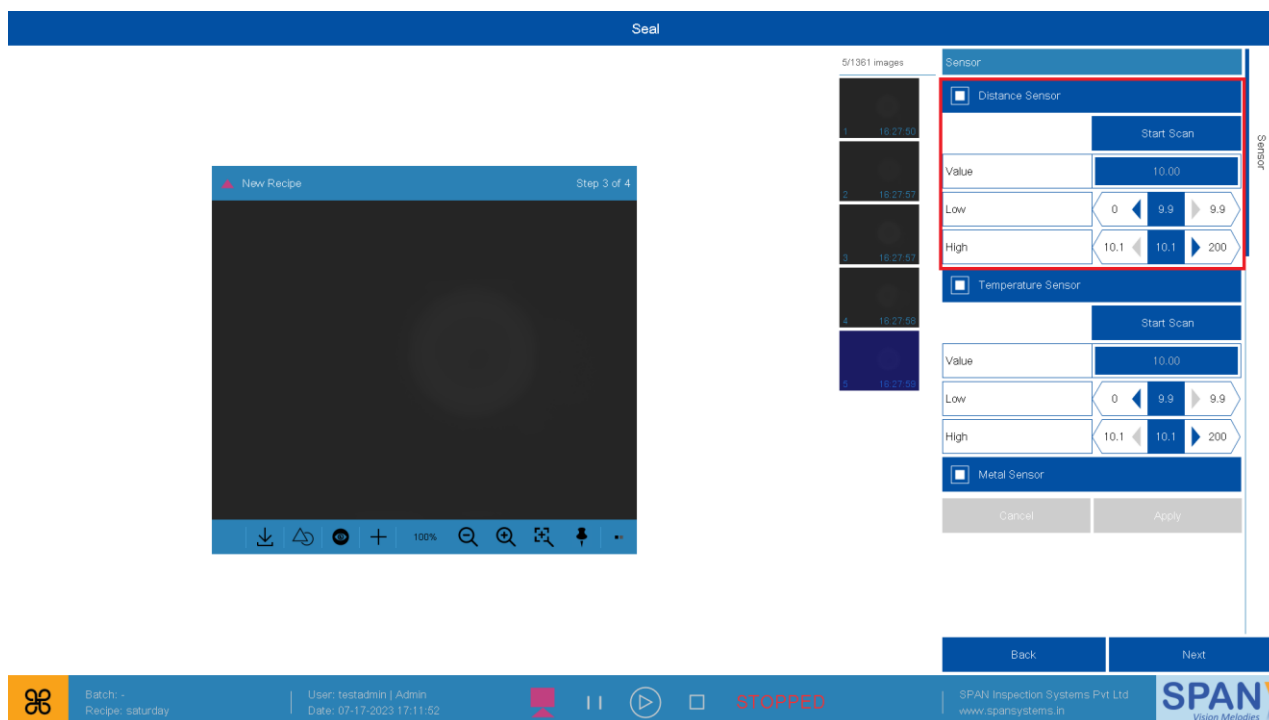
- For the Temperature sensor click on start scan and release one good bottle which is properly sealed and let it pass from under the temperature sensor.

- The value of the temperature sensor will be set automatically and based on its value the Low and High will be set automatically.

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Document No: Sealbeat User Manual

Model No: Sealbeat
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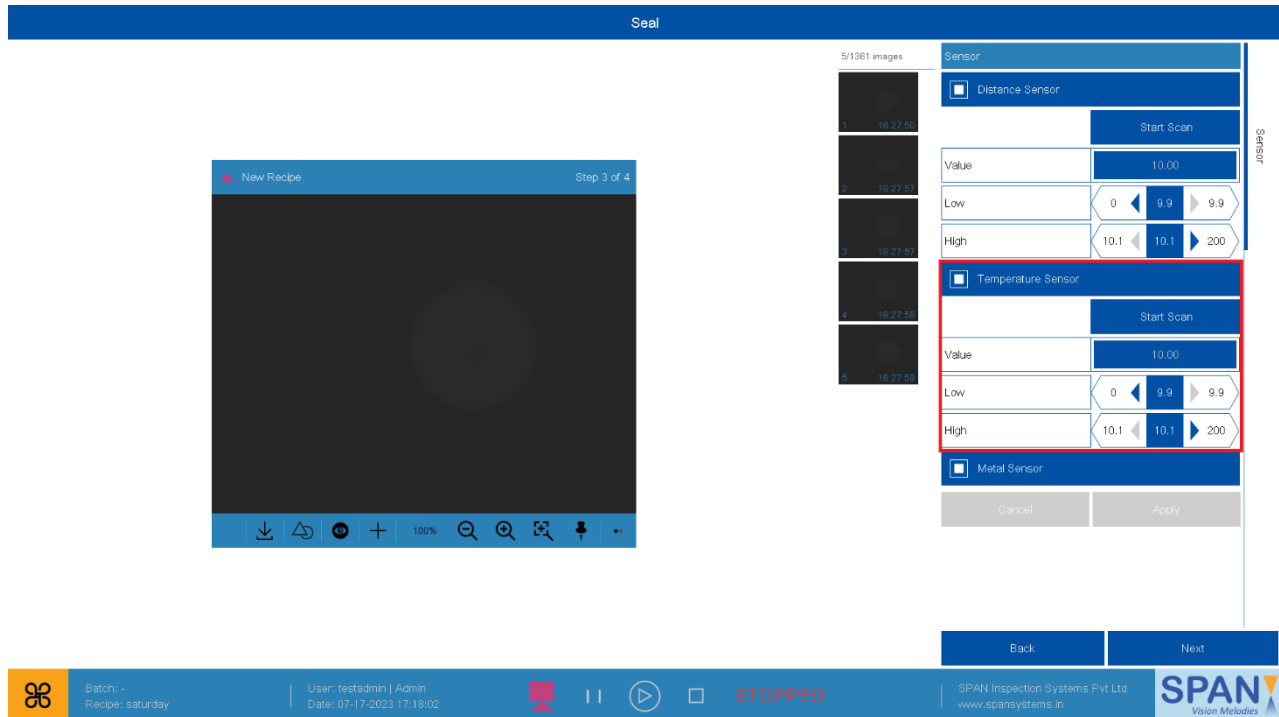
- Click on next button to navigate to the next page.

- Enter the recipe name and click on Finish.

System Name: Sealbeat System
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Document No: Sealbeat User Manual

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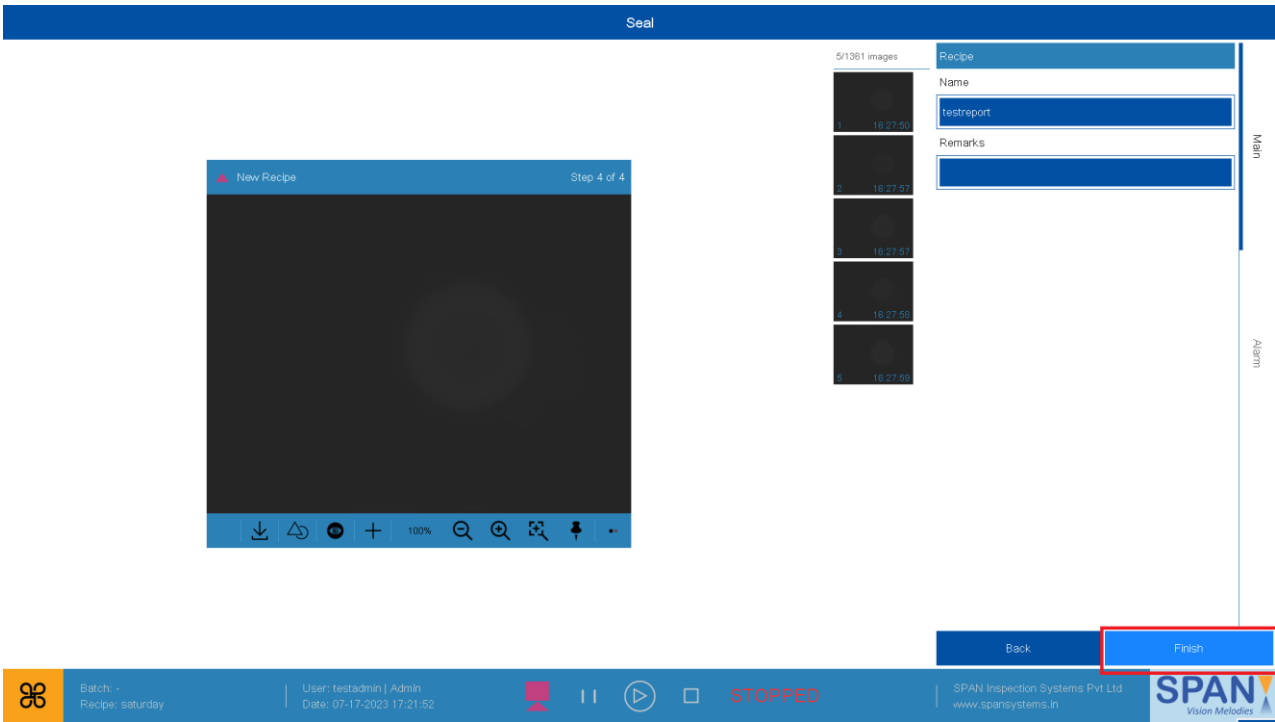
Challenge Test

1) Good product:

2) Cut seal :

System Name: Sealbeat System
Customer: Ajanta Pharma.
Document No: Sealbeat User Manual

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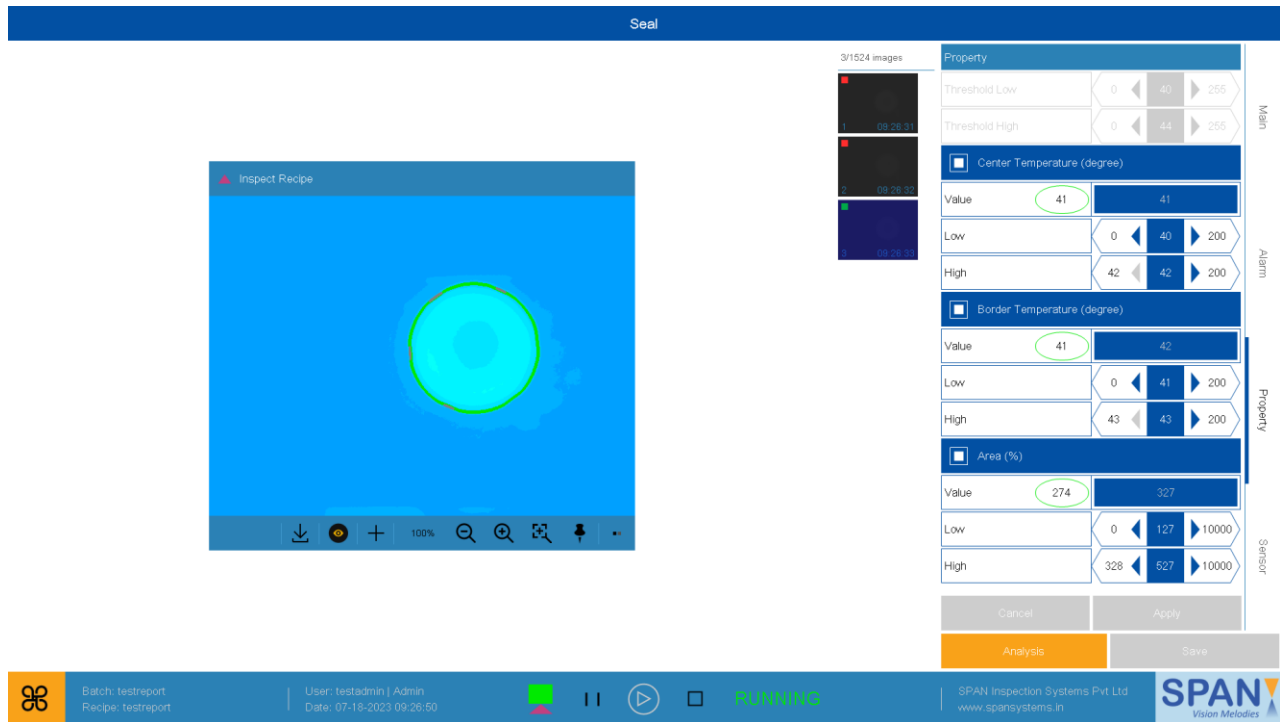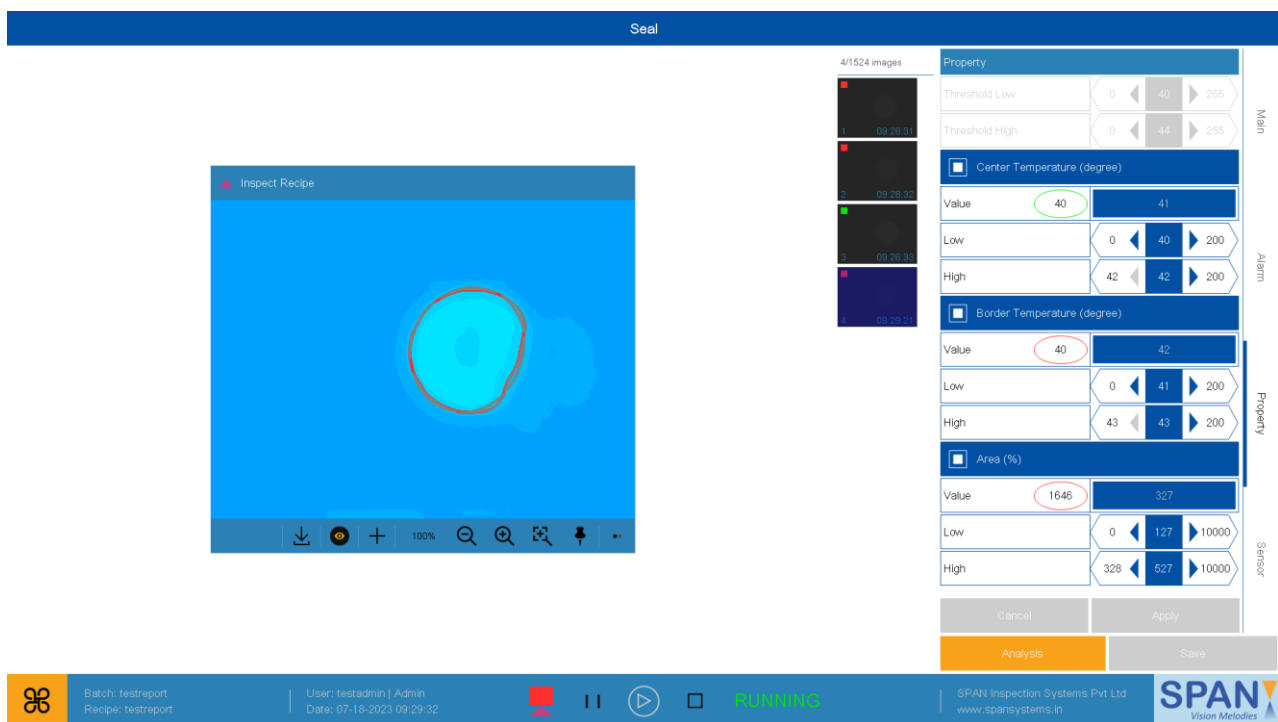
3) Underheated :

4) Overheated :

System Name: Sealbeat System
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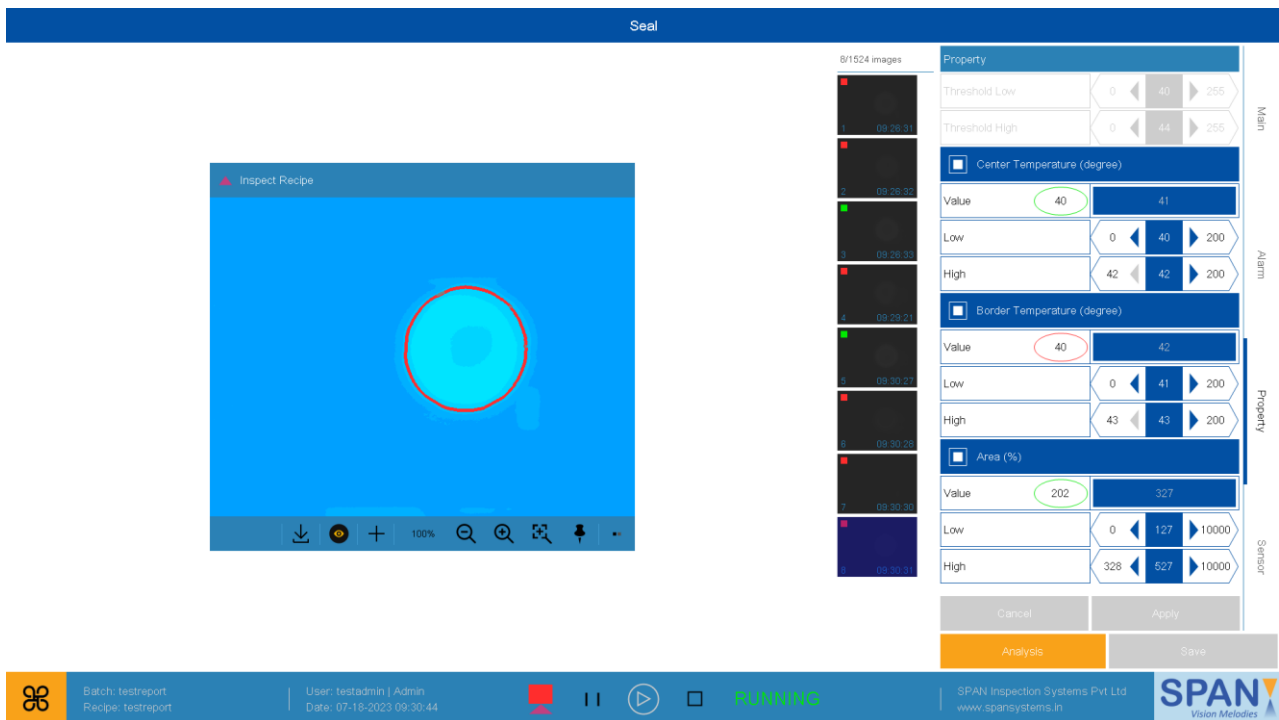
Model No: Sealbeat
Manufacturer: SPAN Inspection Systems Pvt. Ltd.
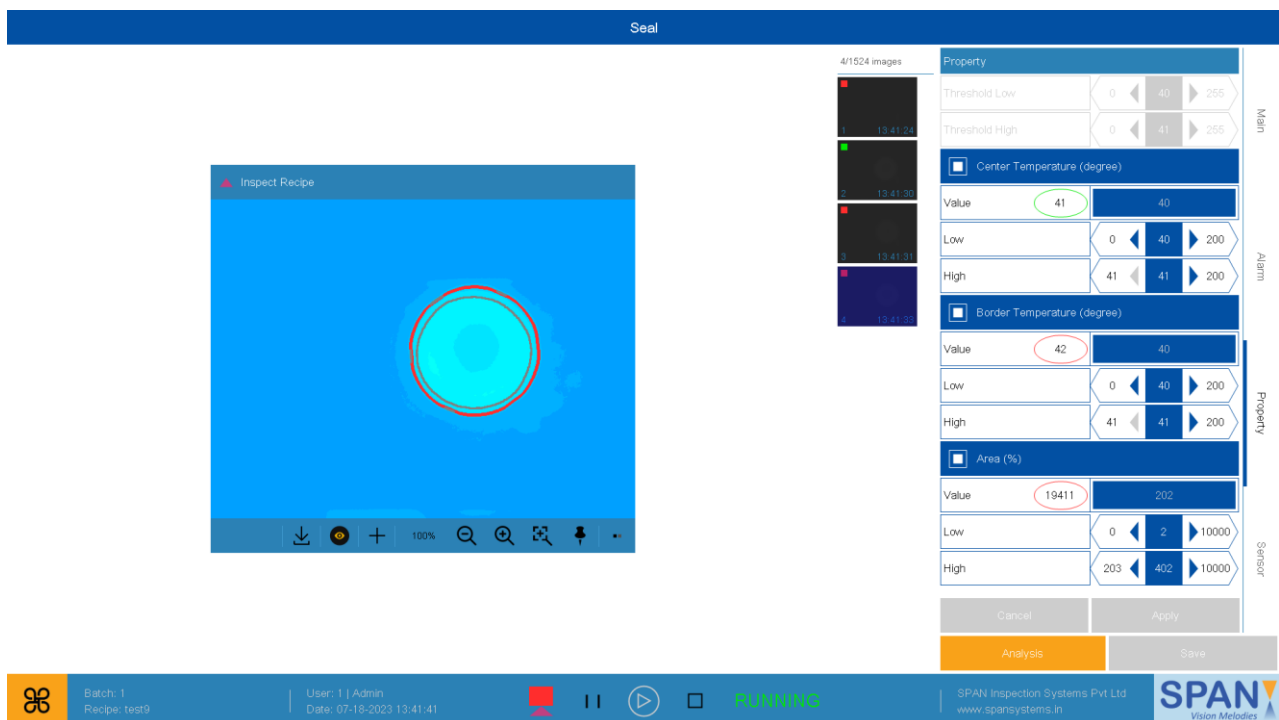
LIST OF ALARMS

Sr. No.	Alarm Code	Alarm Message	Cause	Effect	Method To Generate	Corrective Action
1	ALM0001	(001) EMERGENCY STOP SWITCH PRESSED	Emergency switch activated.	Machine stops instantly.	Press the Emergency push button and confirm machine does not operate in RUN / JOG mode.	1. Check all the Emergency stop switches released. 2. Check the connection of all Emergency stop switches as per the Electrical drawing.
3	ALM00004	(004) INSUFFICIENT COMPRESSED AIR	Insufficient compressed air.	Machine stops normally.	Reduce the air pressure below 5 bar.	1. Set the Inlet pressure specified in Operation Manual. 2. Check proper connection of pressure switch. 3. Replace the pressure switch.
6	ALM00091	(091) REJECTION CONFIRMATION FAIL	If rejected pack is not sensed by rejection confirmation sensor after pack rejection.	Machine stops normally.	Remove the pack that going for rejection before rejection or remove the pipe of rejection.	1. Check whether the air pressure is proper. 2. Check for the proper connection of rejection valve.

SPAN STANDARD ALARMS

1	UNABLE TO CONNECT WITH SPAN IO CONTROLLER	Communication between the camera I/O controller and IPC is lost.	Machine stops normally.	Remove the Communication cable between Camera I/O controller & IPC and check the alarm.
2	(PNC) GOOD PRODUCTION LIMIT REACHED	Good Production limit Reached.	Machine stops normally.	Set Good Production Count limit on HMI.
3	CONSECUTIVE FAULT LIMIT REACHED	Consecutive Fault Limit Reached.	Machine stops normally.	Set Consecutive fault limit on HMI.