Release Notes (Lite version)

English

Lotem 800 II Family

version **3.80.12**

Document Number:
739-00127A-EN

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RE37,376	5,325,217	5,532,728	5,742,743	5,996,499	6,158,345	6,353,216
4,558,302	5,339,176	5,561,691	5,764,374	5,998,067	6,159,659	6,366,339
4,743,091	5,343,059	5,568,595	5,764,381	6,003,442	6,164,637	6,371,026
4,992,864	5,355,446	5,576,754	5,771,794	6,014,471	6,180,325	6,377,739
5,049,901	5,359,451	5,579,115	5,785,309	6,016,752	6,181,362	6,387,597
5,079,721	5,359,458	5,592,309	5,813,346	6,031,932	6,181,439	6,396,422
5,103,407	5,367,360	5,594,556	5,818,498	6,043,865	6,186,068	6,396,618
5,111,308	5,384,648	5,600,448	5,854,883	6,060,208	6,189,452	6,407,849
5,113,249	5,384,899	5,608,822	5,861,904	6,063,528	6,191,882	6,414,755
5,122,871	5,412,491	5,615,282	5,861,992	6,063,546	6,204,874	6,422,801
5,124,547	5,412,737	5,625,766	5,875,288	6,072,518	6,208,369	6,435,091
5,132,723	5,420,702	5,636,330	5,894,342	6,090,529	6,214,276	6,441,914
5,150,225	5,420,722	5,649,220	5,900,981	6,096,461	6,217,965	6,450,092
5,153,769	5,459,505	5,650,076	5,934,196	6,098,544	6,260,482	6,456,396
5,155,782	5,473,733	5,652,804	5,942,137	6,107,011	6,266,080	6,476,931
5,157,516	5,481,379	5,680,129	5,946,426	6,112,663	6,266,134	6,477,955
5,208,818	5,488,906	5,691,823	5,947,028	6,115,056	6,267,054	6,509,903
5,208,888	5,497,252	5,691,828	5,958,647	6,121,996	6,268,948	6,541,181
5,247,174	5,508,828	5,696,393	5,966,504	6,130,702	6,283,589	6,545,772
5,249,067	5,509,561	5,699,174	5,969,872	6,134,393	6,295,076	6,564,018
5,283,140	5,517,359	5,699,740	5,973,801	6,136,509	6,299,572	
5,291,273	5,519,852	5,708,736	5,986,819	6,137,580	6,318,266	
5,323,248	5,526,143	5,713,287	5,995,475	6,147,789	6,352,816	

Creo Inc.
3700 Gilmore Way
Burnaby, B.C., Canada
V5G 4M1
Tel: 1-604-451-2700
Fax: 1-604-437-9891

http://www.creo.com

Document No. 739-00127A-EN

November 2004

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Introduction

We are pleased to send you the latest revision of Lotem 800 II family software. These release notes highlight the changes and improvements made to release 3.80.12 of the software. This version supports all Lotem 800 II, Lotem 800 Quantum and Lotem Spectrum platesetters with multi/dual/single cassettes and can be installed over the following previous software versions: 3.51.02, 3.60.09, 3.70.02, 3.72.02, 3.75.01, 3.75.09.

What Is in These Release Notes

The release notes include the following sections:

Prerequisites—lists the required prerequisites.

Problems Fixed—lists problems in the previous release of Lotem 800 II Software Version that are now resolved.

New Features—describes new menu commands, options, windows, or dialog boxes that were added to Lotem 800 II Software Version.

Known Problems—lists problems that are not yet resolved.

Hardware Upgrade Kit—provides a link for performing a hardware upgrade, prior to installing the software.

Installing Software Version 3.80.12—describes how to install software version 3.80.12.

Firmware for Version 3.80.12—describes the firmware versions that are loaded in the TMCE board and Thermal Head 2 (TH2) when installing this software version.

Defining the Drum Speed—describes how to define the correct drum speed.

Specifying the Head Type—describes how to specify the correct type of head.

Additional Preparations for Spectrums—describes the additional preparations needed for Spectrum platesetters.

Specifying the Head Type for Quantum and non Quantum Platesetters—describes how to start the software.

Installing 3.80.12 on a Lotem 850—describes how to install the software on a Lotem 850 platesetter.

Remote Support—provides remote support information.

Prerequisites

1. Lotem Controller software versions for all 800 platesetters: 3.51.02, 3.60.09, 3.70.02, 3.72.02. See on page 31.
   To upgrade from Lotem Controller software versions 3.75.01 or 3.75.09, to version 3.80.12, follow these release notes without upgrading the hardware, as these two versions are already running on Microsft Windows 2000..

   Note: Other versions of Lotem software cannot be upgraded directly. For example, if software version 3.50.05 needs to be upgraded for the MCU as well as version 3.80.12, the MCU must first be upgraded to version 3.60.09, followed by the software version 3.80.12 upgrade.

2. **Workstation:** Brisque version 4.1.70 (or higher) or CS Xpose 2.00.064 Update 001 or higher. For more details, see the CS Xpose Update procedure.
3. **Operating system:** Windows 2000.
4. **CPU:** New SBC 786 board.
5. **E-Box:** Without the NUC.
6. **Recommended Conveyor:** (FCO 512-00044)
   If a conveyor motor without an encoder is installed, the value of the Second **conveyor motor speed** parameter (**Lotem800>IO OBJECT>Loading System>Unload plate>Second conveyor motor speed**) must be set to **0**.

Problems Fixed

This section lists problems that were resolved in the current release of the Lotem 800 II family software.

- Lotem Controller no longer freezes when accessing the Drum Motor dialog box to perform different operations (GoSpeed, GoPos etc.).
- The release upper tray function and button now work when you replace the SLC with a DLC. In addition an error message no longer appears after the cassette has been reconnected to the Lotem in the single/dual cassette system.
- There are no longer any problems when installing this software version onto a platesetter that does not have a previous version of the Registry installed, but does have Kit 0.15 or any variable punch installed.
- The message `Your password will expire in the next xxx days` is no longer generated when the Lotem starts up.
- Diagnostics no longer issues an alarm when the value of the **Strobe 7** parameter is not set to **0** nor when the **IO Objects\Loader** is not deleted from the hierarchy tree.
- When trying to expose an image, the **5230** error message is no longer generated.
- The **Focus Learn** error message is no longer generated when switching from either, a plate to proof and then back to a plate, or from a proof to a plate and then back to a proof.
- MCU elevator No. 5 cassette now stops at the correct position.
- Previously, when a plate failed to load correctly and the drum performed side to side measurement, the drum would rotate backwards, causing potential damage to both the plate and the platesetter. Now the drum rotates in the loading direction and an incorrectly loaded plate can only cause a fly off.
- Previously when the platesetter operator released the cassette and the XY system was engaged, there was a tendency for the operator to forcibly remove the cassette. This source of potential damage has been eliminated by adding software protectors to the XY system.
- The message `Please take the plate manually and call the Response Center`, is now generated if a plate is stationary on the conveyor.
- The majority of the motors and switches now have software interlock protectors.
- When starting up the PC, or whenever there is a crash or power failure, the status of the XY init and the Drum init detectors is now checked to ensure that the platesetter is correctly initiated.
- All motors and switches now have an appropriate software, low speed protector.

- When the **Release Cassette** button is pressed, a 5 second delay occurs before the pins are elevated. This resolves the problem that existed in earlier versions, whereby the pins moved up and down without a delay.
- It is now possible to click the **Release Cassette** button to open the pins without first having to insert the DLC. Previously, in order to change the pin status after a power failure, the operator would use a cheater to simulate a cassette in the platesetter.
- In earlier versions if the load head grippers were opened, the drum would rotate slightly backwards. This problem has been resolved by introducing a new parameter: **From drum entry to drum stage\enable drum power during stage C\fly off check** (default = 1). The parameter has 3 options: **0**=No; **1**=intermittantly; **2**= always. Set the parameter's value to **2**.
- Previously, 0.15mm plates collided with the punches. This problem has been resolved by amending the value of the **X on wheel** parameter (Loading system\Load plate\from punch entry to drum entry stage\X on wheel) to **307**.
- The unload conveyor no longer stops prematurely when a small plate is being unloaded. This problem was resolved by increasing the default value of **Plate TimeOut to Get Out From The Conveyor [MSec]** parameter to **7000 ms**.
- Previously, if the main air valve detector was active for more than 17,000 milliseconds, the following message was generated: **main air valve detector is missing or the detector is in an invalid state.** This problem has been fixed by raising the value of the **Main Air Valve/Max allowed sol activate time** parameter from 17,000 milliseconds to **4,294,967,295** milliseconds.

New Features

This section lists features that were added to the latest release of Lotem 800 II Software Version.

Side-to-Side Measurement Options

A new Registry parameter has been created (Loading System Setup\Enable\Flyoff Detetcion), offering the operator a choice of three *side-to-side measuring* options:

- If the parameter is set to **0**: Loading sequence will not check the side-to-side measurement.
- If the parameter is set to **1**: Loading sequence will only check the side-to-side measurement of the first load per each new plate type.
- If the parameter is set to **2**: Loading sequence will always check the side-to-side measurement.

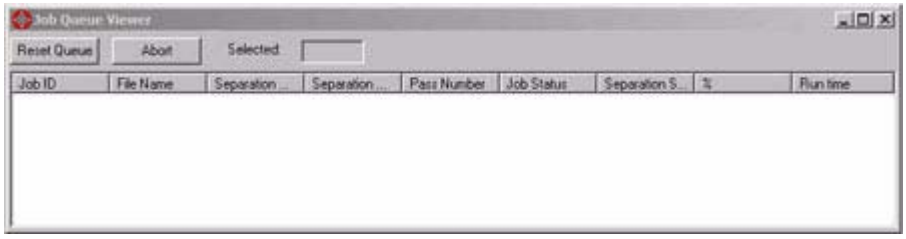
Note: The platesetter's throughput is slower when the parameter is set to 2.

Punch Detectors 9 and 10 are Automatically Disabled

When Kit 0.15 is installed, the punch detectors 9 and 10 are disabled by default.

Job Queue Viewer

A Job Queue Viewer dialog box has been added to Lotem Controller. This feature enables the operator to remotely view the jobs in the workstation's queue.



Amended Drum Rotation Speed for Remote Sessions

Previously, when the platesetter doors were open during a remote session, the drum would rotate at a maximum of 20 rpm. To prevent the need for a low speed detector, the rotation speed has been increased to 35 rpm. If the doors are closed during a remote session, the drum rotation speed is limited only by the platesetter's capabilities.

Lotem 800 II Quantum Diagnostics

The Lotem 800 II Quantum diagnostics for software version 3.80.12, are a new suite of diagnostic tools with enhanced capabilities. There are three diagnostic modes:

- JOIND Diagnostic from the Desktop - can be used when the Controller is down.
- JOIND Diagnostic from the Lotem Controller - can be used from within the Controller without closing the application.
- Diagnostic from the Lotem Controller Hardware Tree (Right Click) - can be used to test specific components without launching the JOIND.

The following are new components covered by the diagnostics (JOIND mode only):

- Proof System
- GTO Arm
- Conveyor Unit
- Phase Monitor Unit

For a more detailed description of diagnostics, see Diagnostics for the Lotem 800 II Quantum, running s/w version 3.80.xx

New Interlock View

The manner in which interlocks are displayed has been redesigned. The interlocks are now logically divided between motor interlocks and laser interlocks.
The Open Interlock dialog box automatically opens when an interlock is open.



To open or close the Open Interlock dialog box, click on the **Interlock** icon (located in the Main window):



Improved Centering Process

The centering process has been improved. If Lotem Controller discovers a discrepancy between the actual size of the plate and the plate's measurements entered into the system, it will recheck the measurements of the plate upto five times. An error message will be displayed if the discrepancy persists.

Note: The Improved Centering Process feature, necessitates the need to readjust the **Virtual HP App Value,** after installing this software version.

Enhanced Remote Support

Remote connectivity has been improved from previous versions.

The Creo Service Port (CSP) is a software package which enables improved support from the Response Center when connecting through the RSS/Service Wire. A new and faster VNC enables better connectivity when remotely controlling the Desktop of the platesetter. See *Remote Support* on page 29.

User Level Access

This version enables three user levels: *User*, *Field Engineer* and *Expert*. The passwords for each level are as follows:

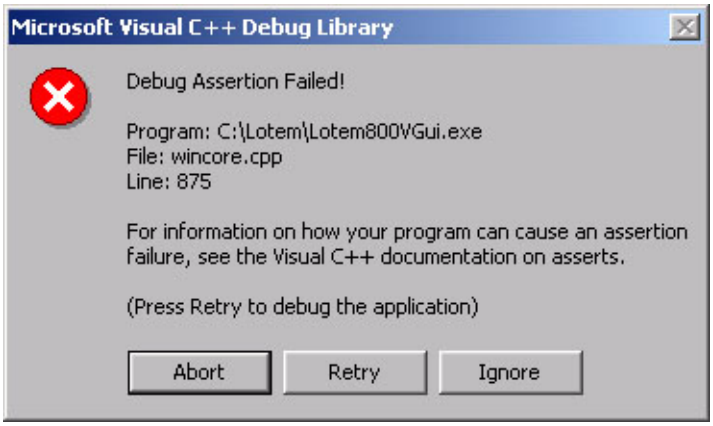
- User: aaa
- Field Engineer: creo
- Expert: creopro (shortcut: Ctrl+U)

Known Problems

This section lists known problems in the Lotem 800 II software. They may be outstanding issues from a previous release or new problems. When a problem listed here is resolved, the solution is described in the *Problems Fixed* section of the release notes for the next version of the Lotem 800 II software.

Microsoft Visual Basic Error Message

If you release the cassette and then reinsert it within 7 seconds, the following error message will be generated:



To resolve this problem, click **Ignore** and continue working.

P33 Thermistor Detector

The MCE board does not read the P33 thermistor detector (**AI_EngineTemp**).
If the **AI_EngineTemp** thermistor detector, does not exist, then bypass it as described below:
In Service Shell, type the following
`Quantum>>`**scan groups**, and navigate to **AI_EngineTemp**.
The letter **b** should be displayed next to the detector's name. This informs the MCE that the detector is not bypassed.
In order to bypass the detector, type the following:
`Quantum>>`**scan AI_EngineTemp bon**
`Quantum>>`**reset**
`Quantum>>`**scan groups**. The letters **xb** should be displayed next to the **AI_EngineTemp** line.

MCU Cover Detector

If you upgrade from any previous version of Lotem Controller, *except* versions 3.71.05 and 3.75.09, you will manually have to change the value of the cover detector from 1 to 0. This will change the detector's status from opened to closed.

Hardware Upgrade Kit

Lotem Controller software versions for all 800 platesetters: 3.51.02, 3.60.09, 3.70.02, 3.72.02. See on page 31.
To upgrade from Lotem Controller software versions 3.75.01 or 3.75.09, to version 3.80.12, follow these release notes without upgrading the hardware, as these two versions are already running on Microsft Windows 2000..

Note: The Hardware Upgrade Kit for Version 3.80.12 is only suitable for platesetters running on Windows 95.

Installing Software Version 3.80.12

Important Notes

When Running Prinergy

In order to install Lotem Controller software version 3.80.12, do the following:

- Make sure that you have installed CS Xpose 2.00.064 Update 001. This enables CS Xpose to connect to a platesetter running Lotem Controller software version 3.80.12.
- Restart the workflow station.
- Navigate to the Device Handling dialog box.
- Delete the previous platesetter configuration and create a new one.
- Reconfigure the Lotem.
- Reconfigure the punches.

When Running Brisque

After installing Lotem Controller software version 3.80.12, do the following:

- Restart the workflow station.
- Navigate to the Device Handling dialog box.
- Delete the previous platesetter configuration and create a new one.
- Reconfigure the Lotem.
- Restore the Punch System and Press Format settings.

When Upgrading to a Faster Platesetter (Speed Improvement)

Option 1:
If the platesetter is an Lotem 800 II model, running Windows 2000 and Lotem Controller software version 3.75.XX, make sure that a dongle (HASP key) has been added, and that the head has been defined accordingly. Platesetters will not expose plates unless the correct HASP key has been added.

Option 2:
If the platesetter is an Lotem 800 Quantum model, running Windows '95, perform the *Pre-installation* procedure as described in the next section, and **ONLY THEN** install the hardware upgrade kit, as described on page 31.

Pre-installation



Important: The Pre-installation procedures **MUST BE** performed prior to any hardware or software upgrades.

Before installing the hardware and software version 3.80.12, do the following:

1. Expose a reference plate by exposing a customer's file (per plate size). Put the reference plate to one side. If the customer uses a GTO, expose an additional GTO reference plate, because the geometric change (GC) parameters are different for GTO machines..



Note: The reference plate is used to check and compare the customer's *cross marks*, *margins*, *shifts* and *image quality* prior to the software installation with the cross marks, margins, shift and image quality after the installation.

2. If available, use the Backup and Restore Utility to backup the registry and database to a diskette. (If the utility is unavailable, manually save the backup and registry information onto a diskette.)
3. Write down the Lotem's TCP/IP address.
4. Measure and write down the X and Y motor values for the virtual home position application detector.
5. Open Service Shell and type the following:
   `QUANTUM>>`**set gc.**
   `QUANTUM>>`**set gc trackprofile.**
   Write down all the parameter settings, including Trackprofile, or alternatively, save the settings as a text file.
6. Write down the following parameters:
   - **IO_Object/balance system/weight configure mechanical stop center pos (deg)**
   - **IO_Object/balance system/weight configure mechanical stop width pos (deg)**
   - **HKey_Local_Machine/Software/MCkey**
     MCValue = Plates
     DCValue = Donors
   - **Loading System/Load plate/Load From cassette to punch entry/ x rel backward for 0.15 and also for 0.2, 0.3, 0.4**
7. Open the right hand side door of the platesetter.
8. Close Lotem Controller and the Service Shell client.

Installing the Software

If you intend to install the software on a platesetter running Windows 95, with Lotem Controller software versions 3.51.02, 3.60.09, 3.70.02 or 3.72.02, make sure that you first upgrade the hardware as described in on page 31.

Note: If you are upgrading from software version 3.75.09 to 3.80.12, proceed to step 6 *Insert the Windows 2000 CD into the CD drive.*

1. Insert the BIOS diskette (part number into the diskette drive.
2. Before Windows starts, press the **F2** key continuously, until the BIOS Setup window appears on the monitor.
3. From **Bios/setup/inside utilities/secure cmos**, change the **secure cmos** status from Enabled to **Disabled**.
4. Click **F10** to save your changes. A prompt message appears. Click **Yes** to confirm the changes and exit the BIOS Setup window.
5. The BIOS default setting is automatically uploaded.

   When the PC starts up the following message is displayed on the monitor:

   ```
   System BIOS shadowed
   System confi data updated - Error
   Check date and time setting
   F1- resume, F2 - setup
   ```

   If nothing appears when you press any of the keys on the keyboard, check the mouse/keyboard connection - make sure it is secure and properly connected. When the BIOS installation has finished, remove the BIOS diskette from the diskette drive.

   Note: Wait for the `A` prompt to appear on the monitor (this may take a few moments); then remove the BIOS diskette.

6. Insert the **Windows 2000** CD into the CD drive.
7. Restart the platesetter by pressing **Ctrl+Alt+Del** and wait for `F1` to appear on the monitor. Click **F1**.
   Make sure the choice is set to **1**, and press **Enter**. The image is automatically loaded. After the CD is successfully loaded, remove the CD from the CD drive.
8. Press **Ctrl+Alt+Del** on your keyboard to restart the system. Wait a few moments for Windows 2000 to load. A time and date error message appears on the monitor.
9. Reset the time and date, then restart the platesetter.
10. Restore the registry from the diskette.
11. Reset the TCP/IP address by doing the following:
    - From the Start menu, select **Settings**.
    - Select **Control Panel**.
    - Double-click on **Network and Dial-up Connections**.
    - Double-click on **Local Area Connections**.
    - Click the **Properties** button.

- Double-click on **Internet Protocol (TCP/IP)**.
  Or
  Select **Internet Protocol (TCP/IP)**, click the **Properties** button and then modify the system name.
- Select the **Use the following IP address** option button and enter the desired TCP/IP address.
- Click **OK** and then click **OK** again to exit the window.

12. Insert the **CD 3.80.12** into the CD drive and follow the on screen installation procedures:
    - The **Installation Warning** dialog box opens.
    - Make sure all Windows programs are closed
    - Click **Next**. The **Welcome - Lotem800 II & IIQuantum Setup** dialog box opens.
    - Click **Next**.
    - The **Lotem800II and IIQuantum Requirements** dialog box opens. Read the product versions and requirements and then click **Next**.
    - The **Question** dialog box opens.
    - Click **Yes**.
    - The **Lotem800II and IIQuantum License Agreement** dialog box opens.
    - Click **Yes**.
    - The **Customer Information** dialog box opens.
      Enter your user name (or any other logical name), company name (or keep the default 'Creo') and the serial number of the platesetter.



Note: Enter the serial number as described in the section *How to identify a platesetter's serial number* on page 14

    - Click **Next**.
    - The **Choose Installation Folder** dialog box opens.
    - Select the destination folder and click **Next**.

How to identify a platesetter's serial number

On the back of each platesetter there is an adhesive label affixed to the lower rear panel. There are two different types of label, depending on the year the platesetter was manufactured.

When installing software version 3.80.12, the first four digits of the Lotem's serial number must be included in the 10-digit access code. Identify the access code and serial number as illustrated below:

Label I



The 10-digit access code (**yywwssssss**) comprises of the following characters:
yy: Represents the year (first two digits)
ww: Represents the week (third set of digits)
ssssss: Represents the serial number (last six digits)
When the serial number only contains five digits, add a **0** to the end of the serial number in order to complete the installation. For example, the serial number 77777 would be entered as 77777**0**

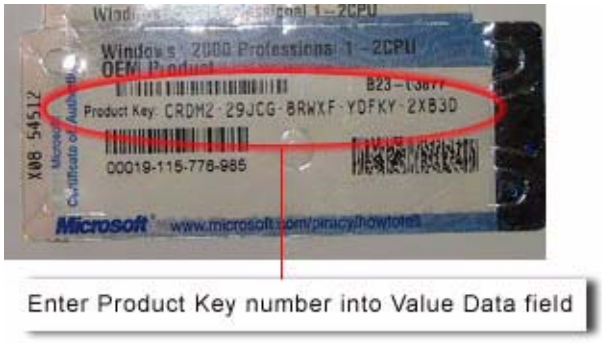
Label II



- The **General Machine Configuration** dialog box opens.
- Select the required Proofing Capability, Loading System and Conveyor Type.

  Note: If you have implemented FCO 512-00044, then select a Conveyor Type with a **Variable Speed**, otherwise select **Fixed Speed**.
- Click **Next**.
- The **Setup Type** dialog box opens.
- Select the required thermal head resolution and click **Next**.
- The **Configurations Option Selection** dialog box opens.
- Select the required interlock system type and click **Next**.
- The **Lotem Configuration Option Selection** dialog box opens.
- Select the required vacuum system type.
- Select whether or not the Kit for 0.15 Media Thickness has been installed.
- Select whether or not the platesetter is a MainFrame Type II.
- Select whether or not the platesetter is a Lotem 850 and then click **Next**.
- The **Start Copying Files** dialog box opens.
- If you are satisfied with the settings, click **Next**.
- The **Install Wizard Complete** dialog box opens.
- Check that the information is correct and then click **Finish**. The dialog box will close and the software will be installed in the selected destination folder.

13. Restore the database.
14. In the Registry Edit, navigate to the following path: **HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\ CurrentVersion\ProductId** and in the **Value Data** field, replace the existing default product key number with the **Product Key** number displayed on the Windows 2000 software kit (included in this upgrade kit):



Note: The Image CD generates a generic product key. Replace the generic product key with the product key displayed on the Windows 2000 software kit.

15. Remove the Product Key adhesive from the Windows 2000 software kit package, and affix it to the mainframe, located near to the E-box:



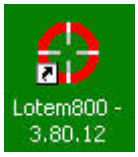
Place adhesive on mainframe, near to the E-box

16. Change the value of Local3 (Left, Right and MCU) parameter (**Local3/Force Download**) from 0 to **1**.
17. Close all the platesetter's doors.
18. After upgrading the software, measure the XY motor values, as described in *Appendix II: Measuring the X, Y Motor Values* on page 38, and then in the Virtual HP App Det. dialog box, enter the delta value (delta = B-A) of the measurements *before* and *after* the upgrade. The final number will usually be a negative number.
    - Attach a plate to the punch beam's short pins.
    - Send the centering motor to end position at a speed of 3.
    - From within Lotem Controller, read the Pos. (encoder measurement).
    - Add/subtract the delta value to/from the actual plate size value entered into the Pos. field (in the Virtual App. Det. dialog box).
    - Make sure that the amended Pos. value reflects the size of the plate.

19. Make sure that the parameters written down in Step 6 of the *Pre-installation* on page 11 remain the same. If required, amend any parameters that may have changed.
20. Verify the firmware already loaded on the head, by typing the following commands in Service Shell:
    `QUANTUM>>`**fw dir**
21. `QUANTUM>> th2 "ver"`
    Make sure that this firmware is correct, as described in chapter *Firmware for Version 3.80.12* on page 19.

    Note: To identify the correct firmware versions, navigate to the Tools folder: **C:TH2\Tools** (The Tools folder contains the firmware files in binary format.)

    To load any required firmware, type the following command in Service Shell:
    `QUANTUM>>`**downloads <filename>.bin**
    After installing any required firmware type the following:
    `QUANTUM>>`**fw dir**
    `QUANTUM>> th2 "ver"`
22. Set other required parameters:
    `QUANTUM>>`**set carriage mspeed 32**
    `QUANTUM>>`**set drum maxacc 11**
    `QUANTUM>>`**set drum tsettle 2**
23. Restart the PC and Service Shell.
24. Start Lotem Controller by double-clicking on the **3.80.12 icon** on the desktop:

25. If an MCU is configured to the platesetter, make sure that the MCU's Reset button is **On**.
26. Make sure the platesetter reaches **Ready** mode.
27. Restore the plate counter:
    - Locate **HKEY_LOCAL_MACHINE\SOFTWARE\Mckey** and type `<plate count>`.
    - For Lotem Quantum Spectrum platesetters: Locate **HKEY_LOCAL_MACHINE\SOFTWARE\Dckey** and type `<proof count>`.
28. If the platesetter has a 0.15 kit installed, make the following amendments:
    - Amend the value of the **punch motors #9** and **#10** parameters to **1**.
    - Amend the value of the **punch motor det. #9** and **#10** parameters to **None**.
29. If the platesetter has an MCU configured, and the software was loaded with a tray still inside the Lotem, then do the following:
    - In **Expert** mode, navigate to the **Cassette System**.
    - Enter the number of the tray (inside the Lotem) in the appropriate field and click the **Force Tray to Lotem** button.

30. After installing this software version, enable the Improved Centering Process and XY Motors control feature by readjusting the Virtual HP App values and the XY system protectors.
31. Re-expose the reference plate and compare the results to the reference plate exposed in step 1 of the pre-installation procedures. Compare the quality between the plates and make sure the gemoetric change (GC), image quality, image position and image geometric have remained the same. If required, repeat this procedure for the GTO plate.
32. Change the value of Local3 (Left, Right and MCU) parameter (**Local3/Force Download**) from 1 to **0** and then restart Lotem Controller.
33. If available, use the Backup and Restore Utility to backup the registry and database. (If unavailable, save the backup and registry information onto a diskette.)
34. Check that the remote support works correctly:
    - Activate the Remote Support from the Lotem Controller and verify that both NetMeeting and VNC are launched.
    - Ask the Response Center to verify access to the Lotem by testing the following:
      - Creo Service Port (new feature) is accessible.
      - Remote desktop sharing using NetMeeting.
      - Remote desktop sharing using VNC.
      - Mapping of Drive C.

Firmware for Version 3.80.12

The following firmware versions are to be loaded in the TMCE board and Thermal Head 2 (TH2) when installing version 3.80.12 The corresponding file name is in parenthesis:

1. **TMCE firmware: 1.32.03** (QuantumFMW13203.bin)
2. **Head firmware: 1.04d** (th2fmw104d.bin)
3. **Xilinx firmware: 2.23** (mcelca0223.bin)
4. **Boot Code: 1.09** (MCREBOOT109.BIN)
5. **Post Code: 1.05** (mcepost105.BIN)
6. **BBR: 1.03** (mcerec103.bin)
7. **Pattern Data: 1.01** (mcedata0101.bin) for Spectrum platesetters only.

Note: To identify the correct firmware versions, navigate to the Tools folder: **C:TH2\Tools** (The Tools folder contains the firmware files in binary format.)

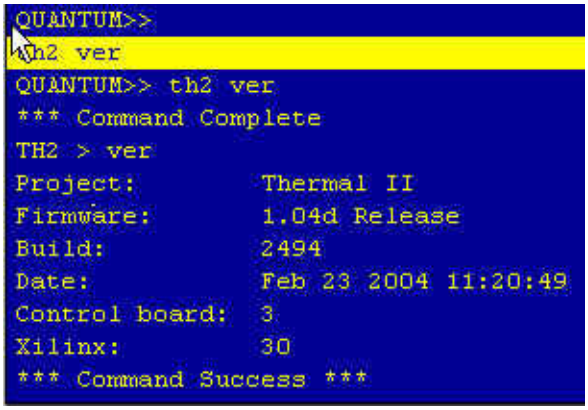
To load any required firmware, type the following command in Service Shell:
`QUANTUM>>`**C:TH2\Tools\downloads\<filename>.bin**

Information about firmware versions loaded in the TMCE and TH2 can be obtained by typing the following commands in Service Shell:
`QUANTUM>> fw dir (or: list version all)`

After loading the correct firmware versions, the following window is displayed:

```
QUANTUM>>
fw dir
QUANTUM>> fw dir
Name           Version  Start     Scts Length  Checksum Used Free
-------------- -------  --------  ---- ------- -------- ---- ----
MCE BBR  Code  1.03     00000000    1    6832 Passed     5%  95%
MCE NVS Parms  n/a      00020000    2  262144 n/a      100%   0%
MCE BOOT Code  1.09     00060000    2  108096 Passed    41%  59%
MCE FW Dir     1.00     000A0000    1  131072 n/a      100%   0%
MCE MAIN Code  1.32.03  000C0000   16 1463148 Passed    69%  31%
MCE OVWR Data  n/a      002C0000    2       0 n/a        0% 100%
MCE POST Code  1.05     00300000    2   75294 Passed    28%  72%
MCE Xilinx     2.23     00340000    6  218976 Passed    27%  73%
-------------- -------  --------  ---- ------- -------- ---- ----
Totals:                            32 2265562          54%  46%
*** Command Complete
```

QUANTUM>> th2 "ver"



Defining the Drum Speed



Important: Set the new drum speed according to the HASP key attached to the platesetter.

To upgrade the drum speed, do the following:

1. Open Service Shell.
2. Type the following command for each media defined in Service Shell:
   `Quantum>>`**th2 "set med (X-1) drumspeed Y"**
   `Quantum>>`**media X**

   Where **X** denotes the number in the media table (subtract 1 from this value), and **Y** is the recommended drum speed.

   - S speed: **150 rpm***
   - F speed: **235 rpm***
   - V speed: **375 rpm***

   * Depending on the type and size of media used. See Media Calculator.



Note: When a lower value is entered, the platesetter operates correctly; however, entering a higher value will cause a plot to fail.

Example:

The following example sets the drum speed for media 1 (Kodak IR) to 235 RPM:

```
Quantum>>th2 "set med 0 drumspeed 235"
Quantum>>media 1
Current Media = 1
==================
```

Name	= Kodak IR
Color	=
Type	= Plate (9)
Invert	= 0
Depth	= 0 microns
Reflectivity	= 0.084
ExtraScanLines	= 1
DrumPlotSpeed	= 235 rpm
TempCoeff	= 0
DebrisOptions	= 1

Density = 2750 kg/m^3
Emissions Intensity = 1.000
Pattern Identifier = 0
Flags = 0
Mainscan scale = 0 ppm
Subscan scale = 0 ppm
AirjestMarginHome = 0 um
AirjetMarginAway = 0 um

==========

Available Media

==========

1. Kodak IR

2. Horsell
** Command Complete.

Specifying the Head Type for Quantum and non Quantum Platesetters

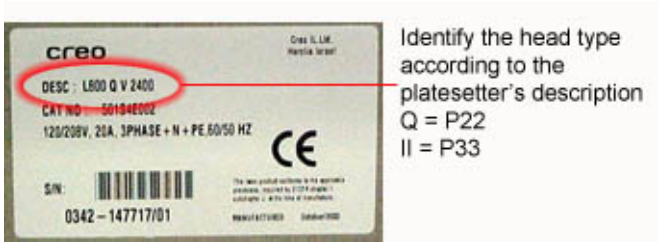
Important: The head type must be defined according to the head installed.

WARNING: Check the head type BEFORE entering the configuration settings. If you enter incorrect settings, the platesetter will not be able to expose any media; you will not be able to re-enter new configurations; and the head will have to be replaced!

Identifying the Head Type

Identify the type of head installed on the platesetter before entering the configuration settings.
Located on the rear lower panel of the platesetter is an adhesive label enabling you to identify the type of head installed on the platesetter.
The **DESC** line on the label either contains the letter **Q** or the Roman numerals **II**:

- **Q** represents Quantum SquareSpot and indicates that a **P22** head is installed on the platesetter.
- **II** represents a Lotem 800 II platesetter and indicates that a **P33** thermal head is installed on the platesetter.



Defining the Head in the TMCE Board



Note: The above command is context sensitive; make sure to upper case the relevant letters in the command.

After the head type has been identified, it is necessary to define the head in the TMCE board.

To define the head, do the following:

1. Open Service Shell.
2. Type the following:
   QUANTUM>>**access dev**
   QUANTUM>>**config**
   A list containing all the available Quantum modes and their corresponding codes appears on the monitor.
   QUANTUM>>Config AVerySecretPassword [head type]
   Change the head type as required (a mismatch will cause the exposure to fail):
   - For P22 heads, the head type is **LotQU**.
   - For P33 heads, the head type is **LotII**.



Note: The above command is context sensitive; make sure to upper case the relevant letters in the command.

Defining the Head Model

After the head type has been defined, verify that the information you entered in Service Shell is correct, and if required, define the head model.

Verifying the head type information:

To verify the head type information, type the following command:

QUANTUM>>**access dev**
QUANTUM>>**ceh head info**
Exposure Head Type = Thermal 2
Firmware Build = Release
Firmware Version = 1.04d
Serial Number = T00531
Head Model = Standard
*** Command Complete

The above output indicates that the **head model** is standard (last line) meaning that it is a **P22** head. For a **P33** head the last line would be:
Head Model = Entry Level

Defining the head model:

If the Thermal Head 2 is not defined as P33, type the following command:

TH2>>**sys model p33**
The following screen message will be displayed:

```
WARNING! Configuring a P33 head will degrade plot quality, and
could disable the head. This command must only be run on P33
heads installed on non-Quantum engines.
Proceed with P33 configuration (Y/N)
```

WARNING: If you type Y (Yes) the action is irreversible.

Type **Y**
To ensure that the head protocol is set to **True**, type the following:
Quantum>>**set ehi protocol**
The following screen message will be displayed:

```
ehi protocol true
```

To change the status from **False** to **True**, type the following:
Quantum>>**set ehi protocol true**

Note: The above actions ensure that the head works correctly.
If the head protocol is not set to true, several scripts will be effected and the head will not work.

Important: The P33 head does not support thermal compensation. Therefore, the thermal compensation detector must be bypassed in the TMCE board, otherwise the **AI_Engine Temp** error message will be displayed.
To bypass the thermal compensation detector:

1. Type the following in Service Shell:
   Quantum>>**scan groups**
2. Navigate to the line **AI_EngineTemp.** If the letter **b** appears next to this line, then the detector is not bypassed. (The **b** informs the MCE not to bypass the detector.) To overcome this problem, type the following:
   Quantum>>**scan AI_EngineTemp bon**
   Quantum>>**reset**
   Then type Quantum>>**scan groups**.
   The letters **xb** will appear next to the **AI_EngineTemp** line. (The letters **xb** inform the MCE to bypass the detector.)

```
QUANTUM>> scan groups
Group Name              Status Value
DI_Group0                      00000000h
DI_Group1                      00000000h
DI_Group2                      0000F004h
DI_Group3                      00000022h
DI_Group4                      00009D90h
DO_Group0                      00000000h
DO_Group1                      00000000h
DO_Group2                      00000020h
AI_EngineTemp                xb 00000159h
AI_MainBoardTemp              b 000001C5h
```

Additional Preparations for Spectrums



Important: Spectrum platesetters will only expose proofs when the following procedures have been completed.

1. Open Service Shell.
2. Type the following command:
   `Quantum>>`**access dev**
   `Quantum>>`**option**

   Note: Ensure that the Spectrum option is enabled.

EdgeDetect option is	enabled
Spectrum option is	**enabled**
Debris UDRCB option is	disabled
Debris UDRCL option is	disabled

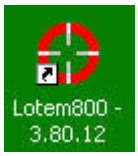
   If the Spectrum option is disabled, type the following command:
   `Quantum>>`**option spectrum enable**
   `Quantum>>`**reset**
3. Type the following command:
   `Quantum>>`**set proof 1 name "proof"**

   Note: Implement this command to successfully plot a proof. This command will only work on Spectrum platesetters. An error message will be generated on non-Spectrum platesetters.

Starting the Software Application

1. Double-click the **Lotem800 - 3.80.12** icon located on the Lotem desktop.



2. Locate the following parameter: **HKEY_LOCAL_MACHINE\SOFTWARE\MCKey** and restore the Plate Counter value to the value that you wrote down before upgrading the hardware.
3. Reconfigure the Brisque. Navigate to the Device Handling dialog box. Delete the previous platesetter configuration and create a new one. Restore the Punch System and Press Format settings.
4. Set the platesetter's power series with the new drum speed.
5. Check MCU functionality and ensure that you can operate the cassettes.
6. Plot the same customer file used in step 1 and compare the two plots. If necessary, adjust the image offsets using the following commands:
   `Quantum>>`**set gc sshift**
   `Quantum>>`**set gc mshift**

Installing 3.80.12 on a Lotem 850

When installing software version 3.80.12 on a Lotem 850 platesetter, the majority of the registry parameters automatically change to accommodate the Lotem 850. However, the following parameters need to be changed manually, (because their default values are set for a Lotem 800 platesetter and not for a Lotem 850 platesetter):

- **Others/Lotem800/Machine/Min media height size (mm)**
  Amend value to: 455
- After the `Quantum` command line type the following:
  Set Carriage and amend the **mtravel** value to **1176**
- After the `Quantum` command line type the following:
  Set Prd and amend the **Drumdiam** value to **344**
- After the `Quantum` command line type the following:
  Set Drum and make the following amendments:
  MaxAcc = **7**
  MaxPacc = **7**
  Kt = **1.6**
  JI = **2.3**
- After the `Th2` command line type the following:
  Set med 0 and amend the **Drumspeed** value to **375**
- After the `Quantum` command line, type the word **Feature**. The following screen message will be displayed:

```
Current Model
-------------
Lotem Quantum [LotQU]
Licensable Limits
-------------
Tag Description
1 Maximum plate size in mainscan: 1030 mm [Optional]
2 Minimum plate size in mainscan: 318 mm [Optional]
3 Maximum plate size in subscan: 1150 mm [Optional]
4 Minimum plate size in mainscan: 225 mm [Optional]
```

After the `Quantum` command line is displayed, type the following:
`Quantum>>`**access enable** and click the **Enter** button on the keyboard.
`Quantum>>`**stg delete flash 2404** and click **Enter**.
`Quantum>>`**stg delete flash 2405** and click **Enter**.
`Quantum>>`**stg delete flash 2406** and click **Enter**.
`Quantum>>`**stg delete flash 2407** and click **Enter**.
`Quantum>>`**reset**
`Quantum>>`**access dev**
`Quantum>>`**ConfigAVerySecretPassword [headtype]**
`Quantum>>`**feature creo 3 1160**
`Quantum>>`**reset**

Remote Support

Creo Service Port and Service Wire

The Creo Service Port (CSP) is installed with the Windows 2000 image CD. This enables defining the Lotem directly to the Service Wire (RSS). Guidelines for supporting the Lotem from the Service Wire can be found in the Lotem Family and RSS - Quick Connectivity Guide.

Remote Control

To access the remote control feature on the Lotem, select **Remote Support** from the **Utilities** menu. This launches the following:

- NetMeeting
- VNC
- Remote Applications dialog box

Note: To connect to NetMeeting from a remote computer, type **Remote** in the **User** box and type **sciremote** in the **Use Password** box.

The VNC on this version is Tight VNC with improved performance compared to previous releases.
To connect to VNC from a remote computer, type **sciremote** in the **Session Password** box.

Remote Diagnostics

There are two main advantages in running remote diagnostics:

- Saves time when the service engineer is on site by having test results available.
- Makes it possible to ship parts to the site before the engineer arrives on site.

When a TCP/IP connection has been established to the customer's site, it is possible to do the following:

- Remotely control the Lotem's desktop and activate three different kinds of diagnostics.
- Run the JOIND as a client/server application, as described below:
  - Ask the customer to close Lotem Controller (or use the desktop control to remotely close the application).
  - Ask the customer to activate the JServer via the **Start > Lotem 800 - Diag** menu (or use the desktop control).
  - Activate the JOIND Client on the remote PC. (This may be downloaded from the Remote Support section in TechPlanet).
  - In **Step 1** of the JOIND Startup, type in the IP address of the Lotem.
  - Click **Next** and then **Finish**.

Drive Sharing & Mapping

Drive C of the Lotem can be used sharing and mapping purposes. To connect to drive C from a remote computer, type the following in the **Start > Run** dialog box:

\\Lotem-IP-Address\C$

or

\\Lotem-IP-Address\C

When prompted, type **remote** in the UserName box and **sciremote** in the Password box.