Lotem 800 - Troubleshooting

Problem: Unexposed areas on the plate near the Tail Gripper (Tail Margin)

Problem Description:

Plate exposure appears to proceed without problems. After unloading and processing, unexposed areas are discovered near the Tail Margin (the plate edge that was held by the Tail Gripper).

Error Message:

None

Machines Affected:

Lotem™ 800 (S-speed)

Lotem™ 800 (F-speed)

Lotem™ 800 Quantum

Lotem™ 800 Spectrum

Software Products and Versions:

N/A

Operating System:

N/A

Probable Causes:

- Defective plate edge
- Problematic plate size
- Loading Roller malfunction
- Debris in Tail Gripper
- Tail Gripper or Spoiler out of alignment
- Malfunctioning Drum vacuum holes
- Drum Vacuum and/or Vacuum Pump malfunction

Documentation Key

This document uses two graphic indicators, as follows:

- ✓ The check mark indicates items that need to be checked and/or verified.
  - ⇨ The arrow indicates an action that needs to be taken. Each action pertains to the item directly above it.

Note: If at any point in the troubleshooting procedure you feel that the problem has been resolved, you can either perform plate loading, or continue to the end of the procedure.

Before the Customer calls the Response Center

There are several troubleshooting steps that the customer should complete before calling the Response Center. These steps can prevent extensive down-time and expensive service calls by enabling the customer to solve problems independently. These steps are fully explained in the section titled, "Troubleshooting Procedure". Ideally, the customer will have completed these steps before calling the Response Center, and also, reviewed the following questions and written the answers down. Either way, it is mandatory that you review the following questions with the customer, and verify whether the troubleshooting procedure was properly performed.

1) Have the customer keep any processed plates.
2) Ask the customer the following questions:
   - ✓ When was the last time the machine worked properly?
   - ✓ What was done since then? For example,
     - Was the machine moved?
     - Was the machine cleaned?
     - Was a new batch or type of plates used?
     - Did plate fly-off occur (did the plate detach from the Drum during loading)?

       Note: Plate fly-off can cause one or more of the Loading Rollers to detach. See step 7 for details about checking the Loading Roller.
   - ✓ Was an error message displayed on screen? If yes, what did it say (include numbers, if any).
   - ✓ What is the software version?
     - ⇨ In the PC Controller, select **Utilities > Machine Info**. The version is displayed.
   - ✓ Does the problem happen all the time (with all plates), or just some of the time? For example,
     - With a particular plate brand, type and/or size?
     - Does the problem seem to be a random occurrence?
   - ✓ What are the temperature and humidity levels in the plate storage room?

- ✓ What is the wall air pressure level? Check the gauge on the wall unit and verify that the level is not less than 6 bar, and that it is constant. If it is not:
  - ⇨ Contact the person who is responsible for this type of maintenance in your building. If the problem cannot be resolved:
    - ⇨ Repair or replace the Air Filter System, as required (TechPlanet).

Troubleshooting Procedure

1) Inspect the processed plate(s). Look for:
   - ✓ Defective plate edge: May indicate manufacturer's defect, or damage that was caused to the plate during handling. If found:
     - ⇨ Load new, undamaged plates. If the problem persists, proceed to the next step.
   - ✓ Bent corners: May indicate use of a problematic plate size. This may cause the Tail Grippers to hit and bend the corner(s) of the plate during loading. The plate edge may also partially extend over the Drum Vacuum Groove during loading. If found:
     - ⇨ Check and make note of the plate size.

       Note: Measure the plate using a ruler or tape measure.
       - ⇨ Proceed to either step 3 and/or step 6.
2) Check the Cassette. Verify that:
   - ✓ Plates are properly loaded and positioned in the Cassette. If they are not:
     - ⇨ Have the customer load plates into the Cassette and provide instructions as to the proper procedure.
3) Use a spirit level to verify that the machine is properly leveled. If it is not:
   - ⇨ Have the customer use a spirit level to check machine leveling, and provide instructions as to the proper method, as required. If the machine is not level, perform machine leveling (TechPlanet).
4) Open the Rear Door and, from the rear of the machine, manually turn the Drum until the Tail Gripper is accessible. Manually move the Tail Gripper to the pre-load position (as shown in the label on the upper panel of the machine—this enables you to thoroughly inspect the drum). Verify that:
   - ✓ The Drum is clean. Refer to the User Guide for details. If it is not clean:
     - ⇨ Clean the Drum using a lint-free cloth.

5) Inspect each Tail Gripper, especially underneath the Spoiler. Look for:
   - ✓ Debris, dirt and/or plate ablation. If found:
     - ⇨ Clean each Tail Gripper and the Spoiler, as follows, and instruct the customer as to the proper procedure while you are working.
       - Open each Tail Gripper by pressing the V-groove on each one.
       - Remove any dirt and/or debris by passing a piece of plate back and forth under each Tail Gripper and the Spoiler, as required.

       Note: Be sure to wear protective gloves when handling the piece of plate.
6) Check the date on which the Drum vacuum holes were last cleaned, and to what depth. Inspect the vacuum holes. Look for:
   - ✓ Debris or dirt: This indicates that Preventive Maintenance is not being properly and/or regularly performed. If found:
     - ⇨ Clean the Drum vacuum holes and instruct the customer as to the proper procedure while you are working. Explain the importance of cleaning the vacuum holes properly (to a depth of 1 inch) and regularly.
7) Inspect the Loading Rollers (especially if the customer reported that plate fly-off had occurred), as follows:
   - Open the Right or Left Side Door.
   - Remove the upper panel.
   - Remove the unloading tray.
   - Shine a flashlight on the Loading Rollers and using your hand, verify that:
     - ✓ All rollers and springs are in place, and are not damaged or worn out. If not in place, or if damaged or worn out:
       - ⇨ Replace rollers and/or springs, as required (TechPlanet).

8) Leave the doors open and, using a cheater, perform plate loading using undamaged plates (inspect the plates before loading them into the Cassette). Be sure that there is no emulsion on the plate edges, and that they are not damaged or too cold to use due to poor storage conditions. Using the Ask Before Do function, visually follow the plate as it progresses through the machine. Verify that:

   ✓ The loading sequence is smooth and correct, and that the plate does not hit, and is not hit by, any machine parts as it progresses. If use of a problematic plate size was identified in step 1 in the section titled, "Troubleshooting Procedure", the Tail Grippers may hit and bend the plate corner(s), but the plate might still progress through the machine. If this happens:

      ⇨ Contact your Product Support Specialist (PSS). Also:

      ✓ Open the Right or Left door of the machine, and, using a flashlight, verify that the Loading Roller presses the plate against the drum in a manner that enables the Tail Edge to be grasped by the Tail Gripper. In addition:

         ✓ Inspect the Tail Gripper. Verify that, just before it closes on the Tail Edge of the plate, the distance between the plate edge and the Drum is not too large (approximately 1 or 2 mm). If it is too large:

            ⇨ Loosen the three securing screws on the right and left of the Loading Roller Assembly, manually move the Loading Roller Assembly slightly closer to the Drum, and tighten the securing screws. Then, perform plate loading again.

   ✓ The plate is properly positioned and secured on the Drum. If it is not:

      ✓ Visually inspect the Drum for additional holes that may have been drilled to accommodate large plates. These holes may have rough edges, and are usually found next to, and in line with, the original drum holes on the far right and left of the Drum. If additional holes are found:

         ⇨ Seal the holes with epoxy.

         Note: You can ask the customer if additional holes were drilled, and/or check the machine's service record.

      ✓ Verify that the Drum vacuum level is correct: Check the vacuum level using a vacuum gauge (TechPlanet). If it is not:

         ✓ Inspect the Drum vacuum tubes for kinks or damage. If found:

            ⇨ Straighten kinked tubes, and/or replace damaged tubes, as required. If the problem persists:

         ✓ Check the Drum Vacuum Swivel Unit. Verify that the vacuum hose is white. If it is not:

            ⇨ Install the new Drum Vacuum Swivel Unit vacuum hose, FCO # 27488B (TechPlanet).

- ✓ Verify that the white vacuum hose is securely attached to the Drum Vacuum Swivel Unit, the band is tightly closed and there is no leakage. If leakage is found:
  - ⇨ Tighten the vacuum hose securing band. If leakage persists:
- ✓ Inspect the vacuum hose for leaks. If found:
  - ⇨ Replace the vacuum hose. If the problem persists:
- ✓ Check for leakage where the Swivel Unit attaches to the Drum. If leakage is found:
  - ⇨ Perform Preventive Maintenance (TechPlanet). If the problem persists:
  - ⇨ Replace the Drum Vacuum Pump. If leakage persists:
  - ⇨ Contact the PSS.

✓ Verify that the Tail Spoiler is properly installed and adjusted, as follows:

- ✓ Use a feeler gauge to measure the distance between the Tail Spoiler and the Drum. It should measure 0.05 mm. If it is not correct:
  - ⇨ Adjust the Tail Spoiler, as required (TechPlanet).
- ✓ Gently jiggle the Tail Spoiler and verify that it is not fixed in place. If it does not move:
  - ⇨ Adjust the threadless screws to enable a small amount of play.

✓ Verify that the plate edge does not partially cover the Drum Vacuum Channel. This may happen when a problematic plate size is being used. If the plate edge completely covers the vacuum channel, or does not extend over it at all, it is okay. If the plate partially covers the vacuum channel:

⇨ Seal the vacuum channel.

Note: If the customer uses large plates, verify that this will not cause problems.

Before You Leave

Before leaving the customer's site, complete the following:

1) Have the customer expose several plates of different sizes (at least three), and verify that the problem is resolved. If the problem persists:

   ⇨ Contact the PSS.

   Note: This is a very important cost-saving step that can prevent you from having to make repeat service calls to take care of the same problem.

2) Verify whether the customer is responsible for performing Preventive Maintenance procedures on the machine, or Creo is responsible.

   ✓ If the customer is responsible:

   ⇨ Verify that Preventive Maintenance is being performed properly and regularly. Remind the customer of the importance of performing the Preventive Maintenance procedures properly and regularly, and provide instructions, as required.

   ✓ If Creo is responsible:

   ⇨ Verify the service record, and either:

   - Perform Preventive Maintenance procedures, as required, or:
   - Schedule a service visit, or:
   - Alert the service department so that they can contact the customer and schedule the service visit.

   Note: Inform the customer as to the action taken.

See Also

Suggested Keywords

Tail Gripper

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