

# 7300 LEVEL 1 OPERATOR TRAINING

## APPENDIX A

### Job Aids



## Job Aid: Types of Shutdowns

Shutdown Type	Steps	Results	When to Use It
<b>Canceling an Inspection</b>	<p>Press the CANCEL button on the Operator Panel.</p> <p>You can also click Cancel on the computer screen.</p>	<p>All moving parts of the conveyor system stop.</p> <p>All other parts of the system remain on.</p> <p>When you resume, the same inspection starts over again at the beginning.</p>	<p>You might <i>cancel</i> an inspection if you think there's something wrong with the inspection. For example:</p> <ul style="list-style-type: none"> <li>• Boards are dropping through between the conveyor rails</li> <li>• The sensor LEDs are not flashing</li> <li>• Boards are moving through the system without stopping</li> <li>• The board doesn't unload</li> </ul> <p>In any case, once you've stopped the inspection, you should call your supervisor or maintenance engineer.</p>
<b>Emergency Shutdown</b>	<p>Press the EMO button on the far right of your Operator Panel.</p> <p>There is also an EMO button at the back of the machine.</p>	<p>Power is cut to all moving parts of the machine.</p> <p>The computer remains on.</p>	<p>You perform an <i>emergency shutdown</i> if there is an <b>immediate danger</b> to a person or to the system. For example:</p> <ul style="list-style-type: none"> <li>• Someone's safety is threatened</li> <li>• Equipment is in danger</li> <li>• A natural disaster, such as an earthquake</li> </ul> <p>In each of these cases, once you've stopped the machine, you should call your supervisor or maintenance engineer.</p>

## Job Aid: Types of Shutdowns

Shutdown Type	Steps	Results	When to Use It
<b>Normal Shutdown</b>	<ol style="list-style-type: none"> <li>a. Exit the Optima program and shut down Windows NT as you normally would.</li> <li>b. Press the ON/OFF button on the Operator Panel.</li> </ol>	This shuts off all power to the machine and the computer.	<ul style="list-style-type: none"> <li>• At the end of the working day, you might power down the machine.</li> <li>• You might be instructed to shut off the system before it's given periodic maintenance.</li> </ul> <p>When you perform a normal shutdown depends on the policies at your work site.</p>
<b>Pass-Thru Mode</b>	Click the Pass-Thru Cycle button on your computer screen.	The Pass-Thru mode moves boards through the system without the boards being inspected.	If the machine cannot inspect, you might be instructed to set the machine to bypass mode to keep the production line moving.

## Job Aid: Errors and Alarms

Error, or Alarm	What It Means	What to Do About It
<p><b>Light Tower Flashing Red/ Alarm Sound</b></p>	<p>There are three lights on the light tower: green, yellow, and red.</p> <p>Usually, the red light signals an alarm, but this depends entirely on how the machine is programmed at your worksite.</p> <p>You may or may not also hear an alarm when the light tower goes yellow or red.</p>	<p>Call a maintenance technician.</p>
<p><b>“Interlocks Off” Message Flashing Onscreen</b></p>	<p>This means there is a problem with the Optima’s safety system.</p> <p>You may also see the light tower flashing red when you see this message onscreen.</p>	<p>Make sure the machine cover is shut; then call a maintenance technician.</p>
<p><b>“Pass-Thru Mode” lit up onscreen</b></p>	<p>In Pass-Thru mode, boards are moving through the machine without being inspected.</p>	<p>Press CANCEL and then start the inspection cycle again by pushing INSPECT on the Operator Panel or clicking Inspection Cycle onscreen.</p>
<p><b>“Inspection Cycle” grayed out onscreen</b></p>	<p>If the Inspection Cycle button is grayed out onscreen, this means there is no software program loaded to inspect the incoming board.</p>	<p>Load the correct board test program.</p>

## Job Aid: Errors and Alarms

Error, or Alarm	What It Means	What to Do About It
<p><b>“Fiducials Not Found” error onscreen</b></p>	<p>The cameras cannot locate the fiducials on the currently loaded board.</p>	<ul style="list-style-type: none"> <li>• Make sure the correct board program is loaded.</li> <li>• If you are operating in standalone mode, make sure the board is correctly oriented, right side up.</li> <li>• If the correct board program is loaded and the board is correctly oriented, call a maintenance technician.</li> </ul>
<p><b>System Hangs</b></p>	<p>A “system hang” means the machine has stalled and the conveyor isn’t moving.</p>	<p>Call a maintenance technician.</p>
<p><b>System Won’t Power Up</b></p>	<p>The machine won’t come on when you push the ON/OFF button, or you see nothing on your computer screen.</p>	<ul style="list-style-type: none"> <li>• Make sure the machine cover is shut.</li> <li>• If the machine still won’t power up, call a maintenance technician.</li> </ul>