OMRON
MICROSCAN

LVS® RIMS and Quality Control Process

Operations Manual

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GS1 Solution Partner

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Important Safety Instructions

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying this unit.

This unit has been carefully designed to provide years of safe, reliable performance. However, as with all electrical equipment, there are some basic precautions that you should follow to avoid personal injury or damage to the system:

- Before using the system, carefully read all the installation and operating instructions.
- Observe all warning instruction labels on the system.
- To protect your system from overheating, make sure no openings on the system are blocked.
- Never insert anything into the openings of the system.
- Do not use the system near water or spill liquid into it.
- All components used to create your system are UL and CE approved. All circuits were designed to incorporate maximum safety. However, any equipment using electrical voltages may cause personal injury if improperly handled.
- Do not attempt to work on the system with the main power lines connected.
- Ensure that the AC power source matches the ratings listed for the system. If unsure, check with your dealer or local utility provider.
- Do not place the AC power cord where it can be stepped on. If the AC power cord becomes damaged or frayed, replace it immediately.
- Avoid looking directly into any system lights. If you need to examine the lights, or look at any component near the lights, be sure to first turn off the lights. If the lights cannot be turned off, then wear polarized sunglasses while examining the lights.
- To avoid damaging the system, turn off and unplug the system before cleaning.
- If the system ever needs repair, consult Omron Microscan or your Omron Microscan Distributor.

LVS-RIMS and QC Overview

The LVS Roll Inspection Mapping System (RIMS) is designed for post press operation and allows the operator to perform the following functions:

- Produce an entire job, including multiple roll run of labels
- Track every error on the job
- Determine at the end of the run if the quality labels meet the job expectations and then run error changes
- Splice and roll fix in an off-line operation (rewind/slitter device)

Additional features include:

- Digitally Store All Errors
- Accept or Reject Errors
- Add Operator Notes
- Full Audit Trail/Password Protected
- 21 CFR Part 11-Compliant Ready
- Eliminate Manual Flagging, Inkjet Marks, Strobe Lights and other methods of marking and finding print defects

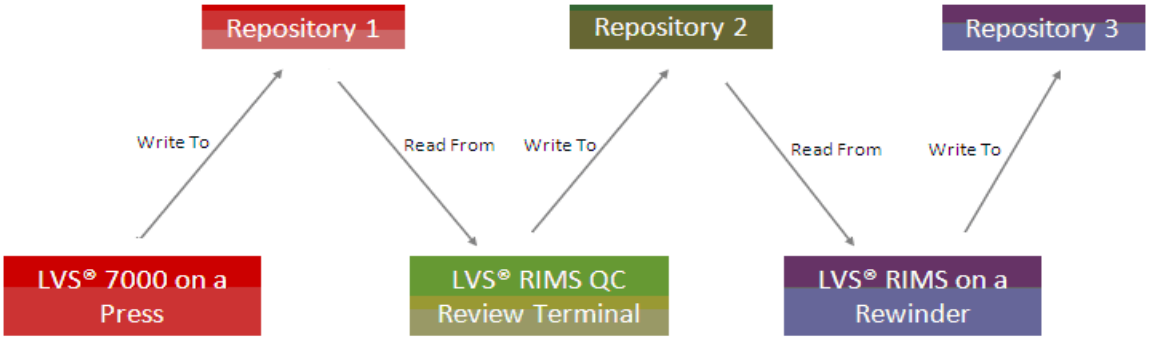
Operation is simple; the standard LVS-7000is mounted to the press for print production and a tracking unit is installed on each of the rewind units. Simply set the unique job name for each roll produced and print the labels. The LVS-7000 tracks all errors (by electronic flagging) and records them for later review by LVS-RIMS. The illustration on the next page shows the workflow of a job's log file from the LVS-7000 to the Quality Control Terminal and again to the LVS-RIMS system.

Process Overview

First, the LVS-7000 Vision System starts the process by checking labels on the Rewinder. The labels are then logged and stored locally in the LVS-7000's Job folder.

Next, the LVS-RIMS Quality Control Review Process program is used to edit the log file as necessary and saves the changes to the Quality Control Job folder.

Lastly, the LVS-RIMS program can be run to stop the labels at the Rewinder splice table when an error occurs.

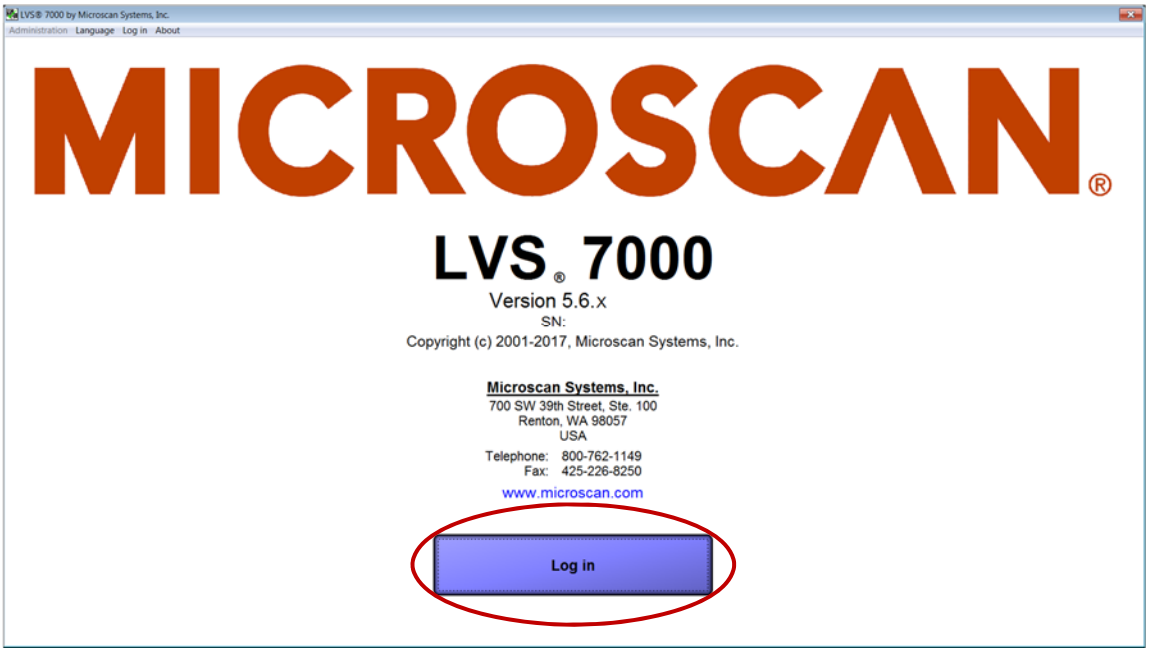


Configurations

CONFIGURATION	DESCRIPTION
LVS-RIMS (Rewinder Only System)	The LVS-7000 and LVS-RIMS are placed on the same Rewinder and the software is also stored on the same computer. The Quality Control software can be installed on the computer as well or on a remote system.
LVS-RIMS Plus (Press and Rewinder System)	The LVS-7000 is on a separate system from LVS-RIMS. The LVS-7000 is usually placed on a Press and LVS-RIMS is positioned on a Rewinder. Both programs are run on separate computers that are networked together to share data. The Quality Control software can be installed on its own computer or on another workstation if desired.
LVS-RIMS QC Review Process	The files identified on the LVS-7000 can be reviewed by the QC function to evaluate error conditions and determine if they are acceptable or need action in the final rewind/inspection operation; this can be in multiple locations for use by the QC/QA Personnel, Plant Manager, Shift Manager, and/or any others at remote locations from the press or rewind units.

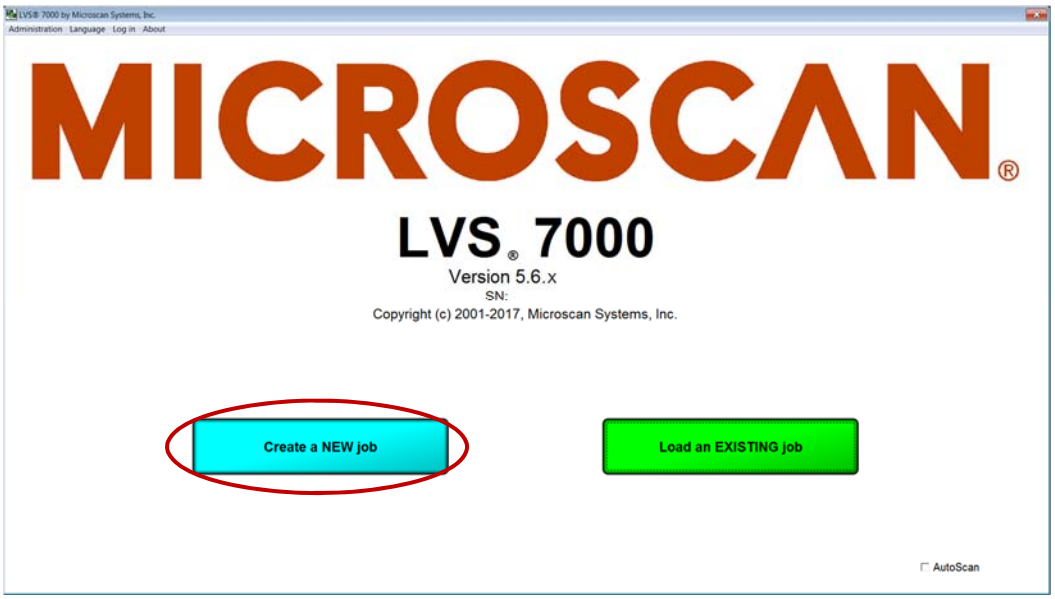
LVS-7000 Operating Instructions

1. Start the LVS-7000 software. The “Welcome” screen appears.



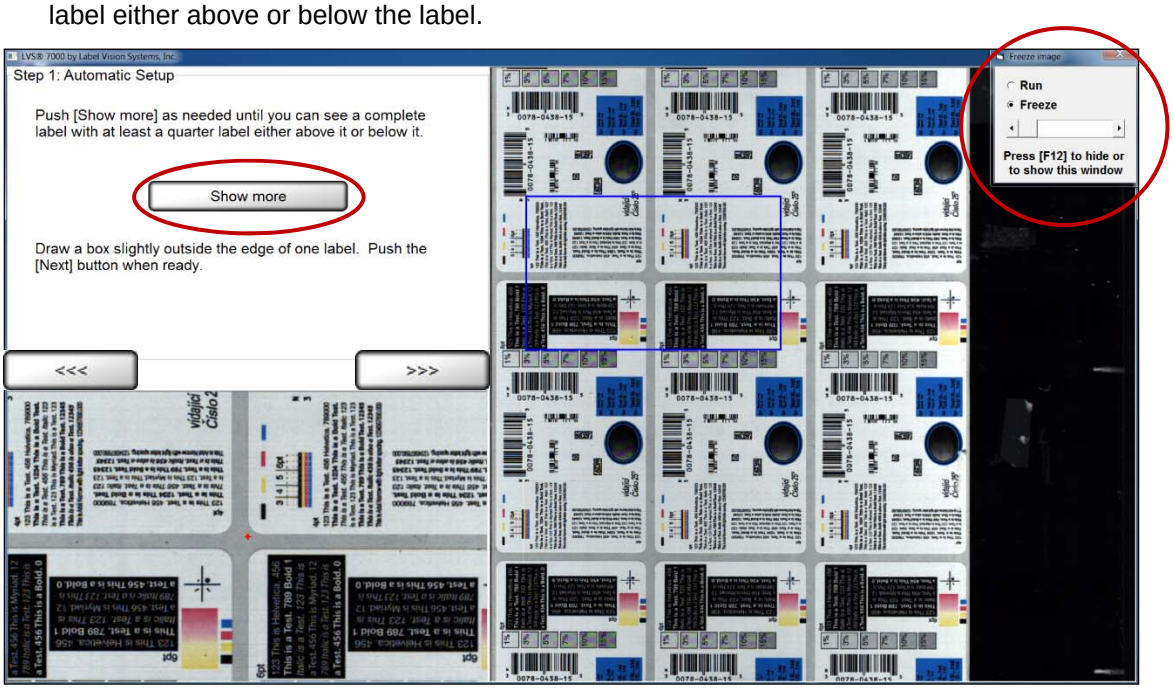
2. Click the **Log In** button and enter the **Operator ID** and **Password**. Click **OK**.

3. Click the **“Create a NEW job”** button.
   - If loading an existing job, click the **“Load an Existing Job”** button and refer to the “Load an Existing Job” section in the “LVS-7000 Operations Manual.”



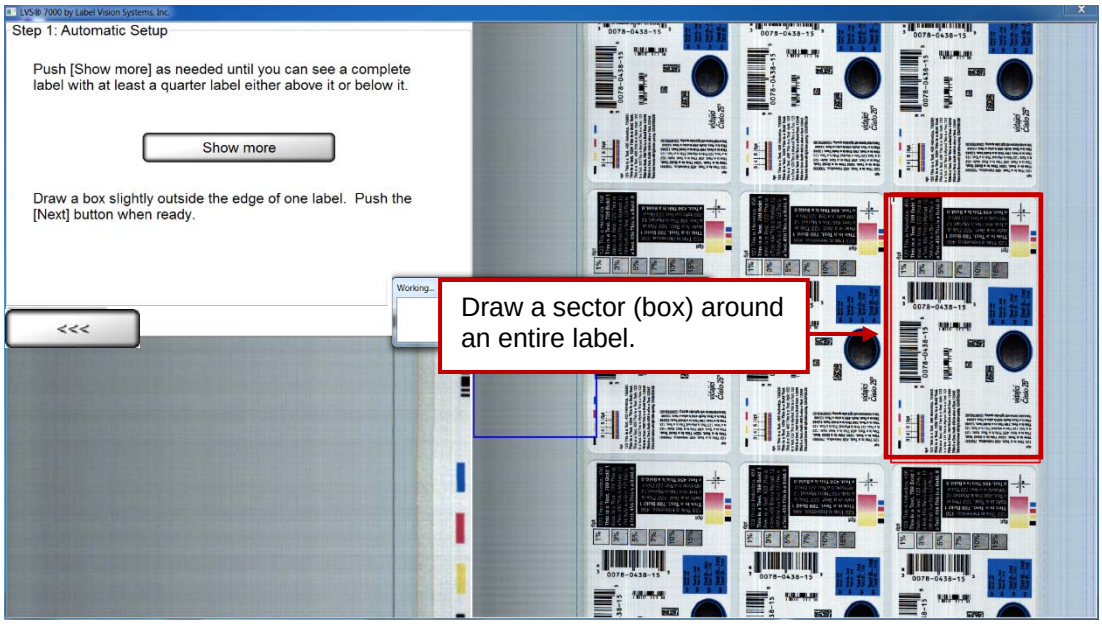
4. Select **Yes** when asked, "Do you want to use the automatic setup feature?"
5. Run the web and stop when reaching the desired label(s). Pressing the F12 keyboard button allows you to run or freeze images (see below).

   Note: Click the **"Show more"** button until you can see a complete label with at least a quarter label either above or below the label.

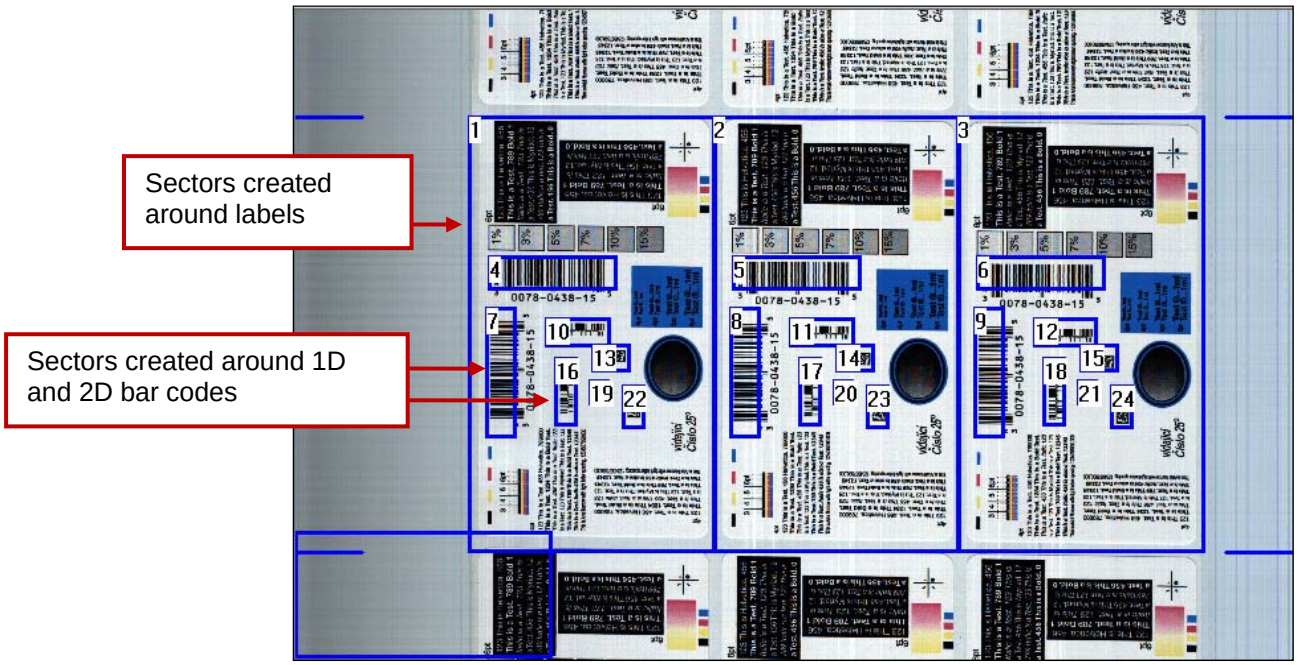


6. Draw a sector slightly outside the edge of an entire label and then click the **right arrow** button. A "Working" message appears indicating the system is analyzing the label.

   Tip: A sector is drawn by clicking on one corner of the label with your mouse, and then dragging the mouse to opposite corner of the label. A red box will appear around the drawn sector (see below).

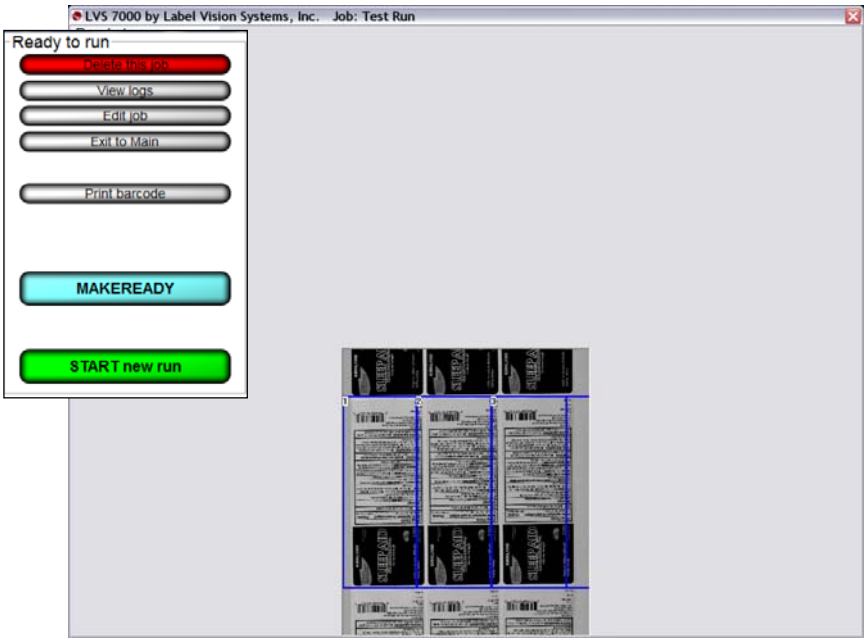


7. The LVS-7000 automatically detects and creates blemish sectors around any other labels across the web, and also detects and creates sectors around any 1D or 2D bar codes in each label (see below).



8. A job name is automatically entered in the **"Job name"** field. You may change the job name if desired.
9. *Optional:* Enter a job description in the **Description** field.

10. *Optional:* Click **Job Report** to view, print or save the Job Report, which shows the settings for all created sectors.
11. Click the **right arrow** button. The "Ready to Run" screen appears (see below).



12. Choose one of the following options:

- Click the **"MakeReady"** button to simulate how inspections will perform and how the job created with will work in a live setting. Make Ready operates exactly as if the system were running normally with the exception that no data is stored and no I/O is triggered. Refer to the "Make Ready Mode" section in the "LVS-7000 Operations Manual" for more information.

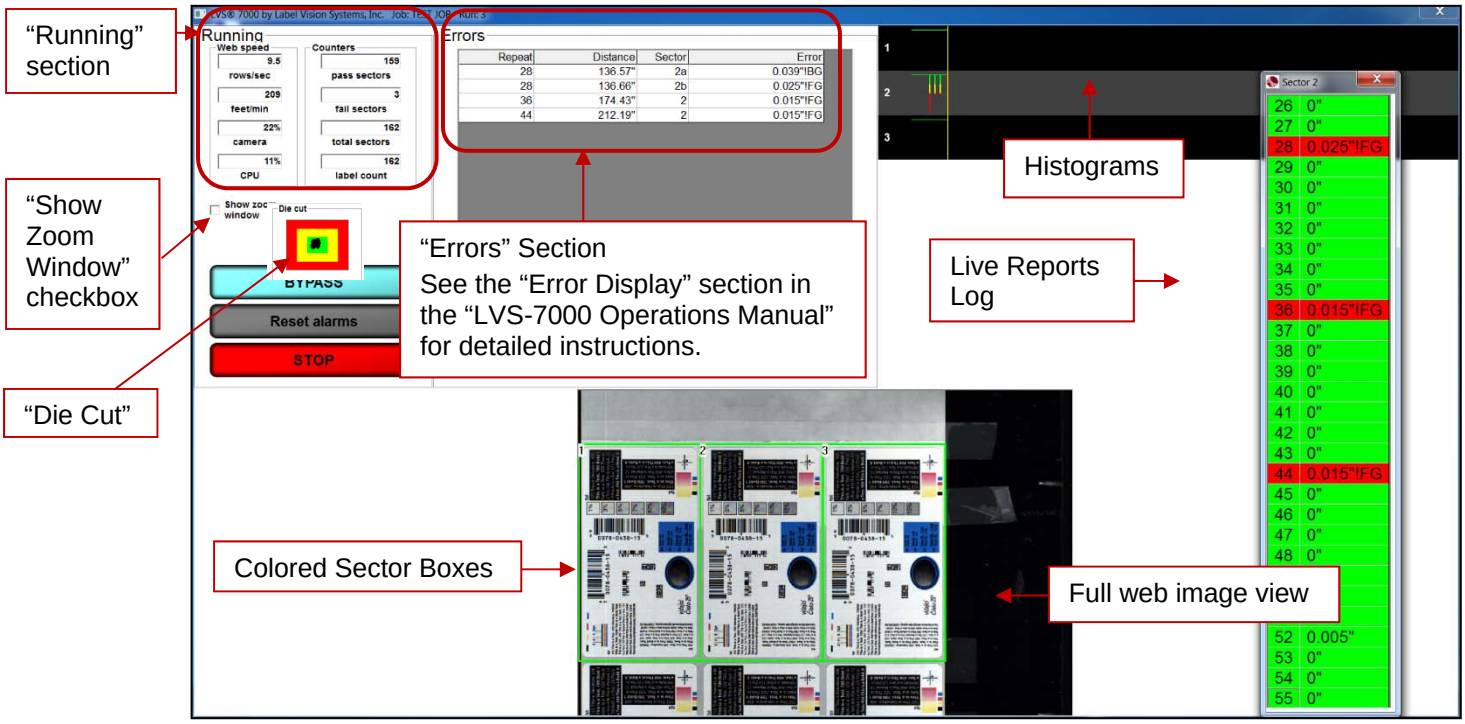
- Click the **"Start New Run"** button to begin a new run and new CSV file.

Additional options include:

Button	Description
Delete this Job	Click to delete the job. Only operators granted the "**Allow Create NEW Job"** permission is allowed to delete a job.
View Logs	A Report Log is created for every job. Click this button to view all previous reports.
Edit Job	Click to change the current job settings. If a password was used, you must enter the correct password for the job. Only operators who are granted the "**Allow Create NEW Job"** permission is allowed to edit a job.

Exit to Main	Click to change to a previously setup job; this will bring you back to the Welcome Screen where you may select "**Load an Existing Job**."
Print Barcode	Click to print a barcode with an encoded location of the job file. See the "Press Steps" section below for more information on printing a barcode.

13. After clicking the **"Start New Run"** button, the **"Operate (Running the Job)"** screen appears; this screen is what you monitor at all times. Refer to the **"Operate Screen (Running the Job)"** section in the **"LVS-7000 Operations Manual"** for detailed information on this screen.



Press Steps

Perform the following steps in the exact order as listed below.

1. Press the “Stop” button on the LVS-7000 screen.
2. Stop the press **(The press must be stopped before following the remaining steps!)**
3. Click the “Print Barcode” button to print a barcode with an encoded location of the job file.

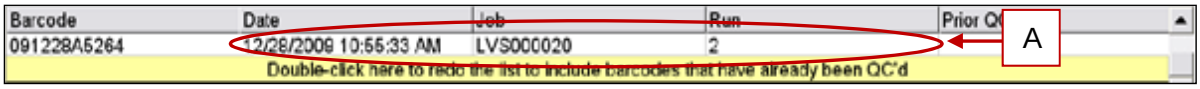
All labels must run from beginning to end with no interruption on the LVS-7000 for each roll.

4. Remove the barcode from the printer.
5. Affix the label on the web at the idler just past the light on the LVS camera system, as indicated by the LVS barcode arrow label (see right image).
6. Jog the web until the LVS barcode label affixed to the web has traveled into the take-up roll.
7. With the LVS barcode in the roll, remove any samples needed for your customer, ensuring that the LVS barcode label does not get removed from the roll **(all cuts MUST be after the LVS barcode has passed into the take-up roll)**.
8. Press the “Start” button on the LVS-7000 screen. Turn on the press.
9. At this time, the Log File can be reviewed by Quality Control. See the next section entitled “Quality Control Operating Steps” for steps on reviewing the Log File.

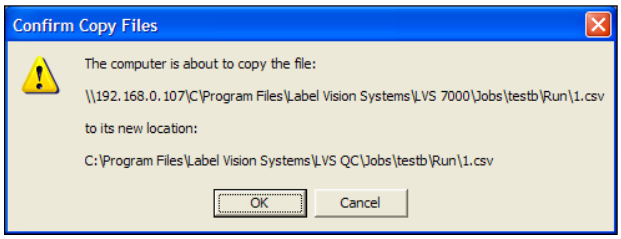
LVS® Bar Code Arrow Label

Quality Control Operating Instructions

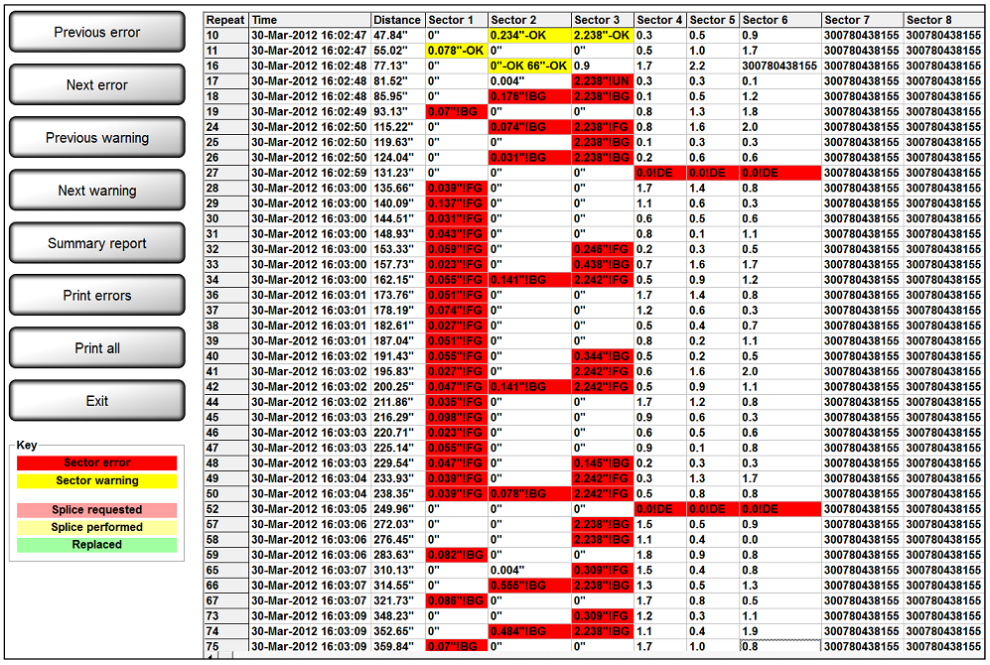
1. Double-click the “LVS QC” icon located on the computer designated as the Quality Control (QC) terminal. A screen appears that contains all jobs needing review by Quality Control (see below).



2. To review or overwrite barcodes that have already been Quality Controlled, double-click on the text below the table highlighted in yellow (see “A” above).
3. Double-click on a barcode and then enter your Operator ID and Password.
4. When the “Confirm Copy Files” message appears, click “OK.”



5. The CSV File Viewer page appears, which is a log of all the labels run on the system (see below). See the table on the next page for button descriptions.



Repeat	Time	Distance	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5	Sector 6	Sector 7	Sector 8
10	30-Mar-2012 16:02:47	47.84"	0"	0.234"-OK	2.238"-OK	0.3	0.5	0.9	300780438155	300780438155
11	30-Mar-2012 16:02:47	55.02"	0.078"-OK	0"	0"	0.5	1.0	1.7	300780438155	300780438155
16	30-Mar-2012 16:02:48	77.13"	0"	0"-OK 66"-OK	0.9	1.7	2.2	300780438155	300780438155	300780438155
17	30-Mar-2012 16:02:48	81.52"	0"	0.004"	2.238"!UN	0.3	0.3	0.1	300780438155	300780438155
18	30-Mar-2012 16:02:48	85.95"	0"	0.176"!BG	2.238"!BG	0.1	0.5	1.2	300780438155	300780438155
19	30-Mar-2012 16:02:49	93.13"	0.07"!BG	0"	0"	0.8	1.3	1.8	300780438155	300780438155
24	30-Mar-2012 16:02:50	115.22"	0"	0.074"!BG	2.238"!FG	0.8	1.6	2.0	300780438155	300780438155
25	30-Mar-2012 16:02:50	119.63"	0"	0"	2.238"!BG	0.1	0.3	0.3	300780438155	300780438155
26	30-Mar-2012 16:02:50	124.04"	0"	0.031"!BG	2.238"!BG	0.2	0.6	0.6	300780438155	300780438155
27	30-Mar-2012 16:02:59	131.23"	0"	0"	0"	0.0!DE	0.0!DE	0.0!DE	300780438155	300780438155
28	30-Mar-2012 16:03:00	135.66"	0.039"!FG	0"	0"	1.7	1.4	0.8	300780438155	300780438155
29	30-Mar-2012 16:03:00	140.09"	0.137"!FG	0"	0"	1.1	0.6	0.3	300780438155	300780438155
30	30-Mar-2012 16:03:00	144.51"	0.031"!FG	0"	0"	0.6	0.5	0.6	300780438155	300780438155
31	30-Mar-2012 16:03:00	148.93"	0.043"!FG	0"	0"	0.8	0.1	1.1	300780438155	300780438155
32	30-Mar-2012 16:03:00	153.33"	0.059"!FG	0"	0.246"!FG	0.2	0.3	0.5	300780438155	300780438155
33	30-Mar-2012 16:03:00	157.73"	0.023"!FG	0"	0.438"!BG	0.7	1.6	1.7	300780438155	300780438155
34	30-Mar-2012 16:03:00	162.15"	0.055"!FG	0.141"!BG	2.242"!FG	0.5	0.9	1.2	300780438155	300780438155
36	30-Mar-2012 16:03:01	173.76"	0.051"!FG	0"	0"	1.7	1.4	0.8	300780438155	300780438155
37	30-Mar-2012 16:03:01	178.19"	0.074"!FG	0"	0"	1.2	0.6	0.3	300780438155	300780438155
38	30-Mar-2012 16:03:01	182.61"	0.027"!FG	0"	0"	0.5	0.4	0.7	300780438155	300780438155
39	30-Mar-2012 16:03:01	187.04"	0.051"!FG	0"	0"	0.8	0.2	1.1	300780438155	300780438155
40	30-Mar-2012 16:03:02	191.43"	0.055"!FG	0"	0.344"!BG	0.5	0.2	0.5	300780438155	300780438155
41	30-Mar-2012 16:03:02	195.83"	0.027"!FG	0"	2.242"!FG	0.6	1.6	2.0	300780438155	300780438155
42	30-Mar-2012 16:03:02	200.25"	0.047"!FG	0.141"!BG	2.242"!FG	0.5	0.9	1.1	300780438155	300780438155
44	30-Mar-2012 16:03:02	211.86"	0.035"!FG	0"	0"	1.7	1.2	0.8	300780438155	300780438155
45	30-Mar-2012 16:03:03	216.29"	0.098"!FG	0"	0"	0.9	0.6	0.3	300780438155	300780438155
46	30-Mar-2012 16:03:03	220.71"	0.023"!FG	0"	0"	0.6	0.5	0.6	300780438155	300780438155
47	30-Mar-2012 16:03:03	225.14"	0.055"!FG	0"	0"	0.9	0.1	0.8	300780438155	300780438155
48	30-Mar-2012 16:03:03	229.54"	0.047"!FG	0"	0.145"!BG	0.2	0.3	0.3	300780438155	300780438155
49	30-Mar-2012 16:03:04	233.93"	0.039"!FG	0"	2.242"!FG	0.3	1.3	1.7	300780438155	300780438155
50	30-Mar-2012 16:03:04	238.35"	0.039"!FG	0.078"!BG	2.242"!FG	0.5	0.8	0.8	300780438155	300780438155
52	30-Mar-2012 16:03:05	249.96"	0"	0"	0"	0.0!DE	0.0!DE	0.0!DE	300780438155	300780438155
57	30-Mar-2012 16:03:06	272.03"	0"	0"	2.238"!BG	1.5	0.5	0.9	300780438155	300780438155
58	30-Mar-2012 16:03:06	276.45"	0"	0"	2.238"!BG	1.1	0.4	0.0	300780438155	300780438155
59	30-Mar-2012 16:03:06	283.63"	0.082"!BG	0"	0"	1.8	0.9	0.8	300780438155	300780438155
65	30-Mar-2012 16:03:07	310.13"	0"	0.004"	0.309"!FG	1.5	0.4	0.8	300780438155	300780438155
66	30-Mar-2012 16:03:07	314.55"	0"	0.585"!BG	2.238"!BG	1.3	0.5	1.3	300780438155	300780438155
67	30-Mar-2012 16:03:07	321.73"	0.086"!BG	0"	0"	1.7	0.8	0.5	300780438155	300780438155
73	30-Mar-2012 16:03:09	348.23"	0"	0"	0.309"!FG	1.2	0.3	1.1	300780438155	300780438155
74	30-Mar-2012 16:03:09	352.65"	0"	0.484"!BG	2.238"!BG	1.1	0.4	1.9	300780438155	300780438155
75	30-Mar-2012 16:03:09	359.84"	0.07"!BG	0"	0"	1.7	1.0	0.8	300780438155	300780438155

BUTTON	DESCRIPTION
Previous Error and Next Error	Allows you to view errors.
Previous Warning and Next Warning	Allows you to view warnings.
Summary Report	Allows you to view a summary of the activity.
Print errors	Allows you to print the errors.
Print all	Allows you to print all the items in the list.
Exit	Allows you to exit the system. After exiting, a window appears indicating if you would like to leave notes for the Operator. If “Yes” is selected, Notepad opens allowing you to enter notes.

Reviewing Errors

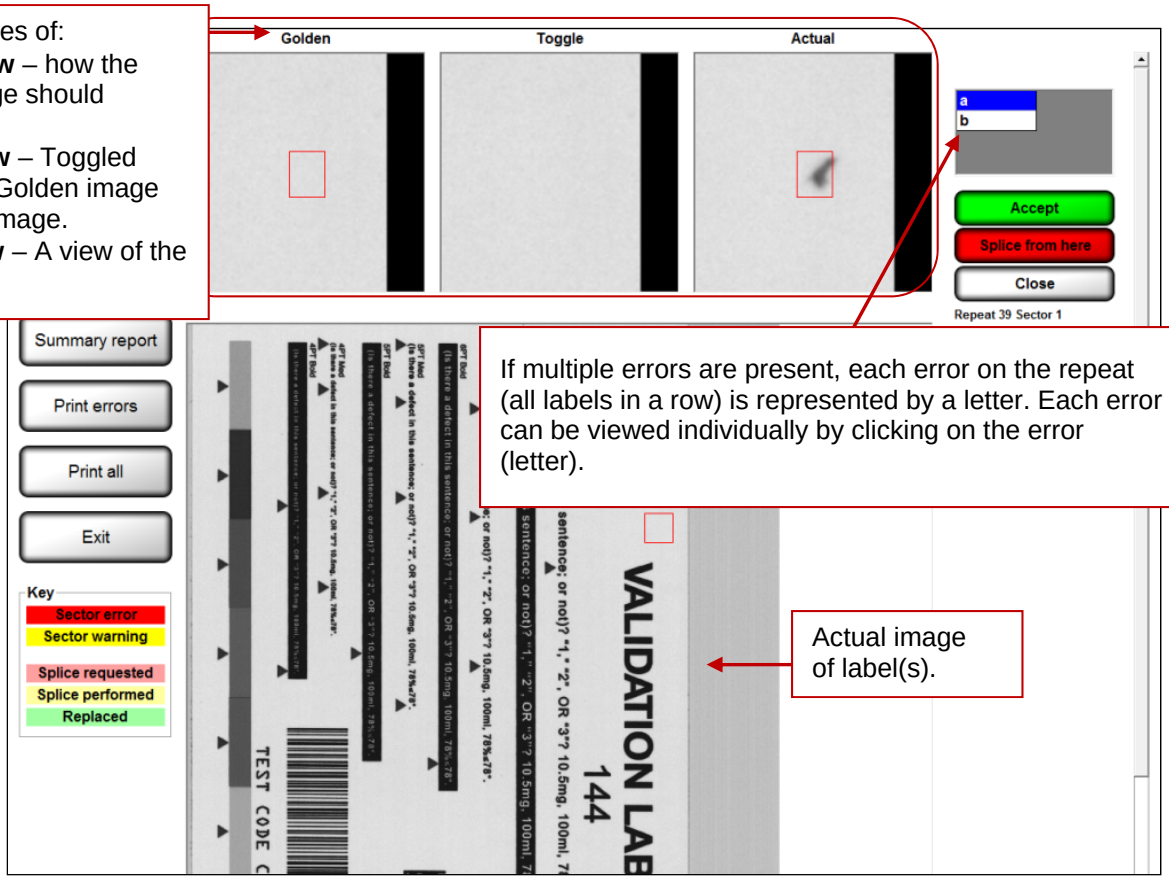
1. Errors are highlighted in red (see below). To review the error, double-click on the error displayed in red.

10	30-Mar-2012 16:02:47	47.84"	0"	0.234"-OK	2.238"-OK	0.3	0.5	0.9	300780438155	300780438155
11	30-Mar-2012 16:02:47	55.02"	0.078"-OK	0"	0"	0.5	1.0	1.7	300780438155	300780438155
16	30-Mar-2012 16:02:48	77.13"	0"	0"-OK 66"-OK	0.9	1.7				155
17	30-Mar-2012 16:02:48	81.52"	0"	0.004"	2.238"!UN	0.3				155
18	30-Mar-2012 16:02:48	85.95"	0"	0.176"!BG	2.238"!BG	0.1	0.5	1.2	300780438155	300780438155

Errors are displayed in red.

2. The "QC File Viewer" page appears (see below).

Thumbnail images of:
- **Golden view** – how the golden image should appear.
- **Toggle view** – Toggled view of the Golden image and actual image.
- **Actual view** – A view of the actual error.

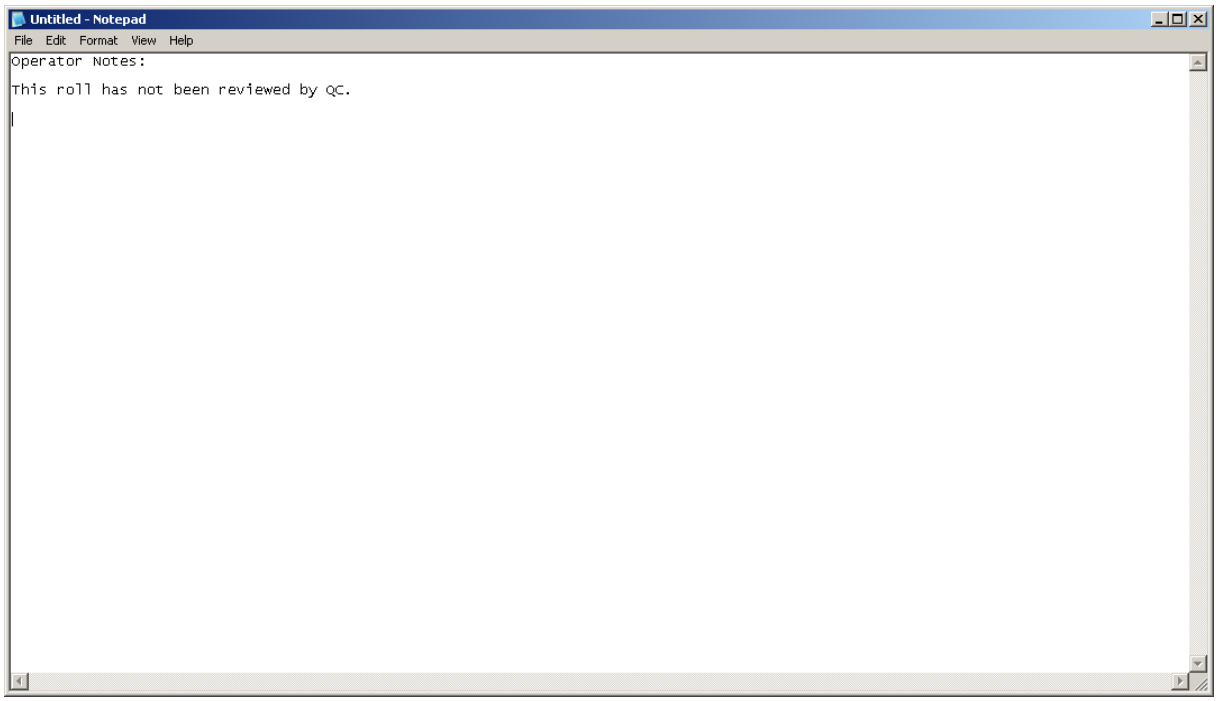


If multiple errors are present, each error on the repeat (all labels in a row) is represented by a letter. Each error can be viewed individually by clicking on the error (letter).

Actual image of label(s).

3. Perform the desired error function (see the next section entitled "Error Functions" for error function descriptions).
4. Click "Exit" when the job has been successfully completed.
5. Click "Yes" when a window appears asking if you wish to save all of your changes.

6. A message appears asking if you want to leave notes for the operator. Clicking “Yes” opens a text file where notes can be entered and connected to the job for the LVS-RIMS operator.



7. After notes are entered, close the .txt file and save the file when prompted; the Job is complete.

Error Functions

Mark an Error for Removal / Replacement

To have an error marked for removal/replacement, click the “Next error” button; the error will stop during the LVS-RIMS application.

Accept Marked Errors

To accept marked errors, click the “Accept” button to accept the error. After clicking the button, the label sector appears in yellow (see “A” below). If any of the individual errors of a repeat/label are not accepted, the web stops at that label for removal/replacement. Note: Click the “Undo Accept” button to undo the changes.

A

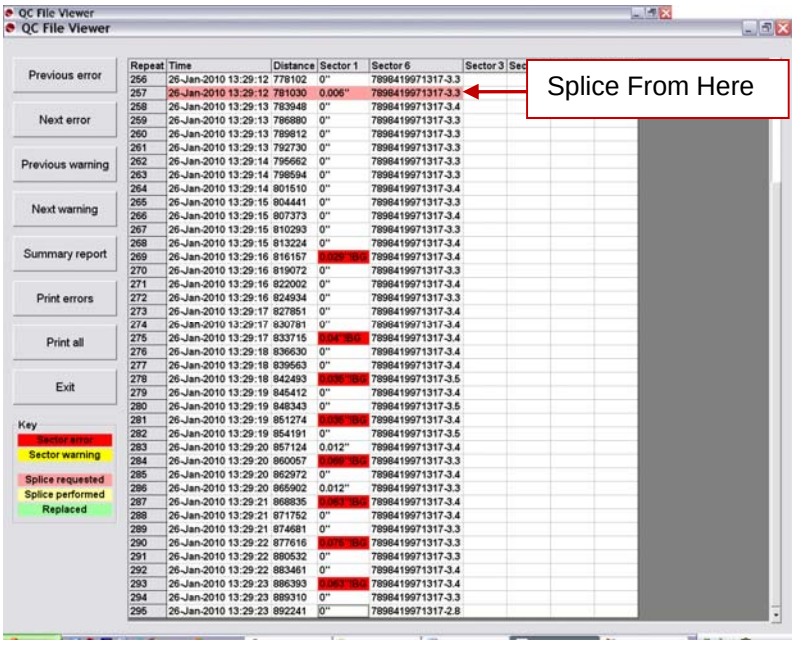
10	30-Mar-2012 16:02:47	47.84			0.234"-OK	2.238"-OK	0.3	0.5	0.9	300780438155	300780438155
11	30-Mar-2012 16:02:47	55.02		0.078"-OK	0"	0"	0.5	1.0	1.7	300780438155	300780438155
16	30-Mar-2012 16:02:48	77.13"		0"	0"-OK 66"-OK	0.9	1.7	2.2	300780438155	300780438155	300780438155
17	30-Mar-2012 16:02:48	81.52"		0"	0.004"	2.238"!UN	0.3	0.3	0.1	300780438155	300780438155
18	30-Mar-2012 16:02:48	85.95"		0"	0.176"!BG	2.238"!BG	0.1	0.5	1.2	300780438155	300780438155

Accept All Individual Errors on a Single Label

If all of the individual errors on a single label are acceptable, highlight the (a) box; press the “Shift” key; and then click the remaining boxes (b, c, d, etc.) so that all boxes are highlighted in blue. Next, click the “Accept” button to accept all of the highlighted errors.

Splice Out Errors

1. Click the “Splice from here” button; the line turns pink indicating a splice is requested (see below).



2. Click on the line where you want to splice to end, and then click the “Splice to here” button (Figure 1). Good labels can be spliced out with bad labels, but no images of the good labels will appear (Figure 2).

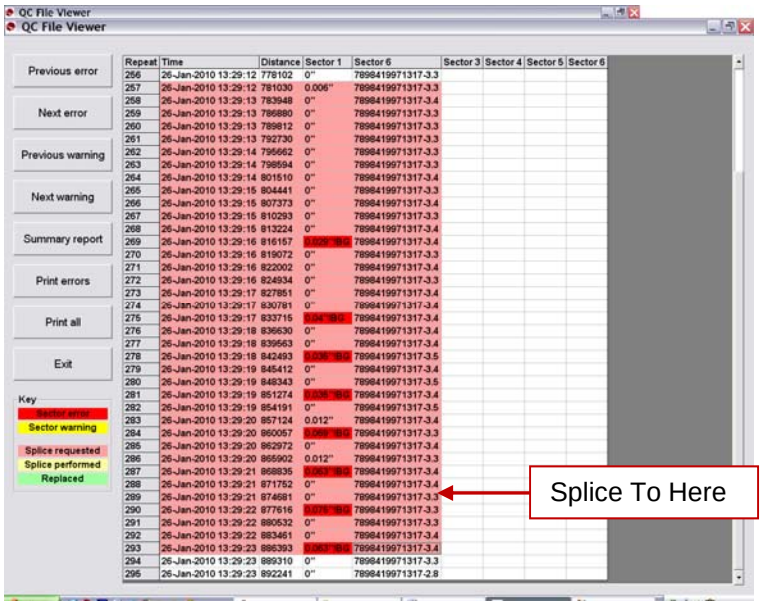


Figure 1

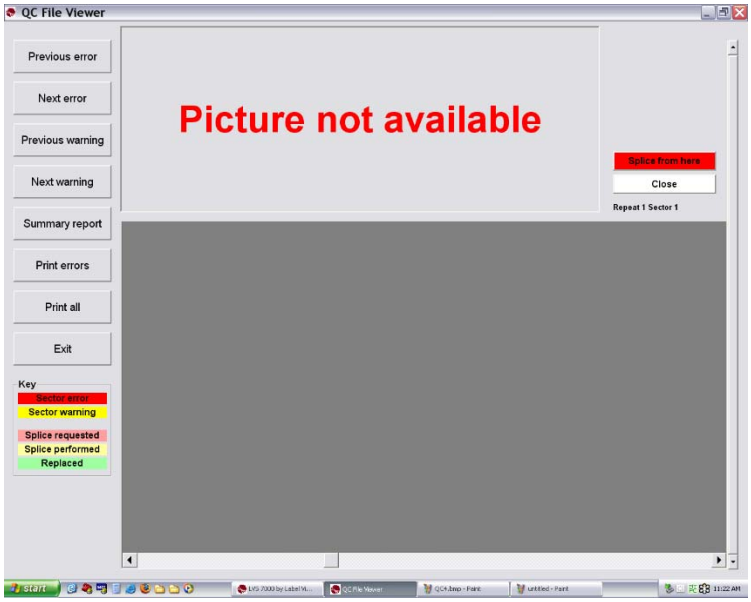


Figure 2: Good label selected (no picture available)

LVS-RIMS Operating Instructions

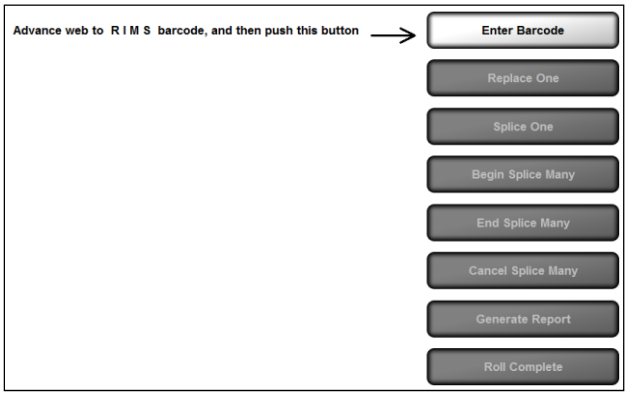
Perform the following steps in the exact order as listed below on the Finishing Station (e.g. Rewinder):

1. Place the roll of labels on the rewinder. Advance the labels forward until the barcode reaches the area where you want the defects to stop. Align the barcode on the labels to the center of the LVS-RIMS barcode arrow.
2. Double-click the RIMS.exe icon on your desktop; the LVS-RIMS Welcome Screen appears:

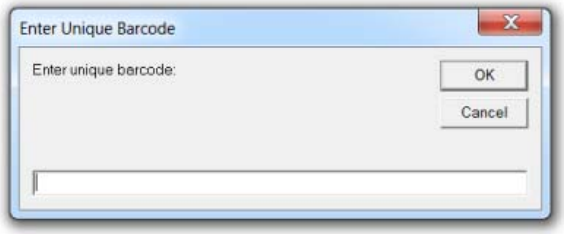
3. Click the “Log in” button and enter the Operator ID and password. Click “OK.”

   Note: When the system is used for the first time, enter “admin” as the Operator ID and Password.

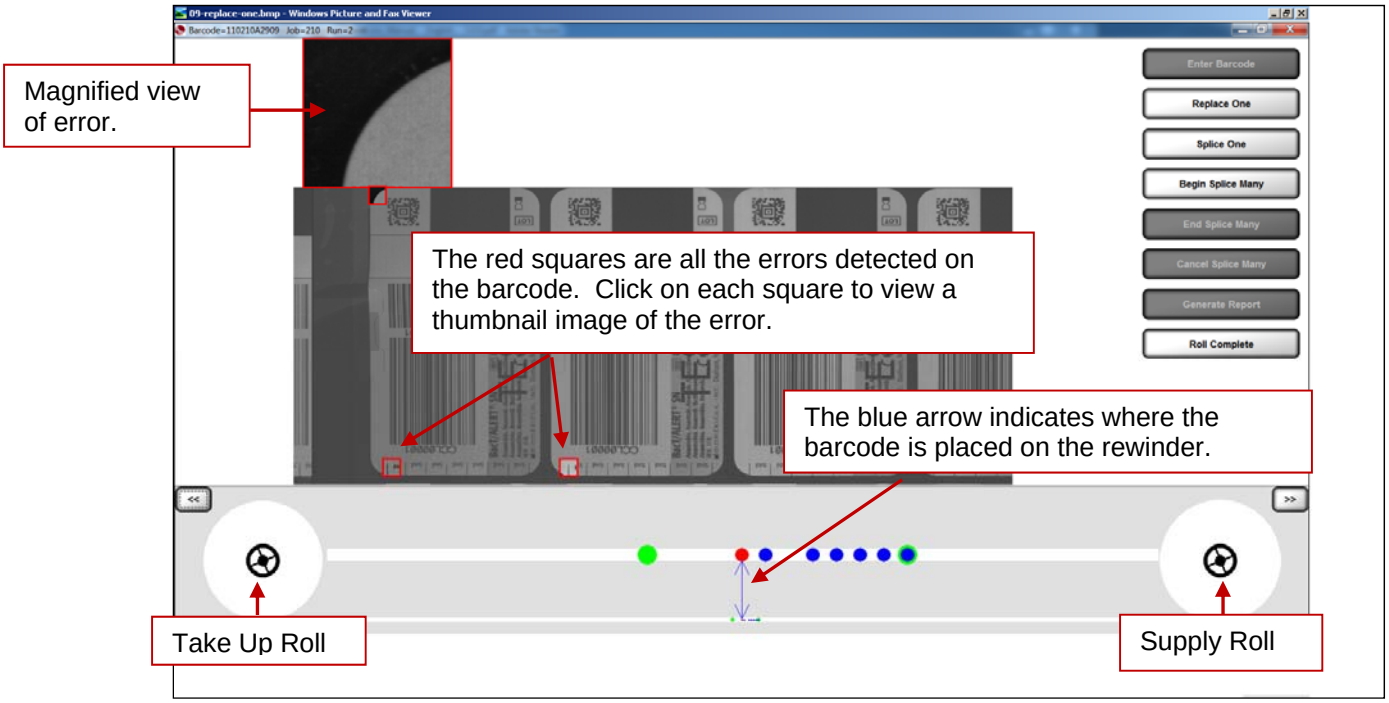
4. Click the “Enter Barcode” button (see below).



5. Enter the 11-digit barcode (or use a hand-held scanner to scan the barcode) and click “OK.”



6. The main LVS-RIMS page appears (see below). The bottom portion of the screen depicts the “Take Up” and “Supply” rolls. Descriptions of the errors (appearing as dots) appearing on this screen are provided in the table below.



Dot	Description
Green dot	Indicates beginning and end of a roll.
Blue dots	Errors to be examined.
Red dot	Next error in line to be examined. A magnified view of the error is shown in top, left corner of screen.
Red dot surrounded by green	Indicates first label has an error.
Hollow dots	When a splice has been requested, the red and blue dots appear hollow to indicate a splice should take place. At the end of a requested splice, the red and blue dots will once again be whole.

Dot	Description
Splice Many	The first red hollow dot indicates the start of splice many. The last red hollow dot indicates the end of splice many.

7. When an error arrives, there will be an audible "beep" and the rewinder stops. **The operator must choose one of the following three options:** Replace One, Splice One, or Begin Splice Many.

   Note: When the error stops short of the home position, the rewind must be jogged so that the error dot is in the home position. At this point, the physical error will be seen in the defined error viewing section on the rewinder.

IMPORTANT: The error dot must be jogged to the home position for these option buttons to be activated. One of the option buttons must be chosen before the next error can be viewed.

- **Replace One** – Remove a label and replace with another label.
- **Splice One** – Remove one label and then splice together the remaining labels.
- **Begin Splice Many** – Remove many labels and then splice together the remaining labels.

  See "Appendix A: Replacing and Splicing Options" for more information on replacing and splicing options.

8. After one of the above buttons is selected, the thumbnail and red dots will disappear and the next defect will appear on the thumbnail window (see figure below).

9. Follow the above steps until either the green dot has reached the viewing area or the job has physically been completed.
10. Upon completion of a job, perform the following steps in the exact order as listed below.
    a) Press the “End Roll” button on the LVS-RIMS software.
    b) Remove all remaining labels from the completed job.
    c) Load the roll for the new job and bring the LVS bar code to the home position, which is the point where defects are located when the corresponding dot on the screen is at the blue arrow on the screen.
    d) Press the “Enter Barcode” button and continue from Step 6 above.

    Note: If the operator does not press the “End roll” button before clearing the old job and entering the new job, the operator **MUST** wait a minimum of 10 seconds after pressing the “End Roll” button before pressing the “Enter Barcode” button.

.INI File Configurations

A shared directory to the Jobs files for the LVS-7000, Quality Control, and LVS-RIMS computers must be made if using simple file sharing. Omron Microscan recommends mapping a drive to the directory that is needed to make sure that there is full access to the path. Access to the Jobs directories must be considered when configuring access privileges through a Domain or Workgroup. By default, the Jobs folder is located in the directories below. Refer to the figure in the “Process Overview” section to understand the workflow from the LVS-7000 to the LVS-RIMS system.

LVS-7000 Default Directory:

- **Version 5.6.9:** C:\Users\<username>\AppData\Roaming\Microscan\LVS 7000\Jobs
- **Windows® 7:** C:\Users\<username>\AppData\Roaming\Label Vision Systems\LVS 7000\Jobs
- **Windows® XP:** C:\Program Files\Label Vision Systems\LVS 7000\Jobs

Quality Control Default Directory:

- **Version 5.6.9:** C:\Users\<username>\AppData\Roaming\Microscan\LVS QC\Jobs
- **Windows® 7:** C:\Users\<username>\AppData\Roaming\Label Vision Systems\LVS QC\Jobs
- **Windows® XP:** C:\Program Files\Label Vision Systems\LVS QC\Jobs

LVS-RIMS Default Directory:

- **Version 5.6.9:** C:\Users\<username>\AppData\Roaming\Microscan\LVS RIMS\Jobs
- **Windows® 7:** C:\Users\<username>\AppData\Roaming\Label Vision Systems\LVS RIMS\Jobs
- **Windows® XP:** C:\Program Files\Label Vision Systems\LVS RIMS\Jobs

QC.INI FILE

The QC.ini file tells the QC software where to find the LVS-7000 log files and where to save the log files when they have been reviewed or Quality Controlled.

[QC]
In1=\\Server1\PathToJobsDir
In2=
In3=
Out=\Jobs
Turret=
TurretDelayInches=0

SETTING	DEFINITION
In1=	Tells the QC computer where to find the LVS-7000 Job files; it usually points to the computer and directory where the LVS-7000 saves its Jobs. For example, if the LVS-7000 computer's IP Address is 192.168.0.101 and the Omron Microscan folder was shared, then In1 could be listed as: In1=\\192.168.0.101\Microscan\LVS 7000\Jobs
In2=	Used if there is more than one LVS-7000 system.
In3=	Used if there is more than two LVS-7000 systems.
Out=	This is where the QC program saves the Log files that were edited. The "./Jobs" path indicates that the QC's Job folder would be in the same location as the QC program. In this case, the Out path could also be listed as: Out= C:\Users\<username>\AppData\Roaming\Microscan\LVS QC\Jobs
Turret=	This setting enables QC to operate in Turret cut roll mode.
TurretDelayInches=0	This setting is the delay in inches from the time the turret cut signal is sent, to the actual physical location of the cutter. This setting should match the setting in the LVS7000.ini file.

LVS-RIMS.INI FILE

[Rims]
A5Follows=4
Debug=0
EncoderDirection=0
EncoderPort=0
HomeToPhotoeye=12
In1= C:\Users\<username>\AppData\Roaming\Microscan\LVS 7000\Jobs
In2=\\Server2\PathToJobsDir
In3=\\Server3\PathToJobsDir
Out=\\ServerX\PathToJobsDir
LinesPerInch=400
MoveBarcodeInches=0
RewinderOffset=41500
StopDwellInMs=20
Turret=0

SETTING	DEFINITION
A5Follows=4	Tells the software to use I/O Line 4 to trigger the beep.
Debug	The Debug setting is not user configurable and should not be altered unless requested by a LVS representative.
EncoderDirection =	Can be set to 0 or 1 depending on the direction the web moves.
EncoderPort=	Determined by the encoder board's serial port in Device Manager.
HomeToPhotoeye=	Distance in inches from the Photo-Eye to the splice table.
In1=	Tells the LVS-RIMS computer where to find QC Job files; it usually points to the computer and directory where the QC computer saves its Jobs. For example, if the QC computer's IP Address is 192.168.0.102 and the Omron Microscan folder was shared, then In1 could be listed as: In1=\\192.168.0.102\Microscan\LVS QC\Jobs
In2=	Used if there is more than one LVS-RIMS system.
In3=	Used if there is more than two LVS-RIMS systems.
Out=	Tells the LVS-RIMS computer where to save the Log files after LVS-RIMS is complete; it usually points to the Jobs directory for LVS-RIMS. For example, it could be listed as: Out= C:\Users\<username>\AppData\Roaming\Microscan\LVS RIMS\Jobs
LinesPerInch=	Determined by dividing the Encoder's pulses per revolution by the circumference of the Encoder Wheel; this number gauges the label repeat.
MoveBarcodeInches=0	This setting alters the location of the scanned barcode to the location to be used as the system's HOME position. If set at 0, the barcode will be the same location as the error presented on the screen of the LVS-7000; any changes will offset that setting.

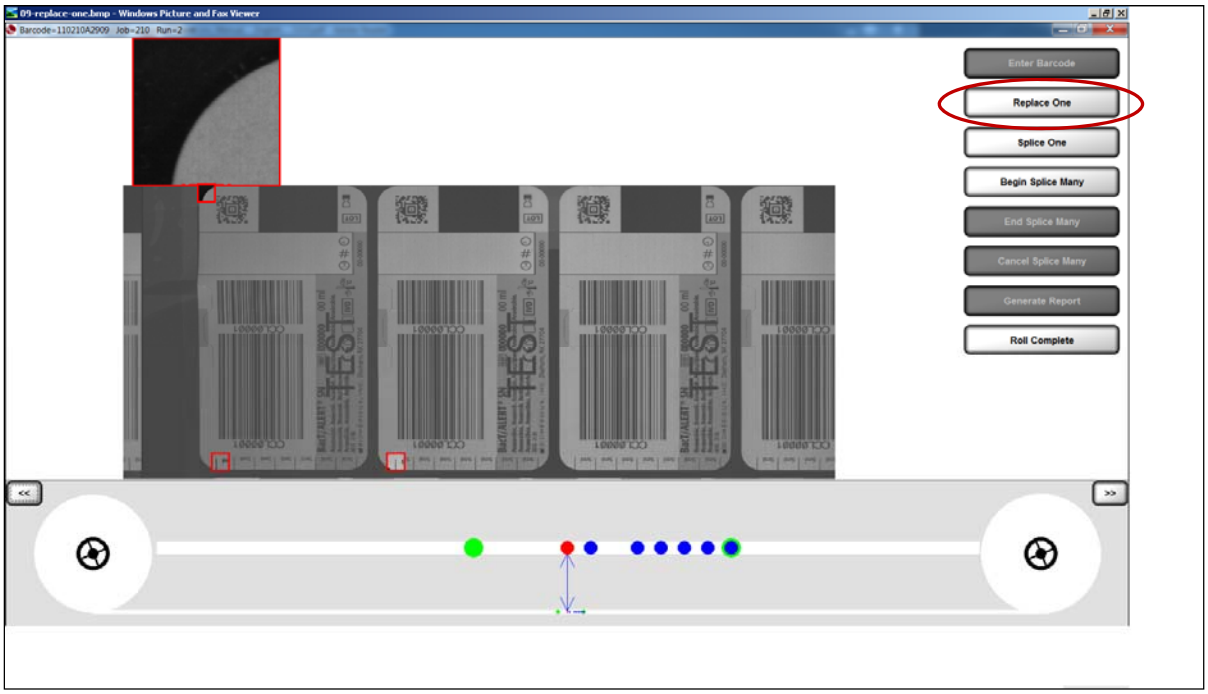
SETTING	DEFINITION
RewinderOffset=	Determines when the error signal is sent in pulses.
StopDwellInMs=	Determines how long a signal will stay on when sending an error; it is usually set to 10, 20, 50, or 100 MS.
Turret=0	This setting turns on Turret Cut Mode, which allows job lookup via scanning of any barcode on a roll that was produced via Turret Cut Mode.

Appendix A: Replacing and Splicing Options

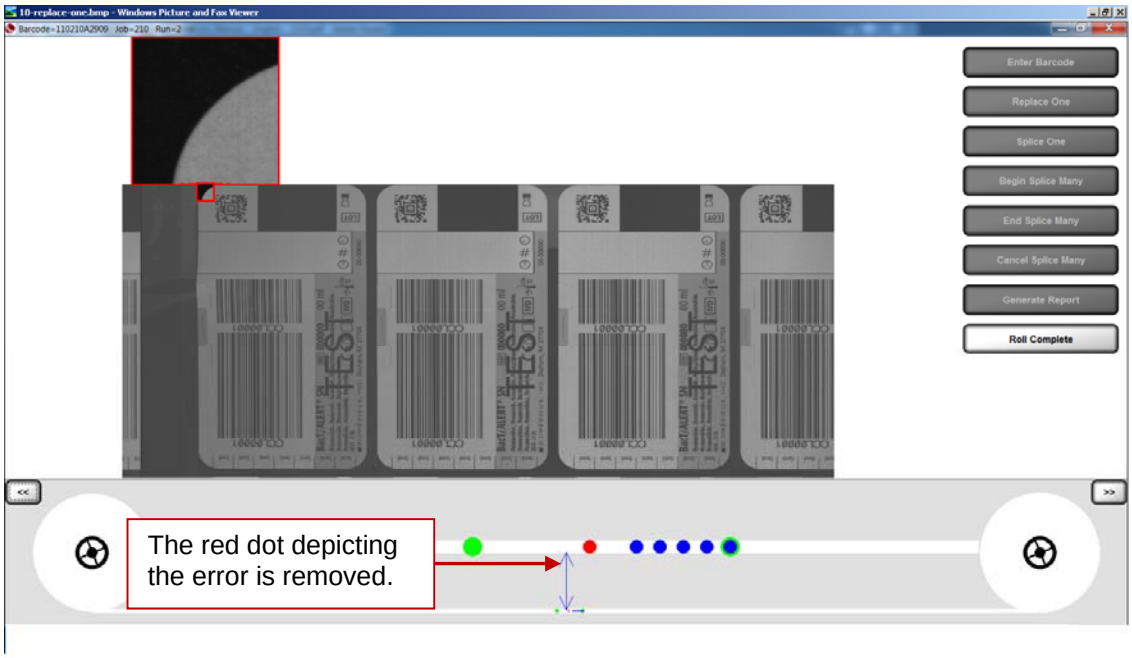
Replace One

The “Replace One” button allows you to remove a label and replace with another label.

1. Click the “Replace One” button.



2. The red dot depicting the error is removed.



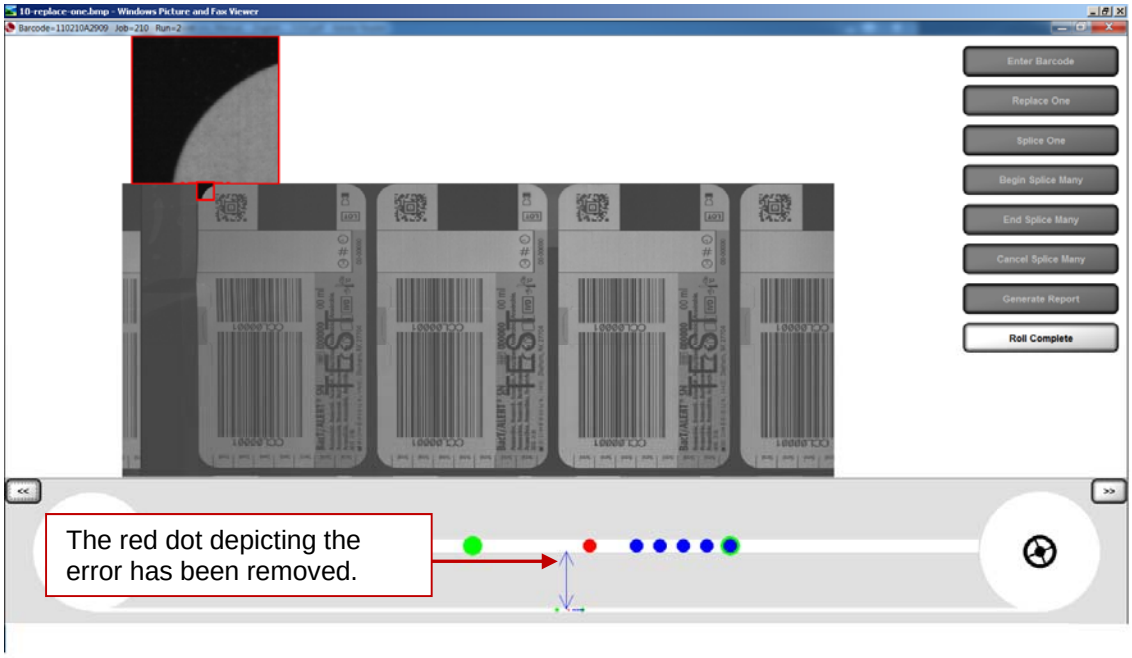
3. Remove the label from the roll and replace with another label.

Splice One

The “Splice One” button allows you to remove one label and then splice together the remaining labels.

1. Click the “Splice One” button. Note that the red dot depicting the error is removed (see below).
2. Cut the desired label and splice the remaining labels together.

Note: After a label is spliced, the system can no longer track the errors that have passed.



Begin Splice Many

The “Begin Splice Many” button allows you to remove many labels and splice together the remaining labels.

1. Click the “Begin Splice Many” button.

2. Cut the desired labels at the Stop arrow and bring the remaining labels together.
3. Upon completion, click the “End Splice Many” button.

   Note: Click the “Cancel Splice Many” button at any time to cancel the splicing process.

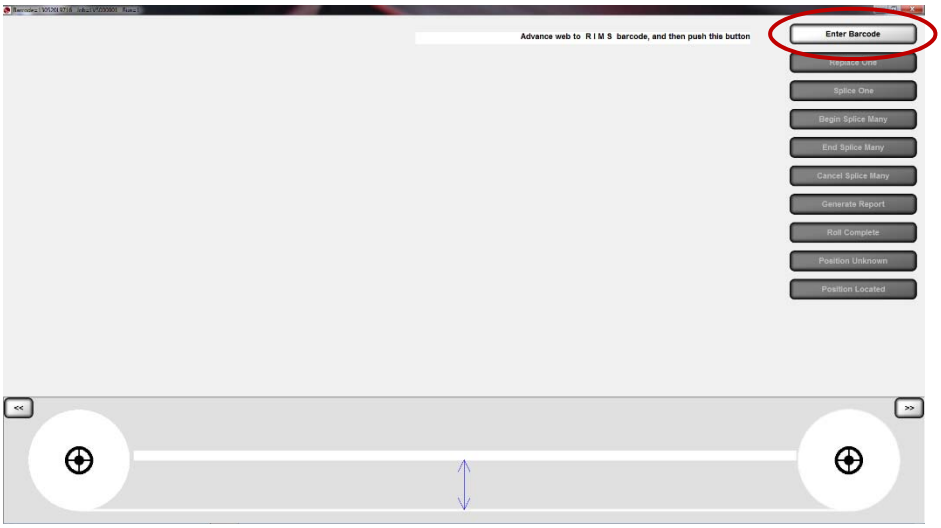
   Note: After labels are spliced, the system can no longer track errors that have already passed the splice table.

Appendix B: Using the LVS-RIMS Locator Function

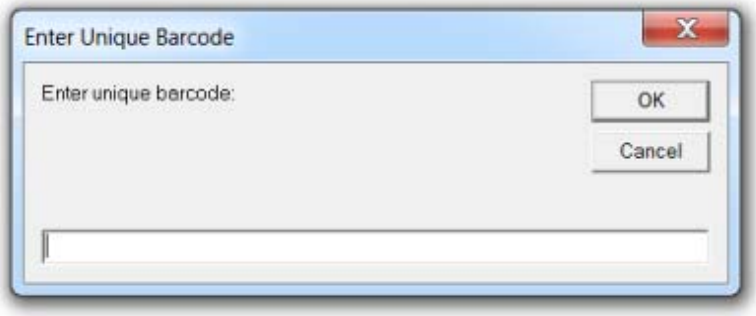
If you get lost in the job (such as loss of power, computer crashes, or the barcode is torn off), you can find your place within the job if you have a defect located at the second splice table and the barcode number for the job (performed by Press operator who prints two barcodes with an encoded location of the job file. One barcode is affixed on the web at the idler as indicated by the LVS barcode arrow label; the other barcode is affixed to the side of the roll).

1. With the known error on the splice table, open and log into the LVS-RIMS software.

2. Click the “Enter Barcode” button:

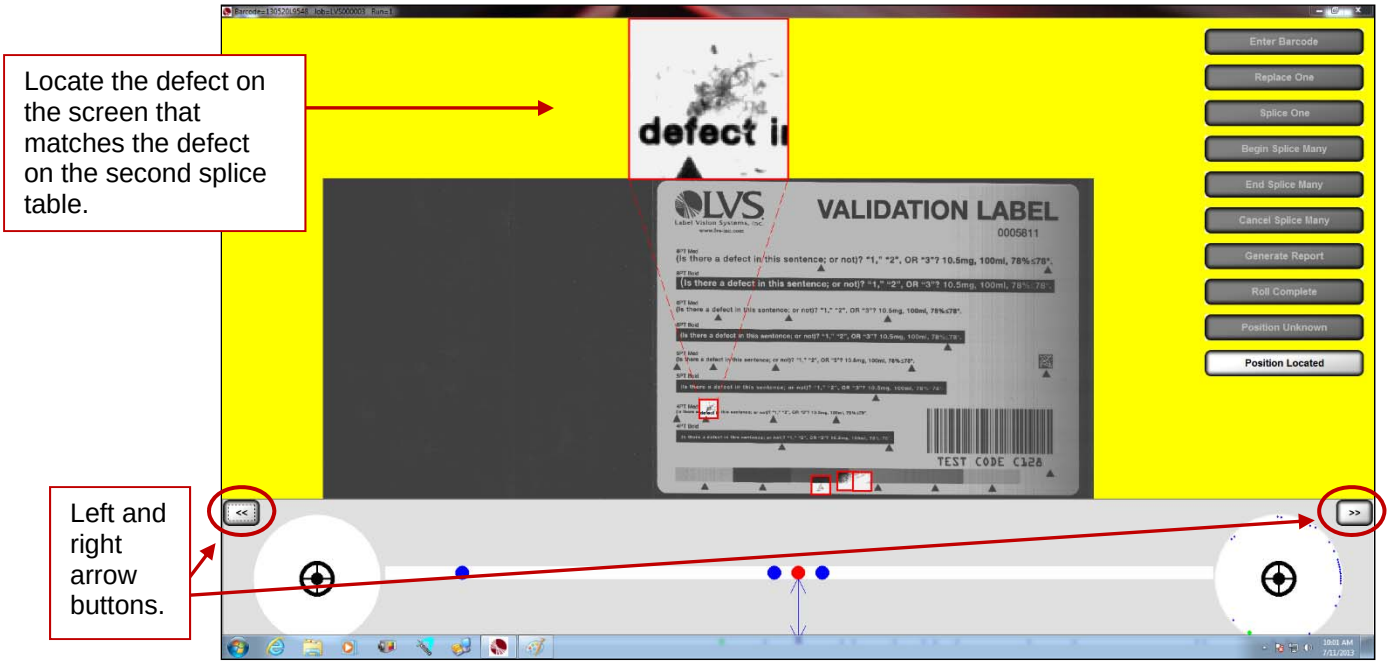


3. Enter the 11-digit barcode (or use a handheld scanner to scan the barcode) and click “OK.”

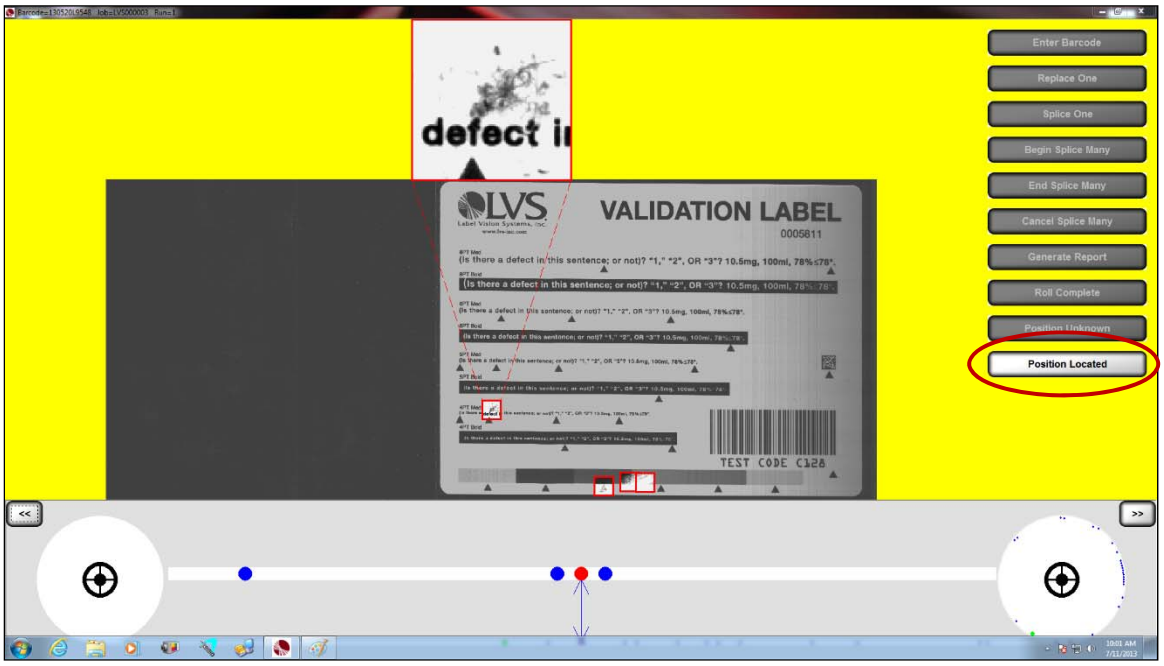


4. When the job appears, click the “Position Unknown” button.

5. Using the left and right arrow buttons on the screen, click until you locate the defect on the screen that matches the defect on the second splice table.



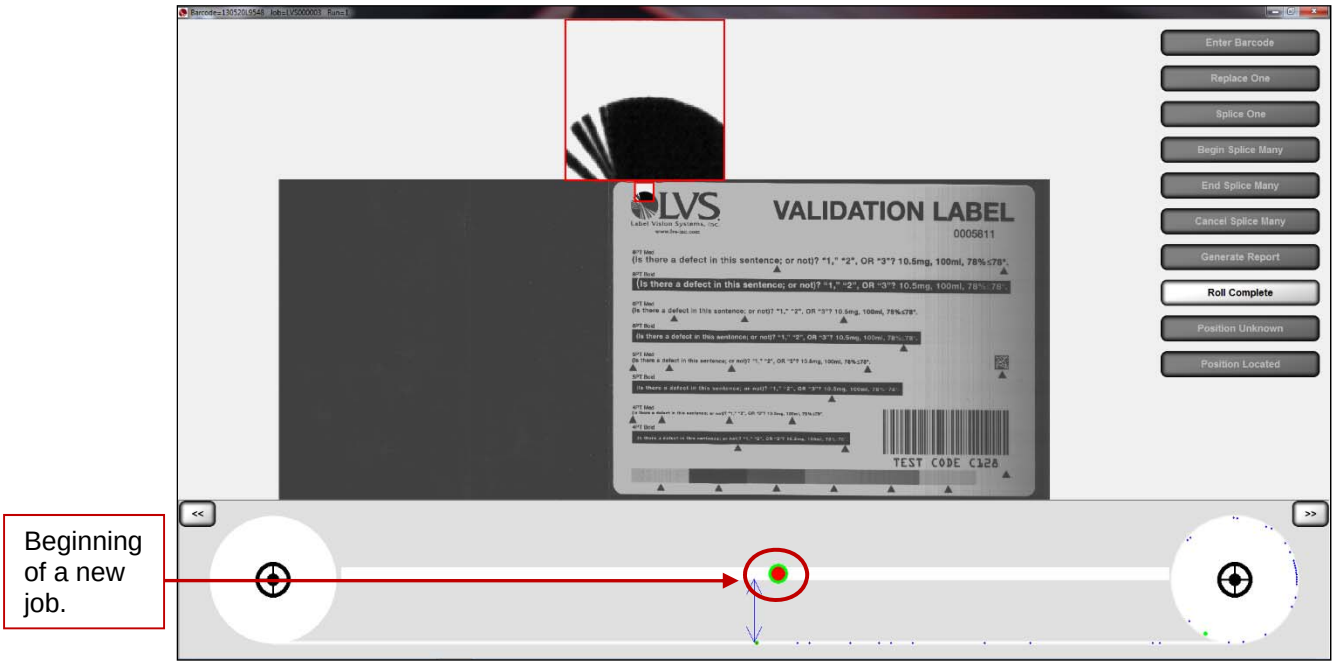
6. When the image matches the defective label, click the “Position Located” button.



7. A “Confirm Splice Prior to Here” pop-up message appears. Type “OK” **(in capital letters)** and then click the “OK” button.

   Note: If you do not type “OK” and close the pop-up message by clicking the “X” button, the system crashes and you must log in again and repeat the above steps.

8. Remove or replace the defective label and begin operating the Rewinder.

   The red dot outlined in green indicates the beginning of a new job.

   Note: If there are error dots between the arrow on screen and the point designated by LVS, you must manually stop the defects by stopping the Rewinder when the error dots are at the blue arrow on screen and repair, splice, or replace the label on the second splice table.