Carestream DENTAL

CS 3600

User and Installation Guide

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We recommend that you thoroughly familiarize yourself with this Guide in order to make the most effective use of your system.

> ⚠ **WARNING: We recommend that you consult the "Safety, Regulatory, and Technical Specifications User Guide" before using the CS 3600 Systems.**

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Contents

1 Conventions in This Guide

Conventions in This Guide

The following special messages emphasize information or indicate potential risk to personnel or equipment:

> ⚠ **WARNING:** Warns you to avoid injury to yourself or others by following the safety instructions precisely.

> ⚠ **CAUTION:** Alerts you to a condition that might cause serious damage.

> ⚠ **Important:** Alerts you to a condition that might cause problems.

> ⓘ **Note:** Emphasizes important information.

> 💡 **Tip:** Provides extra information and hints.

2 CS 3600 Overview

The CS 3600 is designed to acquire 3D still images in the following modes:

- Lower jaw
- Upper jaw
- Buccal bite registration

CS 3600 Overview

Figure 1   CS 3600 Components Overview
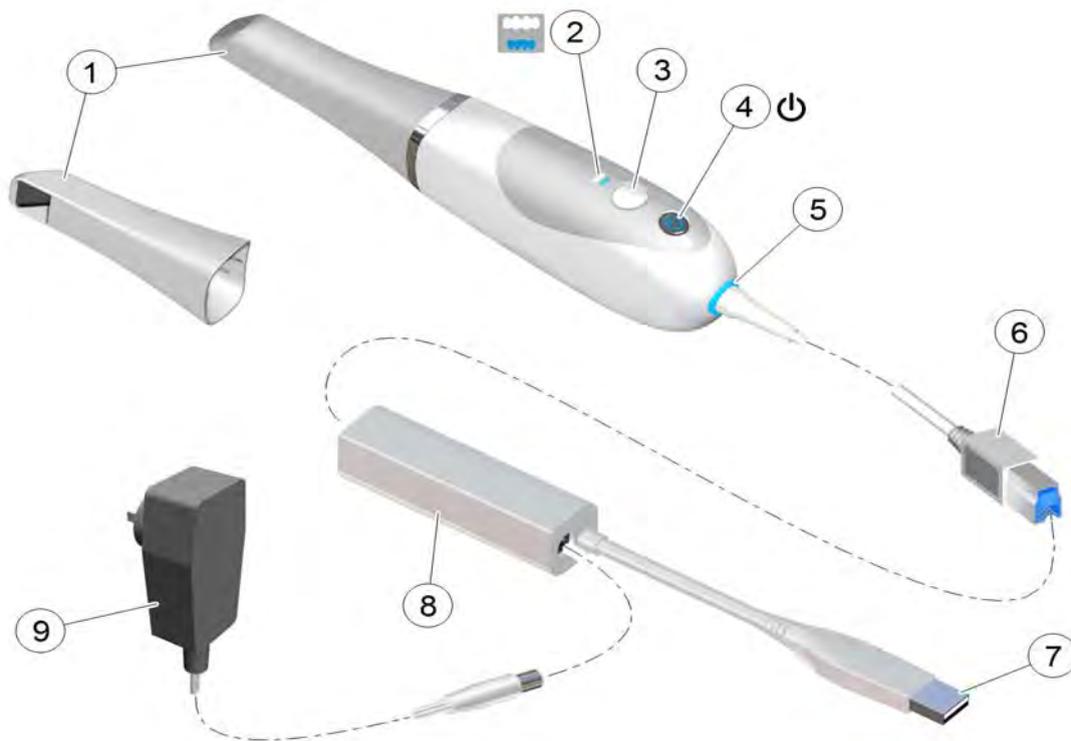
1	**Reusable tip**	There are two types of tips: Normal, facing downward, and Side, facing left. Tips are autoclavable for up to 20 times.
2	**Mode indicators**	- Lower jaw scan mode
		- Upper jaw scan mode
		- Buccal bite registration mode
		Note: The mode indicators and the power button blink rapidly if the CS 3600 is overheating.
3	**Mode button**	Press the button to switch between different modes.

| **4** | **Power button** | • Press one second to power ON.
• Press three seconds to power OFF. |

Power indicator LED:

•		The CS 3600 is active.
•		When the brightness changes gradually from dark to light and light to dark, the CS 3600 is inactive, disconnected, or the tip is not installed.
•		If the light is blinking rapidly and the **Overheating** icon is displayed on the **Acquisition** interface, place the CS 3600 in the holder for 5 to 10 minutes. The CS 3600 will become inactive and cool down.
•		Power is OFF.

5	**USB connection indicator**		
		•	Connected.
		•	Not connected.

6	**Scanner connector**	Plugs into the large jack on the end of the power box.
7	**USB cable**	One end of the cable is hard-wired to the power box, and the other end is connected to a USB port on the computer.
8	**Power box/cable**	Connects the scanner to the power adapter.
9	**Power adapter**	One end of the adapter is inserted in the small jack on the power box, and the other end is inserted in the power outlet.

CS 3600 Holder Overview

The CS 3600 holder can be used as a desktop or a wall mount holder. Place the CS 3600 in the holder when you are not using it.

Figure 2   CS 3600 in Desktop Holder

Figure 3   CS 3600 in Wall Mount Holder

Note: The CS 3600 goes into inactive mode when inserted into the holder. To use it again, take it out of the holder.

Note: The CS 3600 goes into inactive mode when left idle for 5 seconds (if set on a desk, for example). To use it again, pick it up.

Note: The CS 3600 **Acquisition** interface displays a **No Tip** icon when the tip is removed. To use the CS 3600 again, put on the tip.

Note: When the CS 3600 is idle for more than an hour, it powers off.

CS 3600 USB Cable Storage

To avoid damaging the USB cable of the CS 3600, you should loosely coil the cable and avoid creating any sharp kinks, especially in the area where the cable connects to the CS 3600.

Figure 4   Correct CS 3600 Cable Storage

Do **not** wrap the cable around the handle of the CS 3600 or create any sharp bends in the cable.

Figure 5   Incorrect CS 3600 Cable Storage

3 CS 3600 Software Overview

Minimum Computer System Requirements

For the minimum computer system requirements, see the **CS 3600 Safety, Regulatory, and Technical Specifications User Guide**.

> ⚠️ **Important: It is MANDATORY to check that your computer system configuration is compatible with the computer system requirements for the CS 3600 software.**

General Software Overview

The CS 3600 system operates with the following software:

- Imaging software
- **CS 3600 Acquisition** interface

Imaging Software

Carestream's imaging software is a user-friendly working interface that was designed and developed as a common imaging platform for all our dental digital systems.

For more details, see:

- **CS Imaging Software** online help and the **CS Imaging Software** Quick User Guide

OR

- **CS Orthodontic Imaging** software online help and the **CS Orthodontic Imaging** Quick User Guide

OR

- **CS OMS Imaging** software online help and the **CS OMS Imaging** Quick User Guide

CS 3600 Acquisition Interface Overview

The **CS 3600 Acquisition** interface enables you to acquire images in two ways:

- Partial arch scan: Several teeth in the preparation area on both the upper and lower jaws, and a buccal bite registration.

- Full arch scan: Upper jaw, lower jaw, and buccal bite registration.

> (i) **Note:** In some cases, you can acquire images of a single arch (partial or full) and not obtain a buccal bite registration (for example, if there are no teeth in the opposing arch), but it is recommended that you acquire both arches and a buccal bite registration when possible.

Figure 6   CS 3600 Acquisition Interface Overview
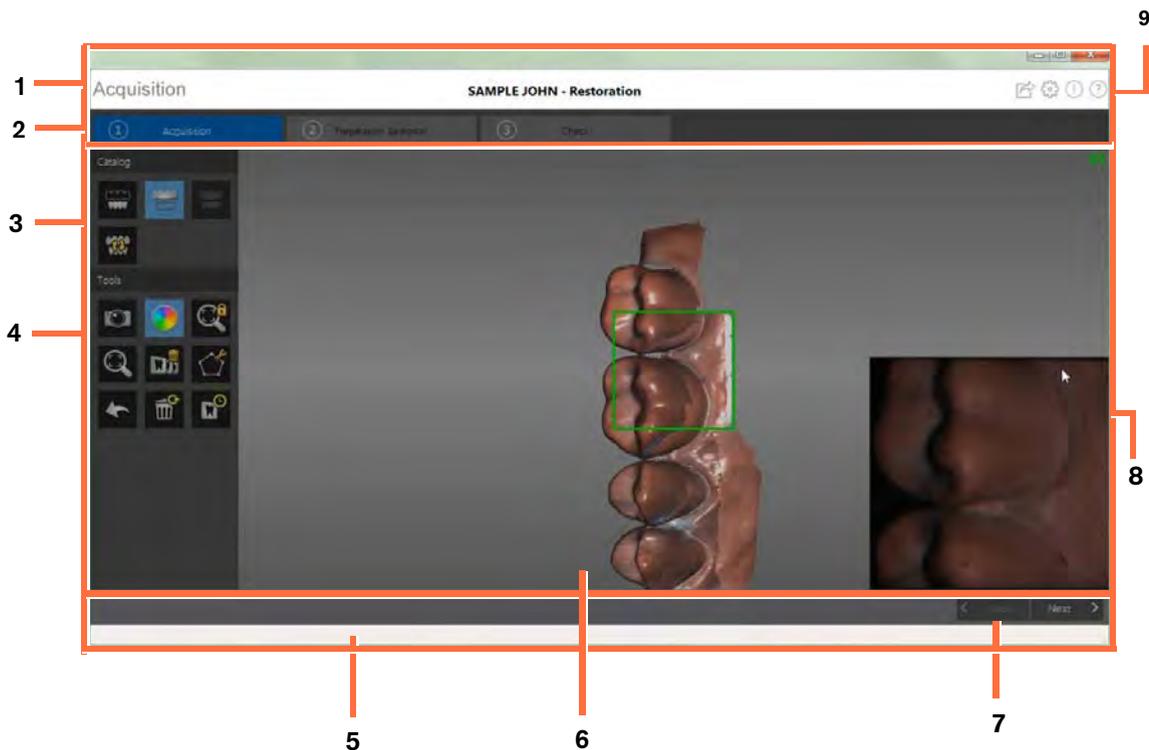
1   **Title Bar:** Displays:

- Patient's name and type of acquisition

- ▬   Minimizes the **Acquisition** interface.

- ▢   Maximizes or restores down the **Acquisition** interface.

- ✕   Closes the **Acquisition** interface.

2	**Acquisition Step:** Displays the current step in the acquisition process.
3	**Acquisition Catalog Toolbar:** Enables you to select the acquisition mode.
4	**Image Toolbar**: Enables you to select and manage 3D images.
5	**Progress Bar:** Indicates the status of the image acquisition process.
6	**3D Model Display Screen:** Displays the 3D model created from the scan.
7	**Navigation Bar:** Enables you to move forward or backward in the acquisition process.
8	**Video Preview Screen:** Displays live video of the scan of the patient's teeth.
9	**Settings Toolbar:** Enables you to export files, set preferences, and access system information and online help.

Toolbar Overview

Acquisition Catalog Toolbar

The acquisition catalog toolbar enables you to select the acquisition mode.

Lower Jaw button: Acquires a 3D image of the lower jaw.

Upper Jaw button: Acquires a 3D image of the upper jaw.

Buccal Bite Registration button: Acquires a 3D image of the bite.

Switch button: Changes the acquisition mode from upper to lower or vice versa, if you accidentally scan teeth on the wrong jaw.

Lower Jaw button: Acquires a 3D image of the scan body in the lower implant jaw when making an implant acquisition.

Upper Jaw button: Acquires a 3D image of the scan body in the upper implant jaw when making an implant acquisition.

Image Toolbar

The image toolbar enables you to select and manage images.

Intraoral Image button: Enables you to select two-dimensional intraoral images.

True Color button: Displays the 3D model in the actual color of the patient's hard and soft tissues.

Freeze button: Prevents the 3D model from being resized and rotated.

Zoom Fit button: Scales the 3D model to the best size to fit the display region.

Show Scanning Area button: Displays the arch diagram, enabling you to indicate the teeth that are part of the model. Click the **Adult** or **Child** icon to display the appropriate arch, and select the teeth that are in the model, including the upper and lower jaw. Click the **Reset** button to clear the selection. This button is available after the model has been refined.

Draw Margin Line button: Opens the **3D Margin Line Tool** window. This button is available when making a restoration acquisition after the model has been refined.

Auto Margin Line button: Draws the margin line automatically on a tooth you select on the model. This button is available when making a restoration acquisition after the model has been refined.

Manual Margin Line button: Enables you to manually draw the margin line on a tooth you select on the model. This button is available when making a restoration acquisition after the model has been refined.

Edit Margin Line button: Enables you to change a margin line on the model. This button is available when making a restoration acquisition after the model has been refined.

Delete Selected Margin Line button: Deletes a margin line that is selected on the model. This button is available when making a restoration acquisition after the model has been refined.

Select by window button: Selects the view or views by dragging the mouse to draw a selection box.

Free Cut button: Selects and deletes unwanted data, such as soft tissue, in the image using a free-form shape.

Split button: Displays a split-screen view of the 3D model, both with and without the scan body. This button is available when making an implant acquisition.

Delete All button: Deletes all views of the current mode.

Undo button: Cancels the last operation.

Reset button: Reverses all deletions and returns to the initial acquisition.

Scan History Check button: Enables you to go backward and forward in a 3D model to check the scan. You can remove mismatched/unwanted views and re-scan areas, if necessary.

Next button: Moves to the next step in the acquisition workflow.

Back button: Moves to the previous step in the acquisition workflow.

Settings Toolbar

The settings toolbar enables you to export files, set preferences, and access system information and online help.

Export button: Enables you to access the folder to which you want to export the image file. Use the export function to save the acquired images for later use.

Preference Setting button: Accesses the **Preferences** dialog box.

About button: Accesses system information, including the firmware and software version, and CS 3600 serial number.

Help button: Accesses the online help.

CS 3600 Status Icons

These icons display the current status of the CS 3600.

Inactive icon: Indicates the CS 3600 is in the holder or in sleep mode after being idle for 5 seconds.

No Tip icon: Indicates the CS 3600 does not have a tip.

Overheating icon: Indicates the CS 3600 is overheating. If this icon is displayed, place the CS 3600 in the holder for 5 to 10 minutes. The CS 3600 will become inactive and cool down.

Not Connected icon: Indicates the CS 3600 is not connected.

Connect icon: Click to connect the CS 3600 with the **Acquisition** software. **Note:** The **Connect** icon is displayed when you float the cursor over the **Not Connected** icon.

Select Acquisition Type Window
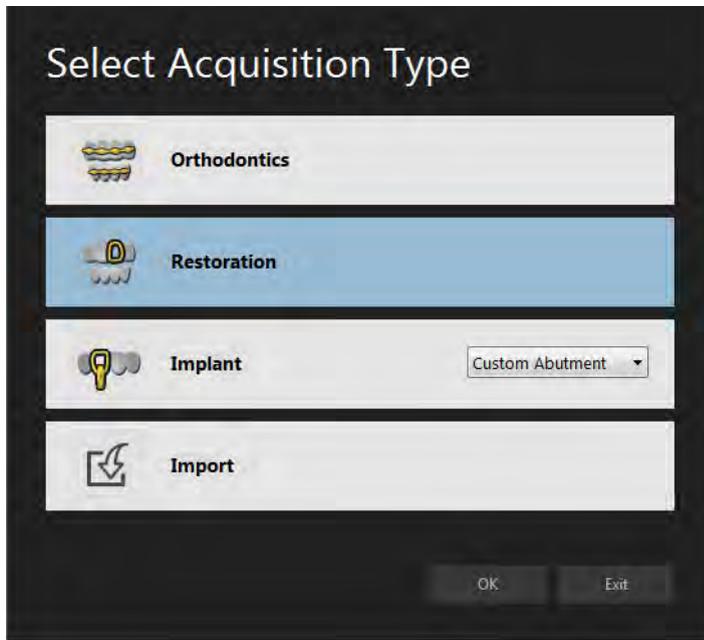
Orthodontics button: Select and click **OK** to perform an orthodontic acquisition.

Restoration button: Select and click **OK** to perform a restoration acquisition.

Implant button: Select and click **OK** to perform an implant acquisition. Click the drop-down button to select Standard Abutment or Custom Abutment.

Import button: Select and click **OK** to access the folder from which you want to import an image file. Use the import feature to access an acquisition you have previously saved.

Note: The acquisition type or folder path you select is selected by default the next time you open the **Acquisition** interface.

Preparation Check

The **Preparation Check** section is displayed after the model has been refined and enables you to verify important restoration data before continuing with the process.
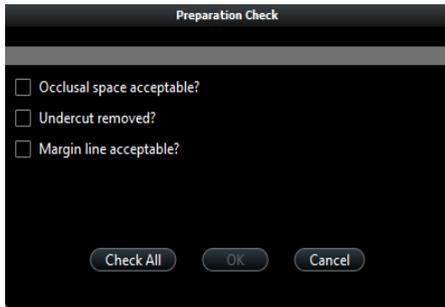
Restoration Preparation Check: A list of items you must check on the restorative 3D model to verify the bite registration and preparation design.

You must examine the appropriate area of the 3D model and select the corresponding option from the list before you can move to the next step.

Verify the following:

- Occlusal space
- Undercut
- Margin line
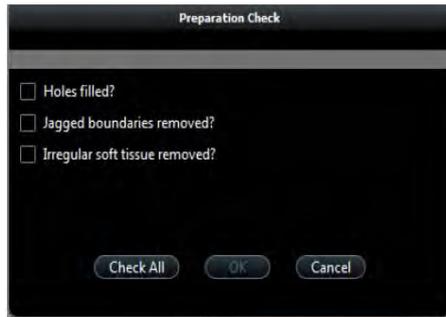
Orthodontic Preparation Check: A list of items you must check on the orthodontic 3D model to verify the accuracy of the model before sending it to the imaging software.

You must examine the appropriate area of the 3D model and select the corresponding option from the list before you can move to the next step.

Verify the following:

- No holes in the image
- Jagged boundaries removed
- Irregular soft tissue removed
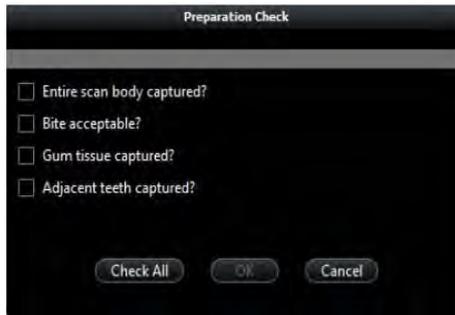
Implant Preparation Check: A list of items you must check on the implant 3D model to verify the accuracy of the model before sending it to the imaging software.

You must examine the appropriate area of the 3D model and select the corresponding option from the list before you can move to the next step.

Verify the following:

- Entire scan body is visible
- Bite
- Gum tissue is captured correctly
- Adjacent teeth are captured

Arch Display

The **Arch Display** section is displayed during refinement selection and after the model has been refined and enables you to view or hide the upper and lower jaws.
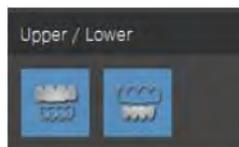
Upper: Click the **Upper Jaw** button to view or hide the upper jaw.
Lower: Click the **Lower Jaw** button to view or hide the lower jaw.

Without Scan Body: Click the **Without Scan Body** button to view the jaw without the scan body.

With Scan Body: Click the **With Scan Body** button to view the jaw with the scan body.

Preferences Dialog Boxes Overview

The **Preferences** dialog boxes enable you to select the **CS 3600 Acquisition** interface settings. It is recommended that you set up your preferences before using the CS 3600.

General Preferences

Figure 7   General Preferences
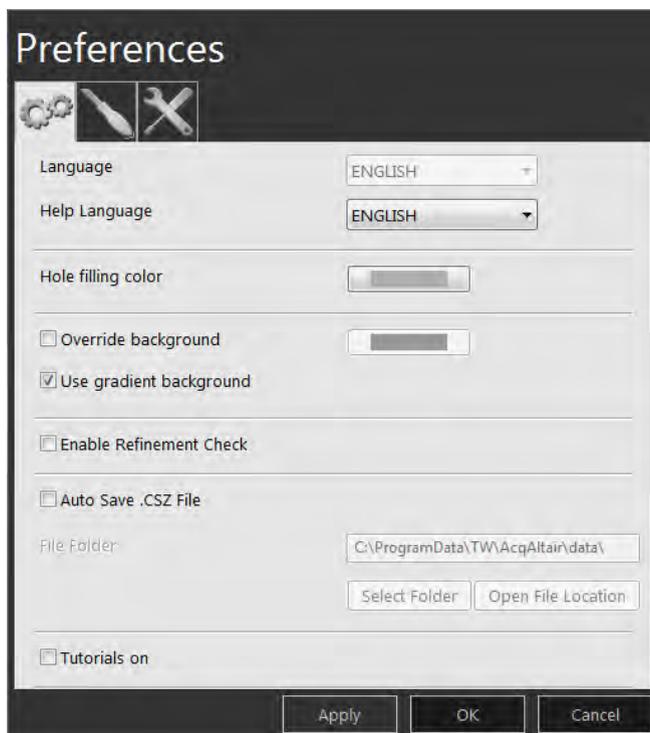
The **General Preferences** window enables you to select these options:

- **Language**: Select the menu language.

- **Help language**: Select the online help system language.

- **Hole filling color:** Select the color used to highlight the filled holes after refinement.

- **Override background:** Select the background color you prefer.

- **Use gradient background:** Select to include color gradations in the background.

- **Enable Refinement Check**: Select to enable the refinement check, which gives you the opportunity to check the image refinement, if desired, before cutting out the implant area. **Note:** You can select this preference only in the implant acquisition mode.

- **Auto Save .CSZ File**: Select to save a copy of the raw data for a scan in the designated folder.

  Use the following options:

    - **Select Folder**: Click to navigate to the folder to which you want to save the .CSZ file.

    - **Open File Location**: Click to open the folder containing the .CSZ files.

- **Tutorials on:** Select this option and re-start the **Acquisition** software to view brief tutorials on the CS 3600 interface and scanning techniques.

Scanner Preferences

Figure 8   Scanner Preferences
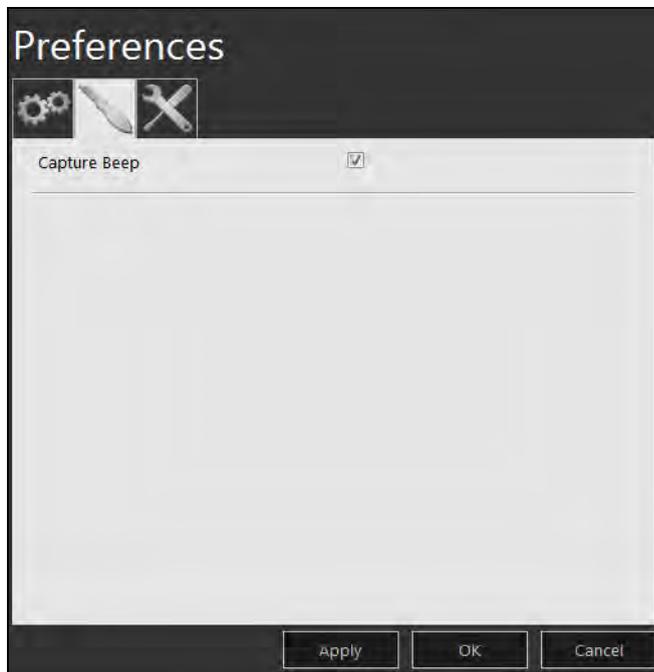
The **Scanner Preferences** window enables you to select the following option:

- **Capture beep**: Select to enable a beeping sound each time a scan starts and stops.

Tools Preferences

Figure 9   Tools Preferences
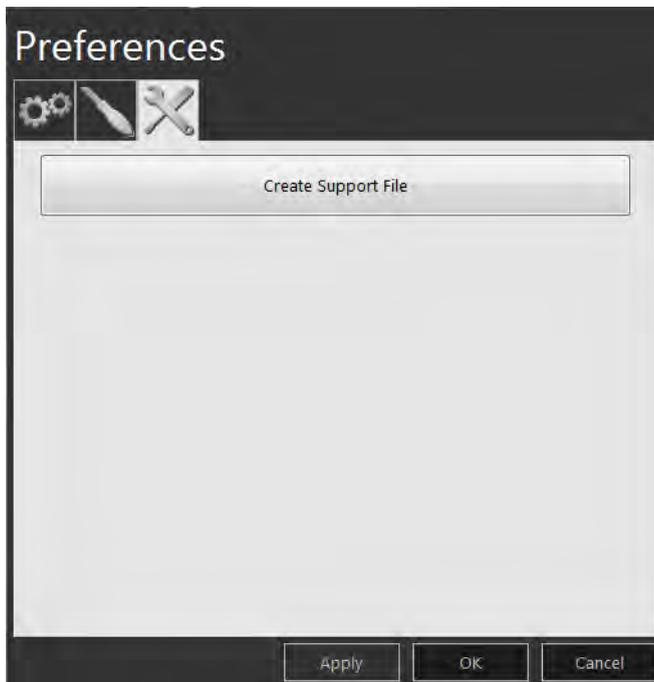
The **Tools Preferences** window enables you to select the following option:

- **Create Support File**: Click to select the folder where the log files for service information are saved.

4 Setting Up the CS 3600

Setting Up the CS 3600

To set up the CS 3600, follow these steps:

1   Install the imaging software on the computer. To install the **CS Imaging Software**, **CS Orthodontic Imaging** software, or **CS OMS Imaging** software, see the relevant installation and quick user guides.

2   Insert the CS 3600 Installation Wizard flash drive ![key icon] into the USB drive. The **AutoPlay** window is displayed.

> ⓘ **Note:** If the **AutoPlay** window does not automatically display, navigate to the CS 3600 flash drive in Windows Explorer and double-click **wizard.exe**.

3   Select **Run wizard.exe**. The **Autorun** window is displayed.

4   Select a language from the drop-down list, select **CS 3600**, and click **Run Installation**. The **Installation Wizard** window is displayed.

5   Follow the on-screen instructions to complete the installation.

6   Firmly slide one of the tips onto the end of the CS 3600.
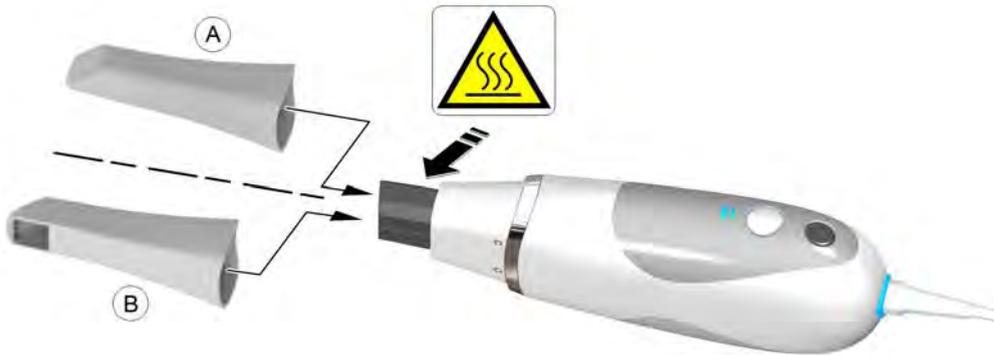
7   Insert the scanner connector (A) into the large jack on the end of the power box (B), and insert the DC power supply (C) into the small jack on the power box. Connect the USB cable (D) to the computer. and insert the power adapter (E) into an outlet.
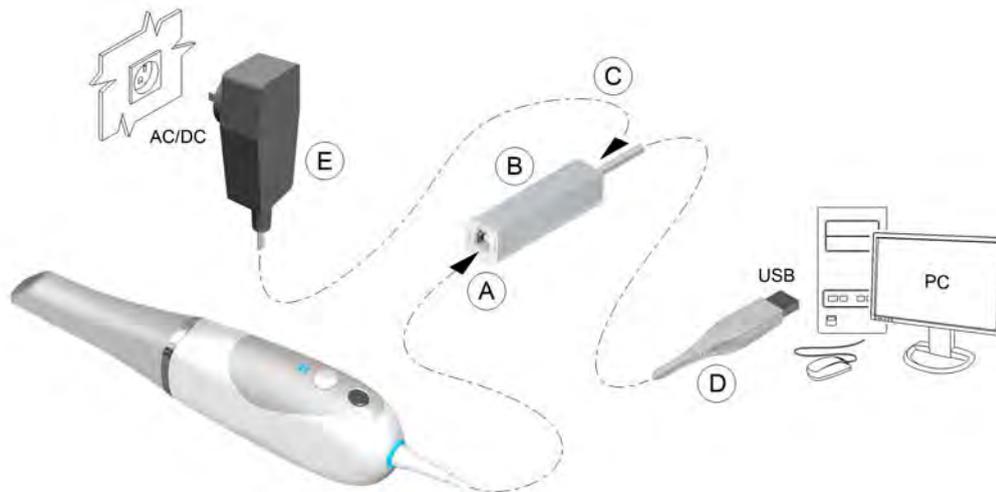
8   Press the power button one second to power on the CS 3600. Ensure the power indicator turns blue.

9   Wait until the USB connection indicator turns blue.

> **(i)** **Note:** The power indicator stops blinking and remains blue when the acquisition interface is open and the CS 3600 is ready to acquire images.

Using the CS 3600 Desktop Holder

The CS 3600 holder can function either as a desktop holder or a wall mount holder.

Installing the CS 3600 Desktop Holder

To use the CS 3600 holder as a desktop holder, follow these steps:

1   Select a clean surface area that you can access easily.

2   Clean the surface on which you are going to fasten the CS 3600 holder.

3   Attach the adhesive tape to the indentations in the holder (A).

4   Remove the adhesive tape protection (B).

5   Place the taped side of the CS 3600 holder on the clean surface (C) and press firmly several times for correct adherence. The maximum adherence is obtained after two hours.
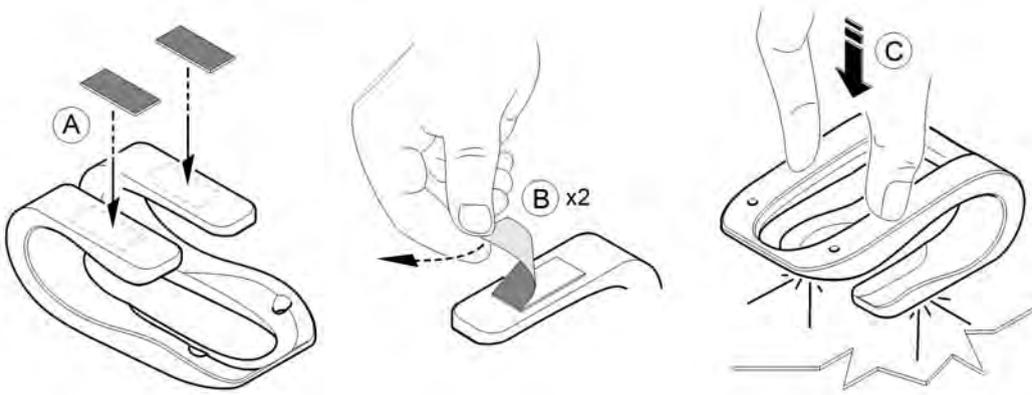
Important: You must avoid all stress on the CS 3600 holder during the first two hours.

Important: Adhesive tape can lose its adherence capability due to environmental and other factors. Check the adherence regularly to ensure that it is secure.

Important: Carestream Health is not responsible for accidents or damage involving the CS 3600 falling due to loosening of the adhesive tape.

Installing the CS 3600 Wall Mount Holder

To use the CS 3600 holder as a wall mount holder, follow these steps:

1   Select an area that you can access easily.

2   Insert screws through the appropriate holes in the holder to affix it to a solid surface.
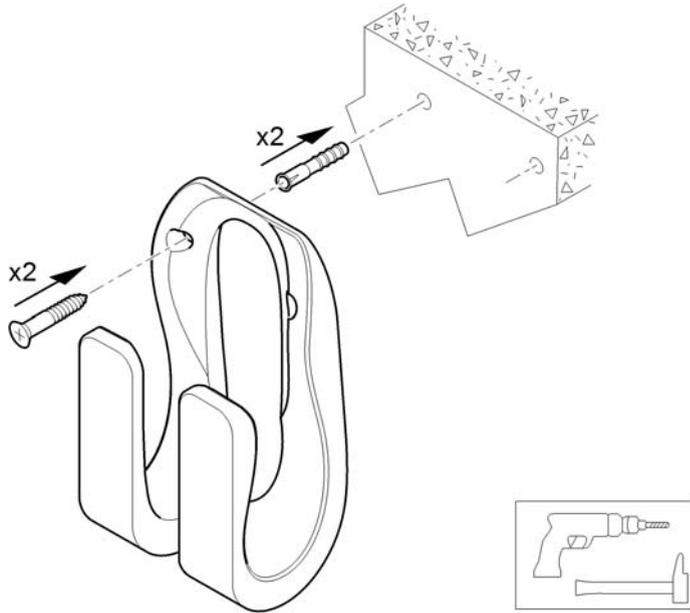
⚠ **Important: If the holder is not properly installed, there is a risk that the holder can fall off the wall, resulting in damage to the CS 3600.**

5 Getting Started

Using the Imaging Software

To use the **CS Imaging Software**, see the **CS Imaging Software** Quick User Guide and the online help delivered with the software.

To use the **CS Orthodontic Imaging** software, see the **CS Orthodontic Imaging** Quick User Guide and the online help delivered with the software.

To use the **CS OMS Imaging** software, see the **CS OMS Imaging** Quick User Guide and the online help delivered with the software.

Accessing the Acquisition Interface

You can access the **CS 3600 Acquisition** interface from inside the **CS Imaging Software**, the **CS Orthodontic Imaging** software, the **CS OMS Imaging** software, or from inside your practice management software.

Accessing the Acquisition Interface Using the Imaging Software

To access the **CS 3600 Acquisition** interface from the **CS Imaging Software**, the **CS Orthodontic Imaging** software, or the **CS OMS Imaging** software, follow these steps:

1   On your desktop, double-click (Carestream's **CS Imaging Software**) or (**CS Orthodontic Imaging** software or **CS OMS Imaging** software).

2   Find or create the patient record.

3   Double-click the patient record to access the imaging window or tab.

4   In the imaging window or tab, click to open the **CS 3600 Acquisition** interface.

5   Select your preference settings.

Accessing the Acquisition Interface from Your Practice Management Software

To access the **CS 3600 Acquisition** interface from your practice management software, follow these steps:

1   Open your practice management software.

2   Find the patient record and open it.

3   Open the imaging software.

4   Click to open the **CS 3600 Acquisition** interface.

5   Select your preference settings.

Setting Up Preferences

Set up your preferences before using the CS 3600. To set up the preferences, follow these steps:

1   On the **Acquisition** interface, click   . The **Preferences** dialog box is displayed.

2   Click   to set the general preferences.

3   Click   to set the CS 3600 scanner preferences.

4   Click   to set the tools preferences.

You can now start acquiring 3D images.

Viewing the CS 3600 Tutorials

To help you become familiar with the CS 3600 **Acquisition** interface and scanning techniques, you can view several brief tutorials. These tutorials are displayed the first time you open the software. After you view the tutorials and click **End Tutorial**, the tutorials will no longer display. You can view the tutorials again at any time by selecting the tutorials option in the **General Preferences** window.

To enable the tutorials, follow these steps:

1   In the **Acquisition** interface, click   . The **General Preferences** window is displayed.

2   Click **Tutorials on**.

3   Click **Apply**, click **OK**, and close the **Acquisition** interface.

4   Reopen the **Acquisition** interface to view the tutorials.

CS 3600 Tools and Tips

Use the following tools and tips to help you acquire quality images:

- **Capture Beep:** When the capture beep is enabled, the CS 3600 beeps each time a scan is stopped and started.

Tooth Preparation

- Dry the teeth thoroughly before starting an acquisition.

- Re-dry the teeth as appropriate throughout the acquisition process.

CS 3600 Position

- To enable the antifog feature, place the tip on the CS 3600 and allow the CS 3600 to warm up for approximately three minutes before starting the acquisition.

- Rest the tip of the CS 3600 on the tooth surface to steady the CS 3600.

- To start the CS 3600, hold the CS 3600 until the first 3D image appears, then move along with the arch.

⚠️ **Important Scanning Procedures—Restoration Acquisition**

Scanning One Surface at a Time

- Start with the occlusal surface, beginning with the preparation area and then scanning the surrounding teeth on the jaw.

- Next, scan the lingual surface, starting with the preparation area and then scanning the surrounding teeth on the jaw.

- Scan the buccal surface, starting with the preparation area and then scanning the surrounding teeth on the jaw.

- Finally, acquire the buccal bite registration.

Scanning Each Tooth Individually

- Scan one tooth at a time, following the occlusal/lingual/buccal, buccal/occlusal/lingual, or lingual/occlusal/buccal scan path.

- Once the entire tooth is scanned, move to the next tooth and repeat the scanning process until you have scanned all the teeth in the preparation area, as well as the surrounding teeth on the jaw.

- Finally, acquire the buccal bite registration.

⚠ Important Scanning Procedures—Orthodontic Acquisition

Scanning One Surface at a Time

- Start with the occlusal surface, and scan the teeth on the jaw.

- Next, scan the lingual surface of the teeth and soft-tissue areas. Be sure to include several millimeters of gingival tissue in the lingual scan.

- Scan the buccal surface of the teeth, palate, and soft-tissue areas. Be sure to include several millimeters of gingival tissue in the buccal scan.

- Finally, acquire the buccal bite registration.

Scanning Each Tooth Individually

- Scan one tooth at a time—following the occlusal/lingual/buccal, buccal/occlusal/lingual, or lingual/occlusal/buccal scan path—and include the palate and soft-tissue areas. Be sure to include several millimeters of gingival tissue in the lingual and buccal scans.

- Once the entire tooth and surrounding areas are scanned, move to the next tooth and repeat the scanning process until you have scanned all the teeth, the palate, and the soft-tissue areas. Be sure to include several millimeters of gingival tissue in the lingual and buccal scans.

- Finally, acquire the buccal bite registration.

⚠ Important Scanning Procedures—Implant Acquisition

Scanning One Surface at a Time

- Start with the occlusal surface, beginning with the implant area and then scanning the surrounding teeth on the jaw.

- Next, scan the lingual surface, starting with the implant area and then scanning the surrounding teeth on the jaw.

- Scan the buccal surface, starting with the implant area and then scanning the surrounding teeth on the jaw.

- Finally, acquire the buccal bite registration.

Scanning Each Tooth Individually

- Scan one tooth at a time, following the occlusal/lingual/buccal, buccal/occlusal/lingual, or lingual/occlusal/buccal scan path.

- Once the entire tooth is scanned, move to the next tooth and repeat the scanning process until you have scanned all the teeth in the implant area, as well as the surrounding teeth on the jaw.

- Finally, acquire the buccal bite registration.

Scanning Metal, Crowns, or Holes

- When scanning metal amalgams and crowns, thoroughly dry the teeth before scanning.

- Adjust the operatory light away from the patient to decrease light scatter.

- If holes are displayed in the scanned image near the restoration area, re-scan the area until the holes are filled. Holes away from the restoration area are not of great concern. To better view any holes, turn off True Color by clicking . Then, place the cursor over the 3D image, left-click and hold to rotate the model. Use the mouse wheel to zoom in on the 3D model.

Removing Soft-Tissue Artifacts, Unwanted Views, and Mismatches

- If you detect soft-tissue artifacts in an image during acquisition, click and left-click at several points around the soft tissue to draw lines around it. Double-click to delete the soft tissue. Re-scan the area to fill any holes.

- You can also remove soft-tissue artifacts, mismatches, or unwanted views by using the scan history check feature, which enables you to return to the portion of the scan just prior to where the unwanted views or mismatch occurred. Then you can re-scan the area. Click . Click on the slider and drag it to the left to remove portions of the scan. When you have removed the unwanted views from the scan, click **OK** to return to the **Acquisition** window.

Preparing the CS 3600

The reusable tip attaches to the body of the CS 3600 and provides a sanitary shield for the patient. **Always disinfect the body of the CS 3600, and clean and sterilize the tip after each use.**

> ⚠ **Important:** The removable scanner tip is autoclavable up to 20 cycles. After 20 cycles, discard the tip. See the CS 3600 Safety, Regulatory, and Technical Specifications User Guide for more information.

To prepare the CS 3600, follow these steps:

1   Make sure the lens window at the base of the CS 3600 is clean by wiping it with a moist, lint-free cloth or lens tissue.

2   Slide the tip onto the CS 3600 as illustrated, with the lens facing downward (A) or to the side, facing left (B).
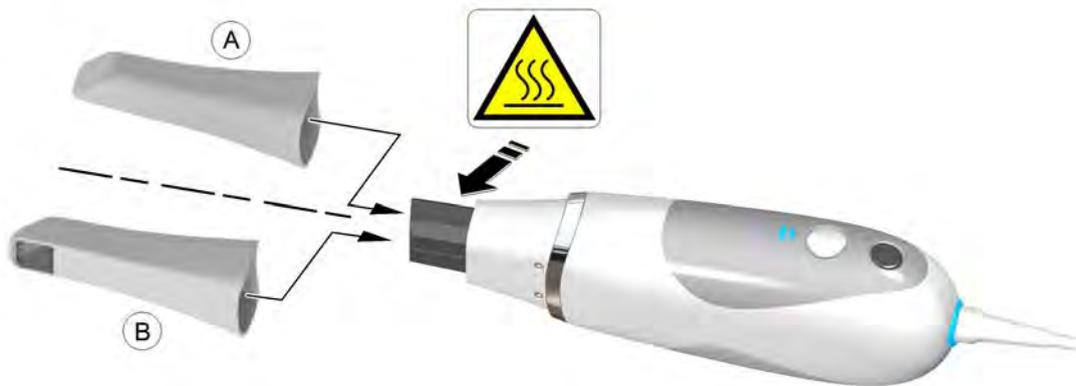
> ⚠ **WARNING:** The base of the CS 3600 becomes heated when the CS 3600 is turned on. Do not touch the heating element at the base of the CS 3600.

3   Press the power button for one second to power on the CS 3600.

4   Let the CS 3600 warm up for approximately three minutes to enable the antifog feature on the tip.

6 Acquiring a 3D Model for Restoration

You can use the CS 3600 to scan either a partial or full arch. For either type of scan, you should acquire images of the upper jaw, lower jaw, and the buccal bite registration. The software combines these images to create a 3D model.

To acquire a 3D model, follow these procedures:

- Scan the upper and lower jaw.
- Scan the buccal bite registration.
- Refine the image.
- Complete the preparation check and export the image.

> (i) **Note:** In some cases, you can acquire images of a single arch (partial or full) and not obtain a buccal bite registration (for example, if there are no teeth in the opposing arch), but it is recommended that you acquire both arches and a buccal bite registration when possible.

Scanning Teeth on the Upper and Lower Jaw

To acquire images using auto acquisition, follow these steps:

1   Dry the teeth thoroughly before starting an acquisition.

2   Access the **CS 3600 Acquisition** interface by clicking in the imaging software.

3   Select in the **Select Acquisition Type** window, and click **OK**.

4   On the **Acquisition** interface, select the **Upper Jaw** acquisition mode.

   OR

On the CS 3600, press the mode button for one second to select the acquisition mode. The mode indicator LED turns blue.

5   Hold the CS 3600 at a 90-degree angle to the occlusal surface of the teeth. Rest the tip on the tooth surface to steady the CS 3600. Live video is displayed on the video preview screen, and the acquisition begins. Images are automatically acquired and transferred to the 3D model display screen.

The image below shows several acquisitions of the upper jaw.

6   Slowly move the CS 3600 tip along the occlusal surface to scan the remaining teeth in the preparation area.

7   When the occlusal surface scan is complete, scan the lingual surface of the teeth in the preparation area.

8   When the lingual surface scan is complete, scan the buccal surface of the preparation area.

⚠ **Important: Re-dry the teeth as appropriate throughout the acquisition process.**

The example below shows a 3D model of the upper jaw when the occlusal, lingual, and buccal surfaces have been completely scanned.
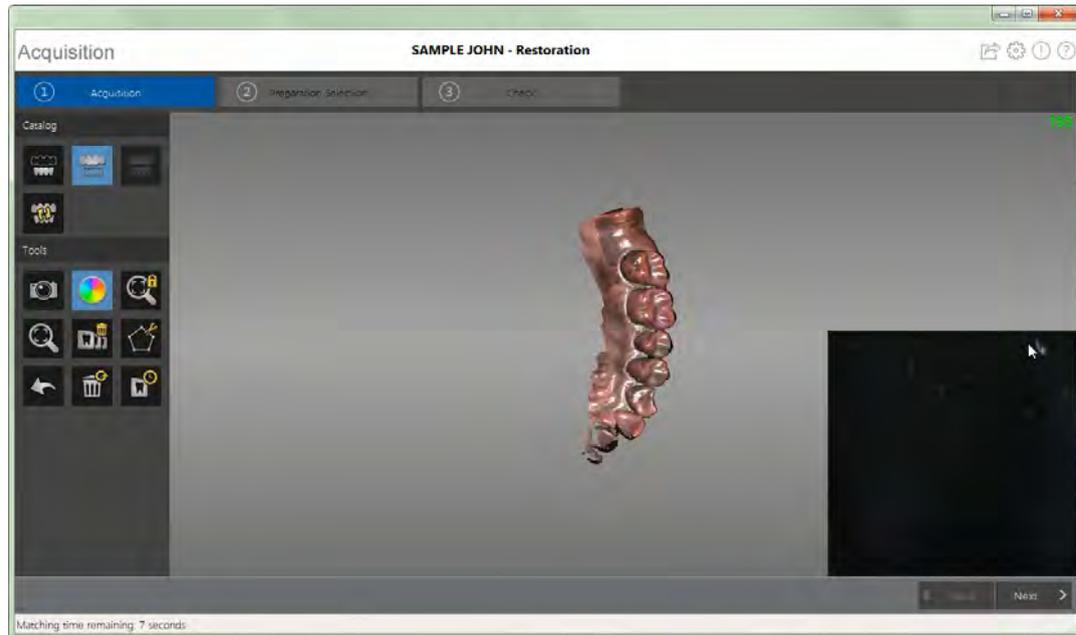

⚠ **Important: If holes are displayed in the scanned image on the preparation area, re-scan the area until the holes are filled. Use the mouse wheel to zoom in on the preparation area for a closer look.**

9   Once the upper jaw has been scanned, you can begin scanning the lower jaw. Click and

repeat steps 5 through 8 until the teeth in the area of restoration on the lower jaw are scanned.

The example below shows a 3D model of the lower jaw when the occlusal, lingual, and buccal surfaces have been completely scanned.
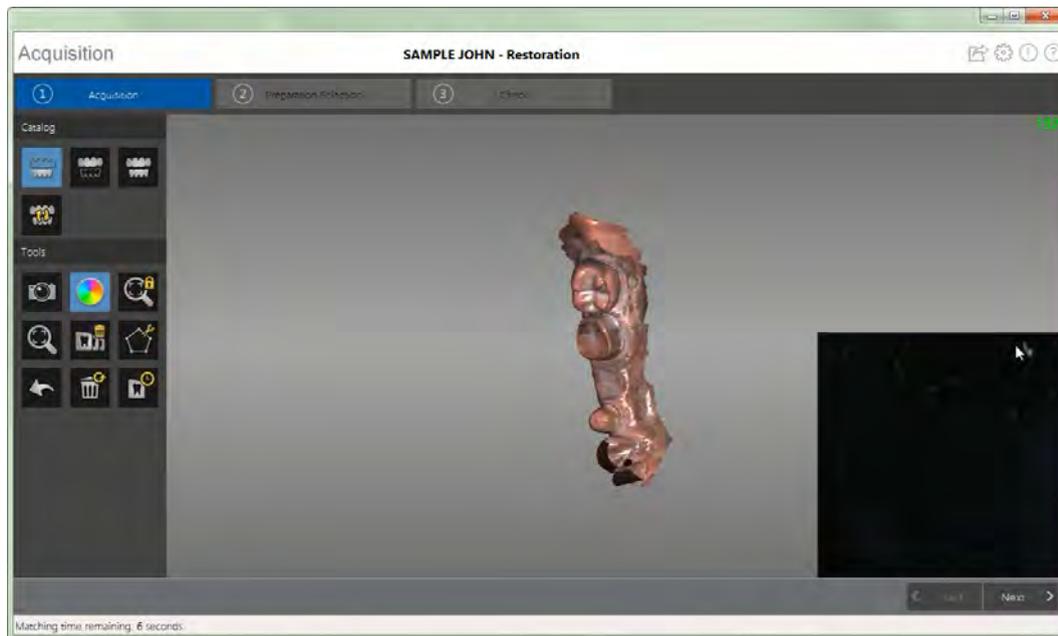
10 Visually inspect the 3D model for any holes. If holes are present near the restoration area, re-scan the area until the holes are filled.

11 When you are satisfied with the 3D model, continue with the buccal bite registration acquisition.

> ⚠ **Important: If you acquire images of teeth from both the upper and lower jaw, you must also acquire the buccal bite registration.**

Scanning the Buccal Bite Registration

To acquire a buccal bite registration using auto acquisition, follow these steps:

1   Click .

2   Have the patient bite down.

3   Position the CS 3600 at a 90-degree angle to the buccal surface of the preparation area, and align the point where the upper and lower teeth meet in the middle of the video preview screen. Rest the tip on the tooth surface to help steady the CS 3600.

4   Move the CS 3600 slightly up and down to trigger the bite registration acquisition.

    The example below shows a buccal bite registration.

A dot is displayed at the bottom of the window to indicate the capture was successful. A successful bite image includes both the upper and lower arch.

> **Tip:** After acquiring the buccal image of one jaw, always move **toward** the opposing arch with the CS 3600.

Once both arches are displayed in the **Acquisition** interface, the bite image is successful, and you can acquire additional bite images, which will increase the accuracy of the bite.

> **Important:** For a partial arch, you should acquire at least three buccal bite images—one on the preparation, one mesial to the preparation, and one distal to the preparation. For a full arch, you should acquire at least four buccal bite images—one on each side of the mouth at the molars, and one on each side of the mouth at the canines.

5   Acquire at least two more buccal bite images, one on either side of the preparation area. You can take up to six bite images for a full arch.

6   Once the bite has been registered, rotate the model and zoom the view to ensure that the bite is accurate and that there are no areas where the bite is mismatched. Click a dot to view the bite for that acquisition.

The example below shows several buccal bite registrations.
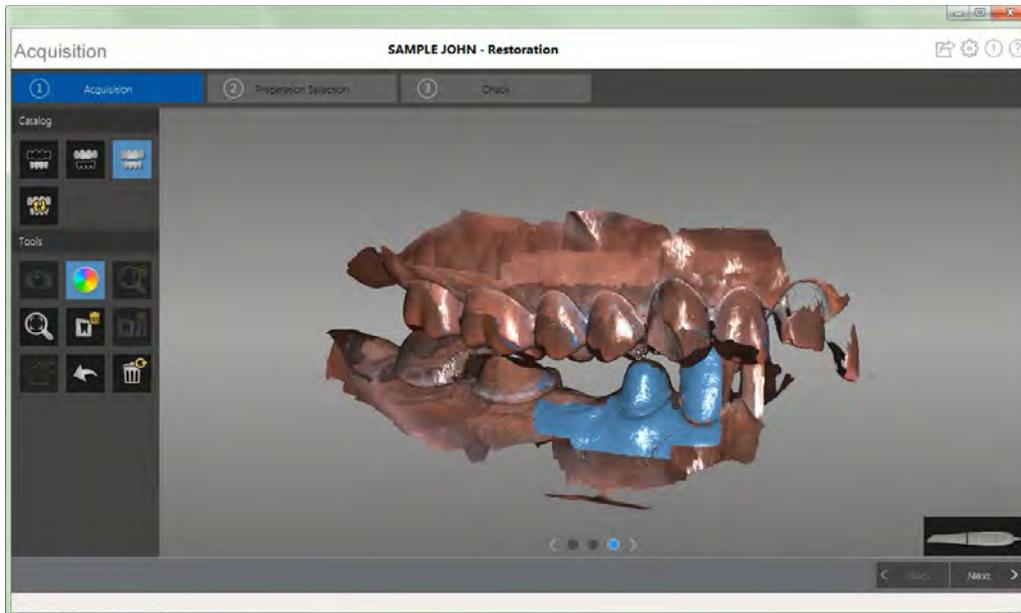
7   When you have finished acquiring the buccal bite registration, proceed to the preparation selection process.

Preparation Selection

The preparation selection step enables you to select specific teeth in the 3D model display area that will be refined at high resolution.

> ⚠️ **Important: If you have acquired fewer than five teeth, the software skips preparation selection, and the entire image is refined. You would then continue with Step 2 of the Check step.**

To select specific teeth on the 3D model for refinement, follow these steps:
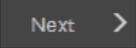
1   Click | Next > | to perform preparation selection.

2   Click [icon] .

3   Place the cursor over the area you want to refine, and left-click and drag the mouse to select the teeth for refinement. You should include the preparation, the adjacent surfaces of neighboring teeth, the teeth on the opposite arch, and at least one buccal bite registration acquisition in this selection.
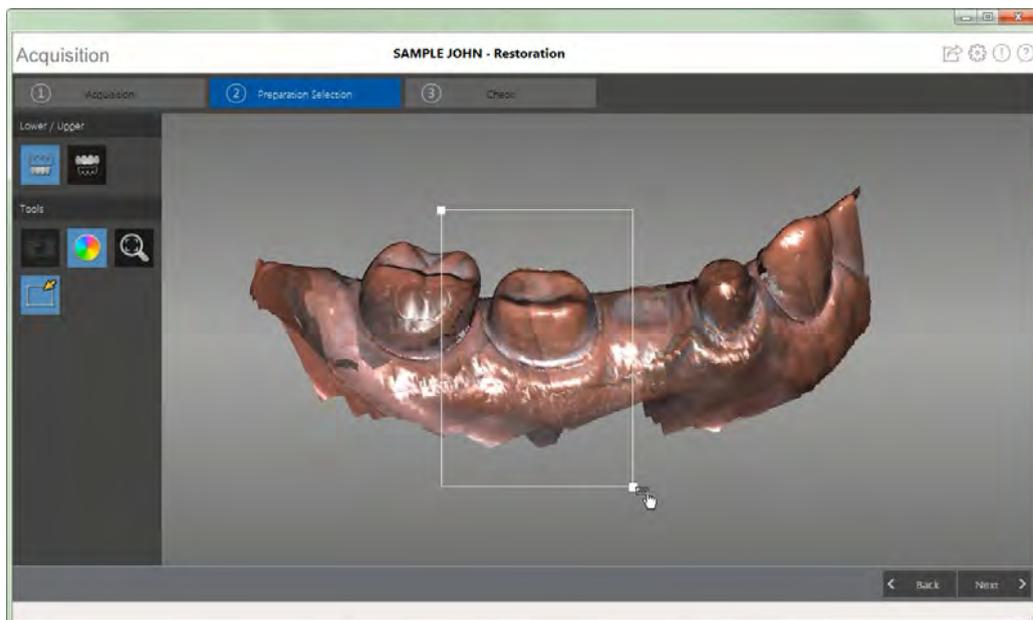
> ⚠️ **Important: Use the mouse to angle the image, and select teeth from above -- not from the side. This prevents teeth behind the target teeth from being refined.**

> ⚠️ **Important: You cannot select more than half an arch, or you will not be able to continue with the refinement process.**

Release the mouse button. The selected teeth are highlighted in blue.
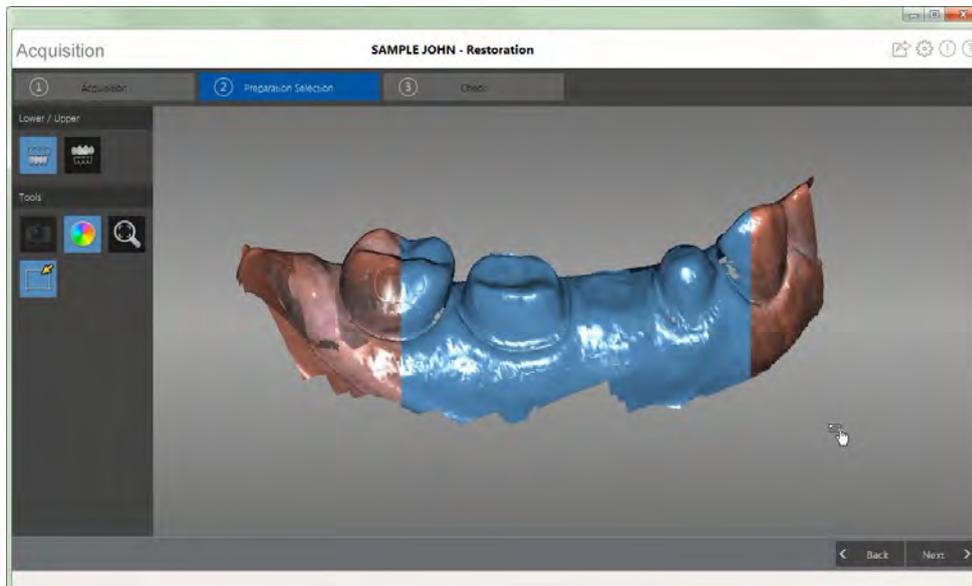

Tip: If necessary, you can select additional areas for refinement. Press **Ctrl**, place the cursor over the additional area to refine, and left-click and drag the mouse to select the additional teeth.

4   When you have successfully finished the preparation selection step, proceed to the check step.

Check

The check step enables you to further process the 3D image to obtain the highest accuracy.

To refine the 3D model and further examine it, follow these steps:
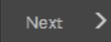
1   Click Next > to refine the image.
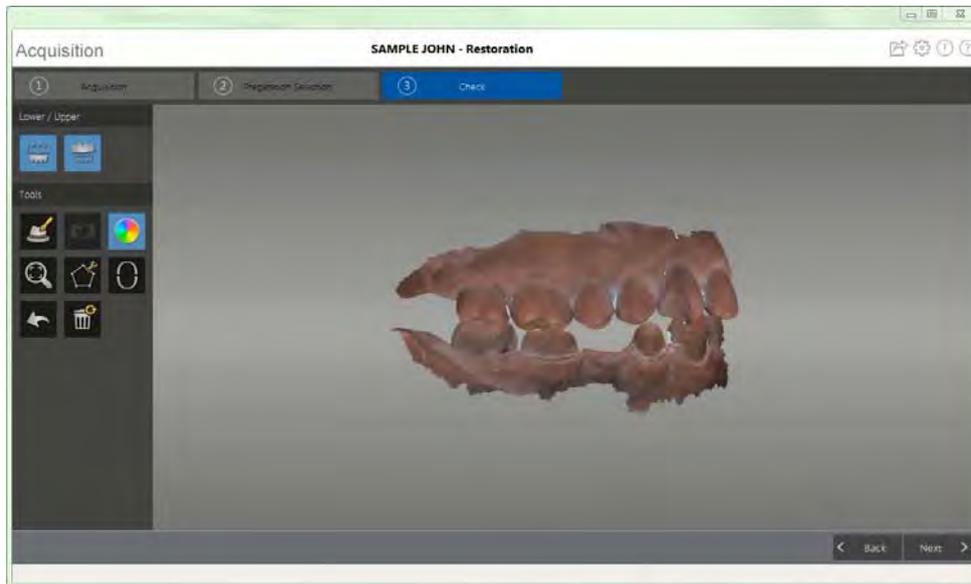
2   Manipulate the refined 3D model using the following methods:

- Right-click and hold on the 3D model to move it in the window.
- Left-click and hold on the 3D model to rotate it.
- If your mouse has a scroll wheel, use the wheel to zoom in or zoom out on the 3D model.

- Click ⊕ to scale the model to its best view.

- Click or to hide the upper or lower jaw. Click the button again to restore the view of the jaw.

- Click to select and delete excess soft tissue in the image.

3   If you find holes in the preparation area, click < Back and re-scan the teeth that are missing data.

4   Repeat steps 1 through 3 until you are satisfied with the 3D model.

5   Click . The arch diagram is displayed.

6   Click the **Adult** or **Child** icon to display the appropriate arch.

7   Select the teeth on the arch that were acquired for the 3D model, including those on the upper and lower jaw.

8   If you are exporting the 3D model to a dental lab, you can draw a margin line reference on the 3D model. See "Drawing Margin Lines."
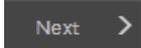
9   Click [Next >]. The **Preparation Check** window is displayed.
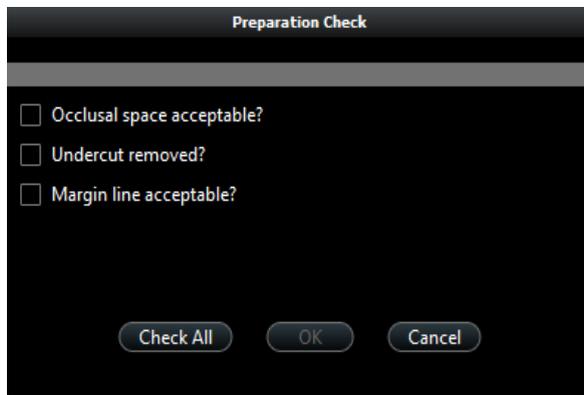
10   Examine the occlusal space on the 3D model and do one of the following:

   •   If the occlusal space is acceptable, click the corresponding option in the **Preparation Check** window.

   •   If the occlusal space is not acceptable, click **Cancel**. Click [< Back] and re-scan the affected teeth.
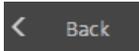
11 Examine the undercut on the 3D model and do one of the following:

- If the undercut is acceptable, click the corresponding option in the **Preparation Check** window.

- If the undercut is not acceptable, click **Cancel**. Click [< Back] . Make the necessary adjustments to the preparation and then re-scan the preparation area and surrounding teeth.
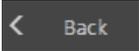
12 Examine the margin line on the 3D model and do one of the following:

- If the margin line is acceptable, click the corresponding option in the **Preparation Check** window.

- If the margin line is not acceptable, click **Cancel**. Click [< Back] and re-scan the affected teeth.
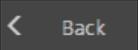
13 When satisfied with the 3D model, click [OK] to send the 3D model to the imaging software.

> ⚠ **Important:** To view your 3D models, use the CS Mesh Viewer that was installed on your desktop. For instructions on using the mesh viewer, click the ? button in the CS Mesh Viewer interface. If you are sending the DCM file to a lab, ask the lab to download the CS Mesh Viewer from the following link: http://sas-origin.onstreammedia.com/origin/carestreamhealthinc/CSMeshViewer/CSMeshViewer.zip

Drawing Margin Lines

If you are exporting the 3D model to a dental lab, you can have the software automatically draw a margin line on the 3D model, or you can manually draw the margin line.

⚠️ **Important: The Auto Margin Line feature can be used only with crowns. For cases involving inlays or onlays, you must manually draw the margin line.**

Automatically Drawing a Margin Line

To automatically draw a margin line, follow these steps:

1   Click ![icon] . The Margin Line Tools are displayed on the toolbar.

2   Click ![icon] .

3   Click on the preparation area. The tooth number selection arch diagram is displayed.
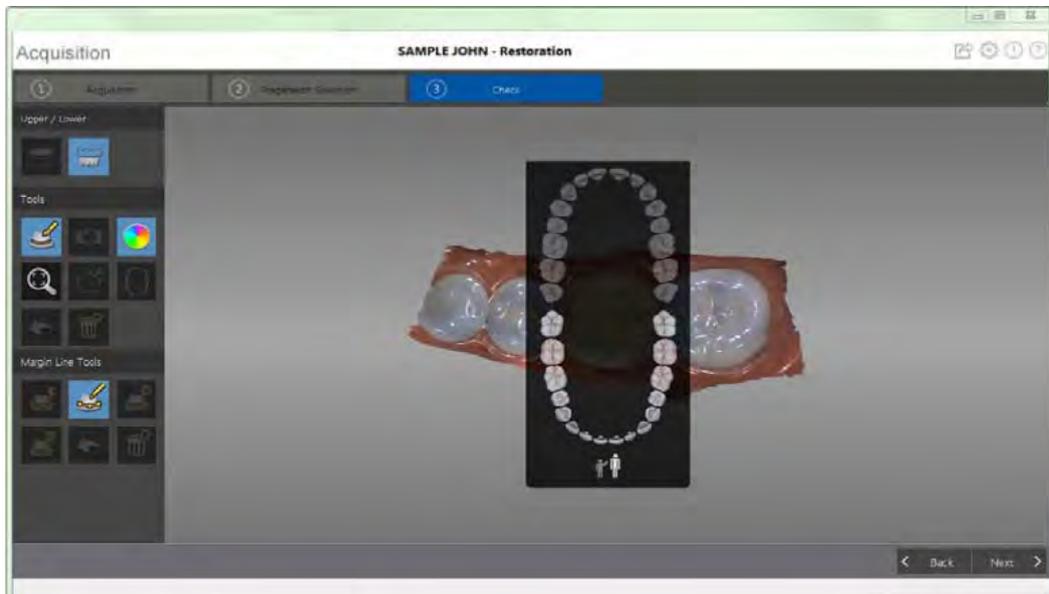
4   Select the corresponding tooth on the tooth number selection arch diagram.
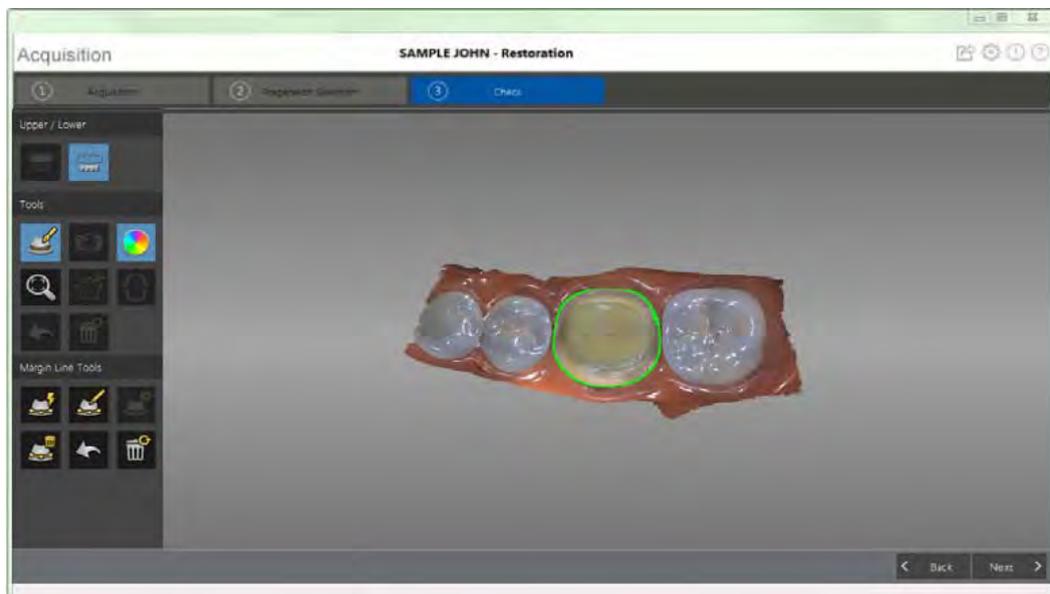
5   Examine the margin line on the 3D model and do any of the following:

- To edit the margin line, click on the margin line to select it. Click . Redraw the section of the margin line you want to alter, and be sure it connects with the existing margin line.

- To delete the margin line, select the margin line and click .

6   To view margin line references outside of the **CS 3600 Acquisition** interface, use the **CS Mesh Viewer** that was installed on your desktop.

Manually Drawing a Margin Line

You must manually draw the margin line if the case involves an inlay or onlay.

To manually draw a margin line, follow these steps:

1   Click . The Margin Line Tools are displayed on the toolbar.
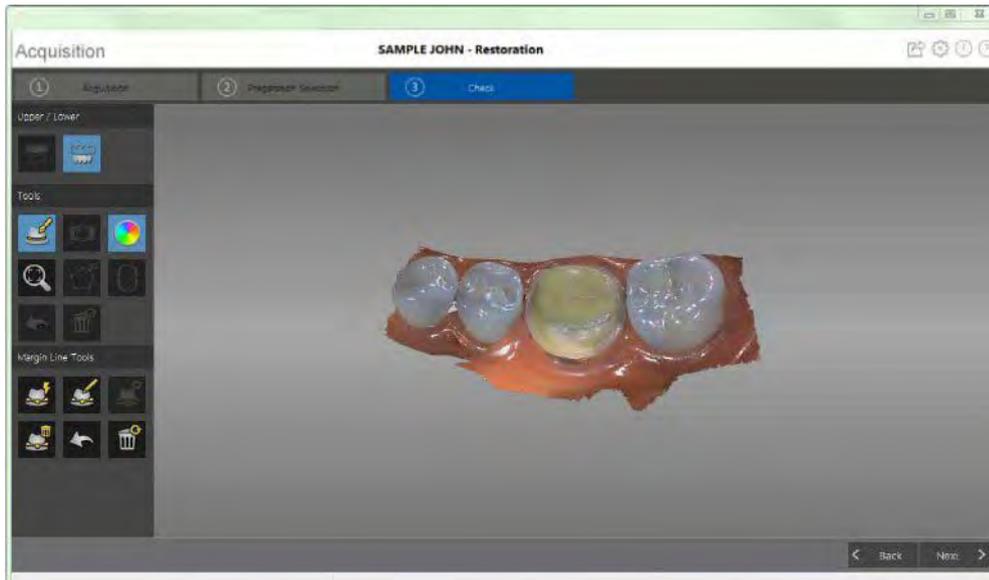
2   Click . The tooth number selection arch diagram is displayed.
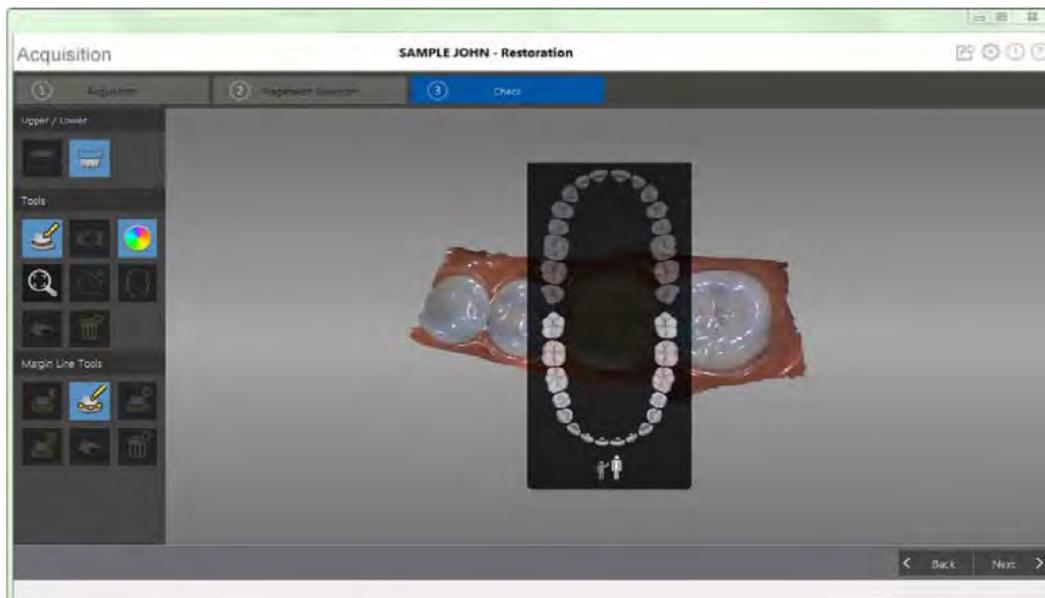
3   Select the corresponding tooth on the tooth number selection arch diagram.

4   Left-click and drag to draw the margin line around the preparation.

5   Examine the margin line on the 3D model and do any of the following:

- To edit the margin line, click on the margin line to select it. Click . Redraw the section of the margin line you want to alter, and be sure it connects with the existing margin line.

- To delete the margin line, click on the margin line to select it. Click .

6   To view margin line references outside of the **CS 3600 Acquisition** interface, use the **CS Mesh Viewer** that was installed on your desktop.

Selecting 2D Images

You can use the 2D Image feature to select 2D images from the 3D model to send to the dental lab along with the 3D model.

> **(i)** **Note:** The 2D Image feature is available only during the acquisition step.

To select 2D images, follow these steps:

1   Click [icon].

2   Manipulate the 3D model to the position you want to view.

3   Click on the areas of the 3D model for which you want 2D images. The images are displayed on the **Views** tab.

4   Click the checkmark on the upper-right corner of an image on the **Views** tab to move the image to the **Saved Views** tab.

5   When you are finished selecting 2D images, click [icon] to return to the **Acquisition** interface.

Reviewing a Scan and Removing Unwanted Views Using Scan History Check

The scan history check feature enables you to go backward and forward in a 3D model to check the scan. If you have areas of the scan containing mismatched or unwanted views, and you cannot remove these areas using the tool, you can use the scan history check feature to return to the portion of the scan just prior to where the mismatch occurred. Then you can re-scan the area.

To use the scan history check feature, follow these steps:

1   Click . The scan history check view is displayed.

2   Manipulate the 3D model to the position you want to view.

3   Click on the slider, and drag it to the left to remove portions of the scan. Moving the slider back to the right replaces the portions you removed.

4   When you have removed the unwanted views from the scan, click **OK** to return to the **Acquisition** window.

> **(i) Note:** Views removed using the scan history check feature cannot be restored.

5   To return to the **Acquisition** window without making any changes, click or **Cancel**.

7 Acquiring a 3D Model for Orthodontics

You can use the CS 3600 to scan a full arch to create a 3D model. You then export this model to the CS Model software, where you can use the electronic model to take basic distance measurements, eliminating the need for taking impressions and working with or storing stone models. You should acquire images of the upper jaw, lower jaw, and the buccal bite registration. The software combines these images to create the 3D model.

To acquire a 3D model for orthodontic use, follow these procedures:

- Scan the upper and lower jaw.
- Scan the buccal bite registration.
- Refine the image.
- Complete the preparation check and export the image.

> (i) **Note:** In some cases, you can acquire images of a single arch (partial or full) and not obtain a buccal bite registration (for example, if there are no teeth in the opposing arch), but it is recommended that you acquire both arches and a buccal bite registration when possible.

Scanning Teeth on the Upper and Lower Jaw

To acquire images using auto acquisition, follow these steps:

1   Dry the teeth thoroughly before starting an acquisition.

2   Access the **CS 3600 Acquisition** interface by clicking in the imaging software.

3   Select in the **Select Acquisition Type** window, and click **OK**.

4   On the **Acquisition** interface, select the **Upper Jaw** acquisition mode.

OR

On the CS 3600, press the mode button for one second to select the acquisition mode. The mode indicator LED turns blue.

5   Hold the CS 3600 at a 90-degree angle to the occlusal surface of the teeth. Rest the tip on the tooth surface to steady the CS 3600. Live video is displayed on the video preview screen, and the acquisition begins. Images are automatically acquired and transferred to the 3D model display screen.

The image below shows several acquisitions of the upper jaw.

6   When the occlusal surface scan is complete, scan the lingual surface of the teeth. Hold the CS 3600 at a 45-degree angle to the lingual surface of the teeth. Be sure to include several millimeters of gingival tissue in the lingual scan.

7   When the lingual surface scan is complete, scan the buccal surface of the teeth. Hold the CS 3600 at a 45-degree angle to the buccal surface of the teeth. Be sure to include several millimeters of gingival tissue in the buccal scan.

> ⚠ **Important: Re-dry the teeth as appropriate throughout the acquisition process.**

The example below shows a 3D model of the upper jaw when the occlusal, lingual, and buccal surfaces have been completely scanned, as well as much of the palate.
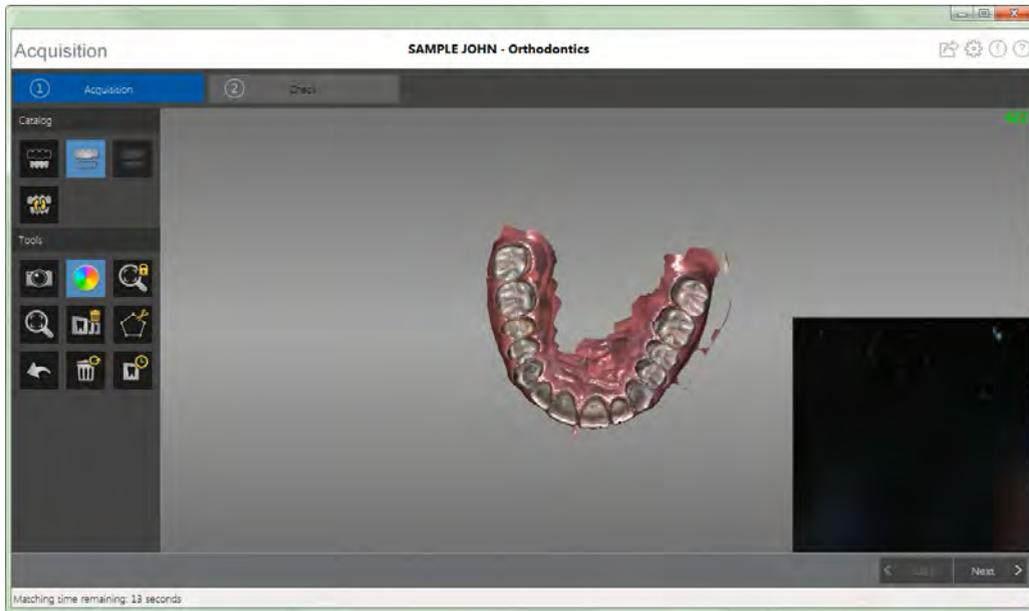

> ⚠ **Important:** If holes are displayed in the scanned image, re-scan the area until the holes are filled. Use the mouse wheel to zoom in on the image for a closer look.

8   Once the upper jaw has been scanned, you can begin scanning the lower jaw. Click [icon] and repeat steps 5 through 8 until the teeth on the lower jaw are scanned.

The example below shows a 3D model of the lower jaw when the occlusal, lingual, and buccal surfaces have been completely scanned, including soft tissue.
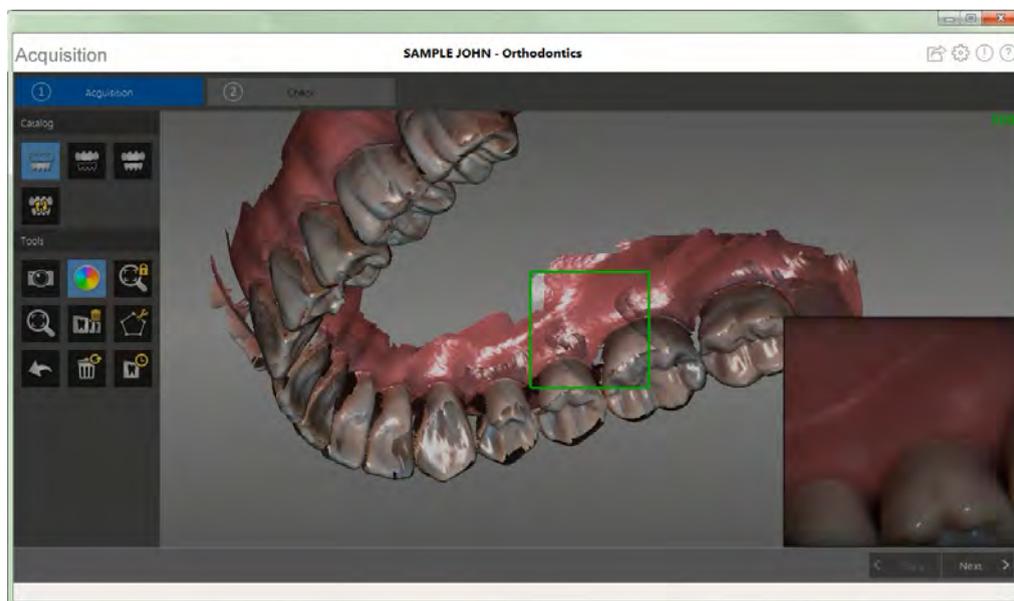
9   Visually inspect the 3D model for any holes. If holes are present, re-scan the area until the holes are filled.

10 When you are satisfied with the 3D model, continue with the buccal bite registration acquisition.

Scanning the Buccal Bite Registration

To acquire a buccal bite registration using auto acquisition, follow these steps:

1   Click .

2   Have the patient bite down.

3   Position the CS 3600 at a 90-degree angle to the buccal surface of the teeth, and align the point where the upper and lower teeth meet in the middle of the video preview screen. Rest the tip on the tooth surface to help steady the CS 3600.

4   Move the CS 3600 slightly up and down to trigger the bite registration acquisition.

The example below shows a buccal bite registration.

A dot is displayed at the bottom of the window to indicate the capture was successful. A successful bite image includes both the upper and lower arch.

> **Tip:** After acquiring the buccal image of one jaw, always move **toward** the opposing arch with the CS 3600.

Once both arches are displayed in the **Acquisition** interface, the bite image is successful, and you can acquire additional bite images, which will increase the accuracy of the bite.

> ⚠ **Important: For a full arch, you should acquire at least four buccal bite images—one on each side of the mouth at the molars, and one on each side of the mouth at the canines.**

5   Acquire several additional buccal bite images. You can take up to six bite images for a full arch.

6   Once the bite has been registered, rotate the model and zoom the view to ensure that the bite is accurate and that there are no areas where the bite is mismatched. Click a dot to view the bite for that acquisition.

The example below shows several buccal bite registrations.

7   When you have finished acquiring the buccal bite registration, proceed to the check step.

Check

The check step enables you to further process the 3D image to obtain the highest accuracy.

To refine the 3D model and further examine it, follow these steps:

1   Click **Next >** to refine the image.

2   Manipulate the refined 3D model using the following methods:

- Right-click and hold on the 3D model to move it in the window.
- Left-click and hold on the 3D model to rotate it.
- If your mouse has a scroll wheel, use the wheel to zoom in or zoom out on the 3D model.

- Click to scale the model to its best view.

- Click ![upper jaw icon] or ![lower jaw icon] to hide the upper or lower jaw. Click the button again to

    restore the view of the jaw.

- Click ![scissors icon] to select and delete excess soft tissue in the image.

3   If you find holes in the image, click [< Back] and re-scan the teeth that are missing data.

4   Repeat steps 1 through 3 until you are satisfied with the 3D model.

5   Click [Next >] . The **Preparation Check** window is displayed.

6   Examine the 3D model for holes and do one of the following:

- If there are no holes in the image, click the corresponding option in the **Preparation Check** window.

- If there are holes that need to be filled, click **Cancel**. Click ❮ Back and re-scan the affected teeth.
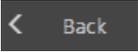
7   Examine the 3D model for jagged boundaries and do one of the following:

- If there are no jagged boundaries in the image, click the corresponding option in the **Preparation Check** window.

- If you find jagged boundaries in the image, remove the boundaries using the ⬠ tool.

8   Examine the 3D model for irregular soft tissue and do one of the following:

- If there is no irregular soft tissue in the image, click the corresponding option in the **Preparation Check** window.

- If you find irregular soft tissue, remove the irregular soft tissue using the ⬠ tool.

9   When satisfied with the 3D model, click **OK** to send the 3D model to the imaging software.

⚠️ **Important:** To view your 3D models, use the CS Mesh Viewer that was installed on your desktop. For instructions on using the mesh viewer, click the ? button in the CS Mesh Viewer interface. If you are sending the DCM file to a lab, ask the lab to download the CS Mesh Viewer from the following link: http://sas-origin.onstreammedia.com/origin/carestreamhealthinc/CSMeshViewer/CSMeshViewer.zip

Selecting 2D Images

You can select 2D images from the 3D model to send to the dental lab along with the 3D model.

> **(i) Note:** The 2D image selection feature is available only during the acquisition step.

To select 2D images, follow these steps:

1 Click .

2 Manipulate the 3D model to the position you want to view.

3 Click on the areas of the 3D model for which you want 2D images. The images are displayed on the **Views** tab.

4 Click the checkmark on the upper-right corner of an image on the **Views** tab to move the image to the **Saved Views** tab.

5 When you are finished selecting 2D images, click to return to the **Acquisition** interface.

Reviewing a Scan and Removing Unwanted Views Using Scan History Check

The scan history check feature enables you to go backward and forward in a 3D model to check the scan. If you have areas of the scan containing mismatched or unwanted views, and you cannot remove these areas using the tool, you can use the scan history check feature to return to the portion of the scan just prior to where the mismatch occurred. Then you can re-scan the area.

To use the scan history check feature, follow these steps:

1   Click . The scan history check view is displayed.

2   Manipulate the 3D model to the position you want to view.

3   Click on the slider, and drag it to the left to remove portions of the scan. Moving the slider back to the right replaces the portions you removed.

4   When you have removed the unwanted views from the scan, click **OK** to return to the **Acquisition** window.

> **Note:** Views removed using the scan history check feature cannot be restored.

5   To return to the **Acquisition** window without making any changes, click or **Cancel**.

8 Acquiring a 3D Model for Implants

You can use the CS 3600 to scan a full or partial arch containing an abutment or implant to create a 3D model. When you acquire a full or partial arch with an existing abutment, the acquisition process is the same as that of a standard restoration. When you acquire a full or partial arch containing an implant, the software replicates the image, enabling you to cut out the implant area, re-scan the jaw with the scan body in place, and create two 3D models—one containing the scan body, and one without. You then send these models to the lab that will create the custom abutment.

Before you can acquire a 3D model for an implant, you must select a scan type, which determines the scan process you will follow.

The following scan types are available:

- **Standard Abutment**: Use when an abutment is present in the jaw. The acquisition process is the same as the restoration acquisition process.

- **Custom Abutment:** Use when acquiring 3D models to be sent to a lab that will create a custom abutment. The implant acquisition process—cutting out the implant area and acquiring the scan body—is performed on the appropriate jaw.

To acquire a 3D model for an implant, follow these procedures:

- Scan the upper and lower jaw.
- Scan the buccal bite registration.
- Use the Free Cut tool to cut out the implant area.
- Install the scan body, and re-scan the jaw with the scan body.
- Refine the image.
- Complete the preparation check, and export the images.

> (i) **Note:** In some cases, you can acquire images of a single arch (partial or full) and not obtain a buccal bite registration (for example, if there are no teeth in the opposing arch), but it is recommended that you acquire both arches and a buccal bite registration when possible.

Scanning Teeth on the Upper and Lower Jaw

To acquire images using auto acquisition, follow these steps:

1   Dry the teeth thoroughly before starting an acquisition.

2   Access the **CS 3600 Acquisition** interface by clicking in the imaging software.
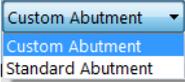
3   Select a scan type , click in the **Select Acquisition Type** window, and

   click **OK**. This example uses the **Custom Abutment** option.

4   On the **Acquisition** interface, select the **Upper Jaw** acquisition mode.

   OR

   On the CS 3600, press the mode button for one second to select the acquisition mode. The mode indicator LED turns blue.
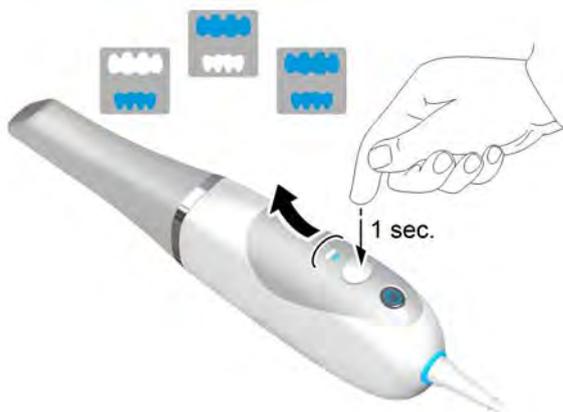
5   Hold the CS 3600 at a 90-degree angle to the occlusal surface of the implant area. Rest the tip on the tooth surface to steady the CS 3600. Live video is displayed on the video preview screen, and the acquisition begins. Images are automatically acquired and transferred to the 3D model display screen.

The image below shows several acquisitions of the upper jaw.
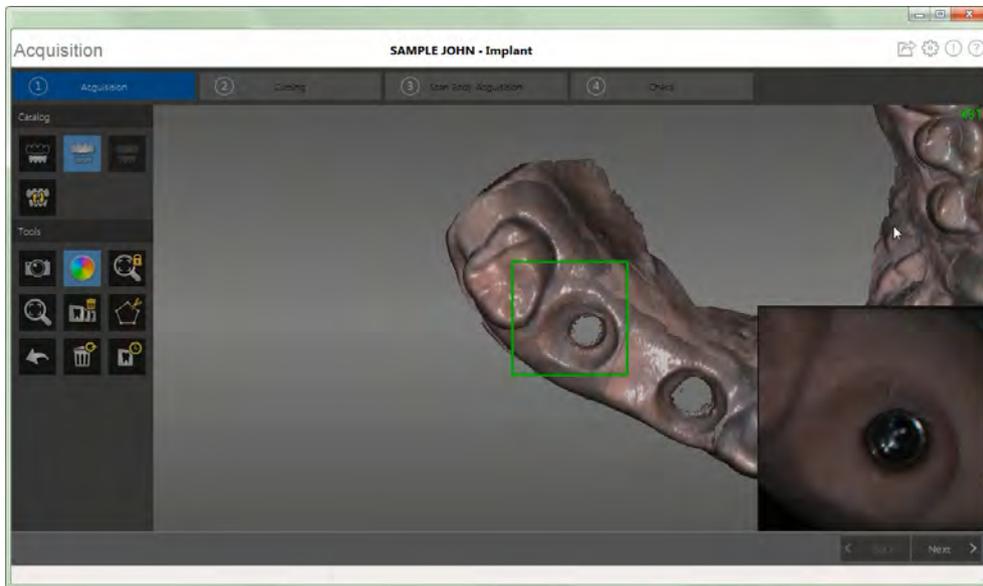
6   Slowly move the CS 3600 tip along the occlusal surface to scan the remaining teeth in the implant area.

7   When the occlusal surface scan is complete, scan the lingual surface of the teeth in the implant area. Hold the CS 3600 at a 45-degree angle to the lingual surface of the teeth.

8   When the lingual surface scan is complete, scan the buccal surface of the implant area. Hold the CS 3600 at a 45-degree angle to the buccal surface of the teeth.

> ⚠ **Important: Re-dry the teeth as appropriate throughout the acquisition process.**

The example below shows a 3D model of the upper jaw when the occlusal, lingual, and buccal surfaces have been completely scanned.
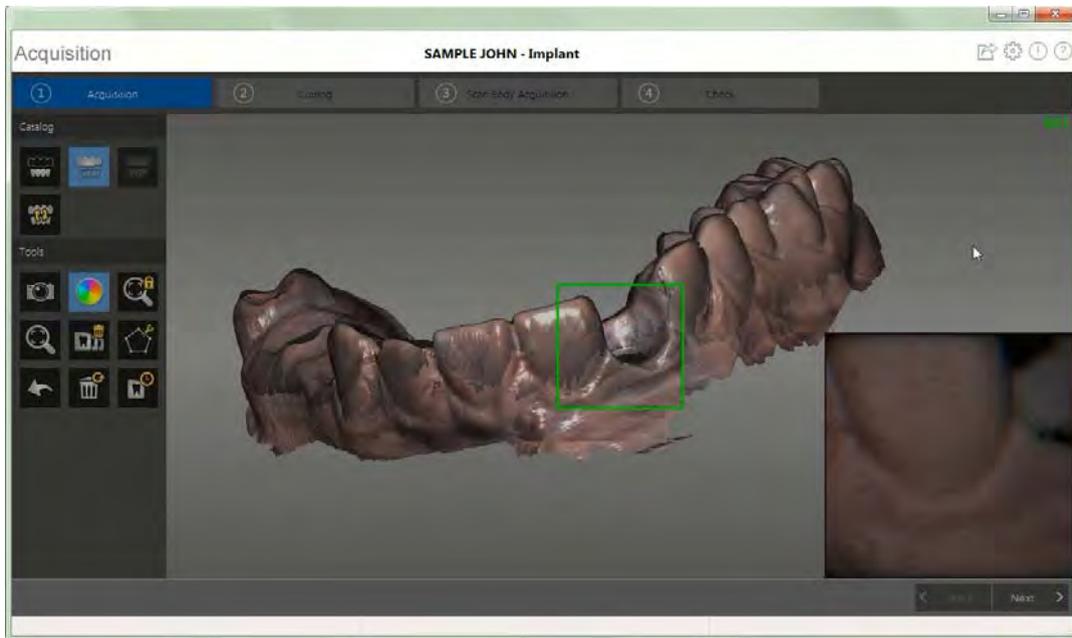
> ⚠ **Important:** If holes are displayed in the scanned image on the implant area, re-scan the area until the holes are filled. Use the mouse wheel to zoom in on the implant area for a closer look.

9   Once the upper jaw has been scanned:

You can continue with only the upper jaw, if desired. Click 〔 Next 〕. A message is displayed, stating that you have not acquired the opposing jaw and asking if you want to continue anyway. Click **Yes**. Continue with the steps listed under "Using the Free Cut Tool to Cut Out the Implant Area" on page 66.
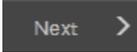
> ⓘ **Note:** If you selected the **Enable Refinement Check** option in the **Preferences** window, the software will refine the image before you perform the cutting step.

OR

You can begin scanning the lower jaw. Click 〔icon〕 and repeat steps 5 through 7 until the teeth on the lower jaw are scanned.

The example below shows a 3D model of the lower jaw when the occlusal, lingual, and buccal surfaces have been completely scanned.
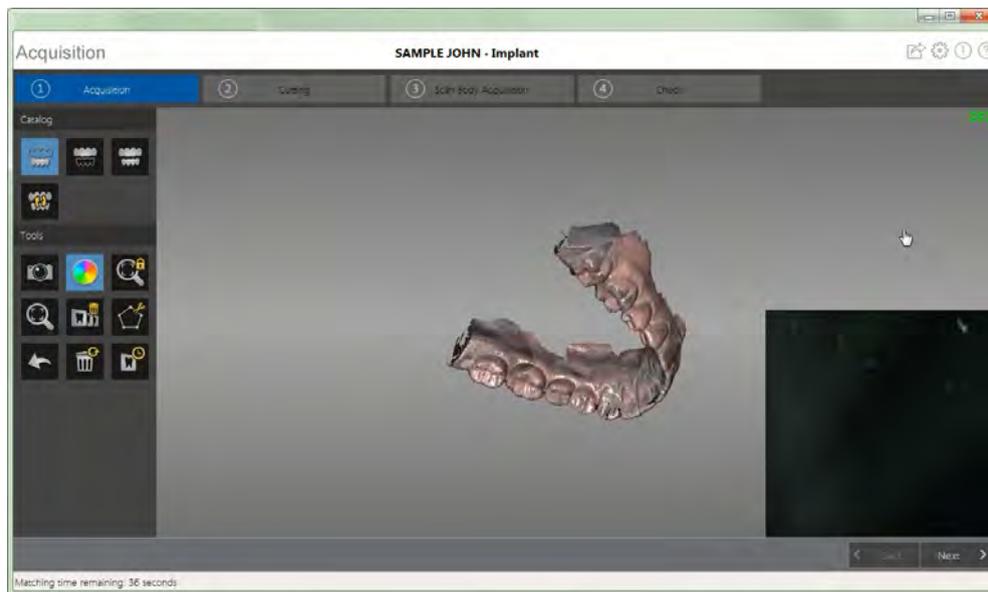
10   Visually inspect the 3D model for any holes. If holes are present near the implant area, re-scan the area until the holes are filled.

11   When you are satisfied with the 3D model, continue with the buccal bite registration acquisition.

> ⚠ **Important: If you acquire images of teeth from both the upper and lower jaw, you must also acquire the buccal bite registration.**

Scanning the Buccal Bite Registration

To acquire a buccal bite registration using auto acquisition, follow these steps:

1 Click .

2 Have the patient bite down.

3 Position the CS 3600 at a 90-degree angle to the buccal surface of the implant area, and align the point where the upper and lower teeth meet in the middle of the video preview screen. Rest the tip on the tooth surface to help steady the CS 3600.

4 Move the CS 3600 slightly up and down to trigger the bite registration acquisition.

The example below shows a buccal bite registration.

A dot is displayed at the bottom of the window to indicate the capture was successful. A successful bite image includes both the upper and lower arch.

> **Tip:** After acquiring the buccal image of one jaw, always move **toward** the opposing arch with the CS 3600.

Once both arches are displayed in the **Acquisition** interface, the bite image is successful, and you can acquire additional bite images, which will increase the accuracy of the bite.

> **Important:** For a partial arch, you should acquire at least three buccal bite images—one on the preparation, one mesial to the preparation, and one distal to the preparation. For a full arch, you should acquire at least four buccal bite images—one on each side of the mouth at the molars, and one on each side of the mouth at the canines.

5   Acquire at least two more buccal bite images, one on either side of the implant area. You can take up to six bite images for a full arch.

6   Once the bite has been registered, rotate the model and zoom the view to ensure that the bite is accurate and that there are no areas where the bite is mismatched. Click a dot to view the bite for that acquisition.

The example shows several buccal bite registrations.
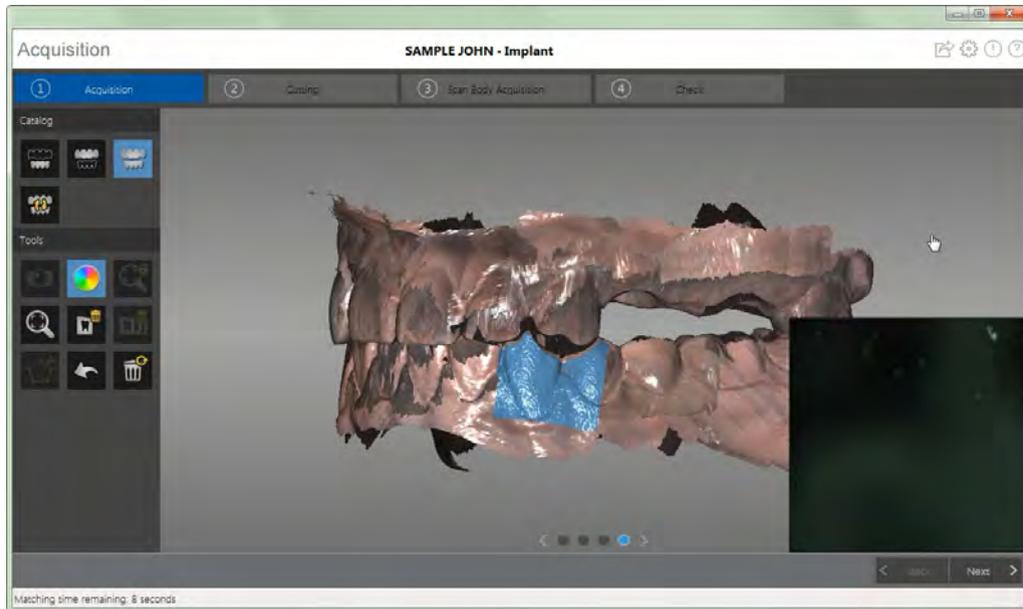
7   When you have finished acquiring the buccal bite registration, proceed with the process of cutting out the implant area using the Free Cut tool.

Using the Free Cut Tool to Cut Out the Implant Area

The Free Cut tool enables you to remove the section of the image containing the implant so it can be replaced with the scan body image.

To cut the implant area from the 3D image, follow these steps:
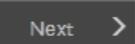
1 Click [Next >] .

   Note: If you selected the **Enable Refinement Check** option in the **Preferences** window, the software will refine the image before you perform the cutting step.

   • If you are satisfied with the refined image, click [Next >] and continue with the cutting process.
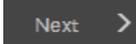
   • If you are not satisfied with the image, click [< Back] and re-scan the area until the holes are filled. Then click [Next >] to proceed with the cutting process.
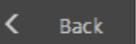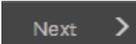
2 Click [ ]. Click the mouse at several points around the implant to form a circle big enough to surround the emergence profile.
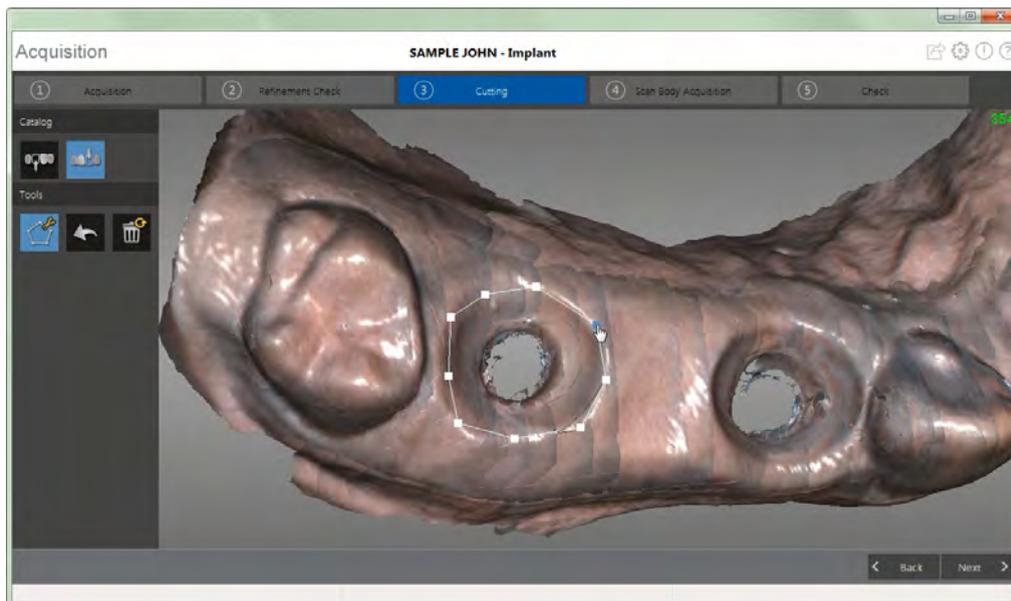
3   Double-click the mouse.
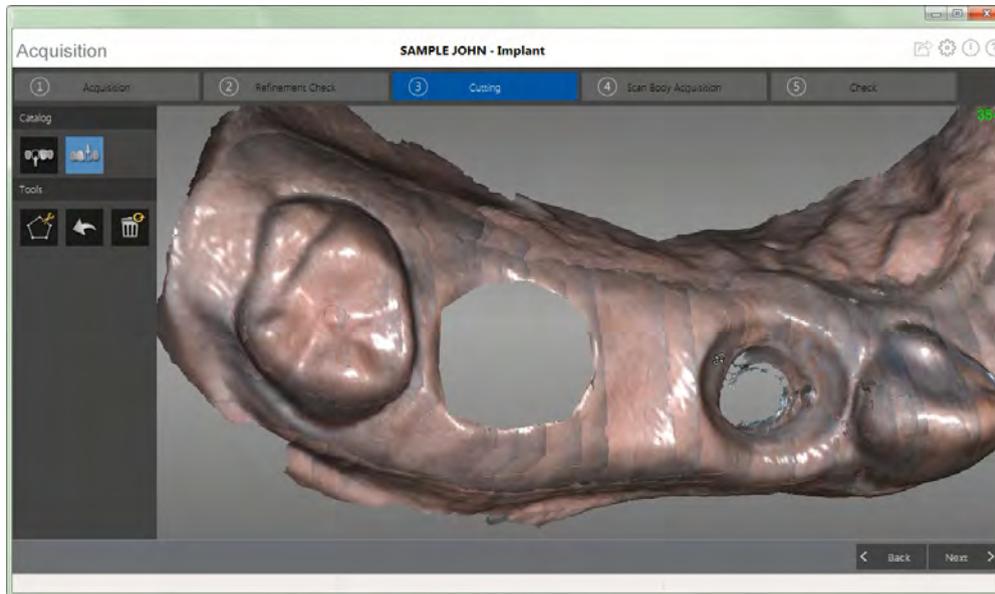
> **(i)** **Note:** If you removed too much of the image, click [icon] to restore the image and repeat the cutting process.

4   When you have finished cutting out the implant area, continue with the scan body acquisition.

Acquiring the Scan Body on the Implant Jaw

After you install the scan body, scan the jaw to incorporate the scan body into the 3D image.

To acquire an image of the jaw with the scan body in position, follow these steps:

1   Install the scan body.

2   Click   Next   >   .
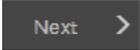
3   Re-scan the jaw, concentrating on the area containing the scan body. Repeat the steps for acquiring an image as described in "Scanning Teeth on the Upper and Lower Jaw" on page 60.
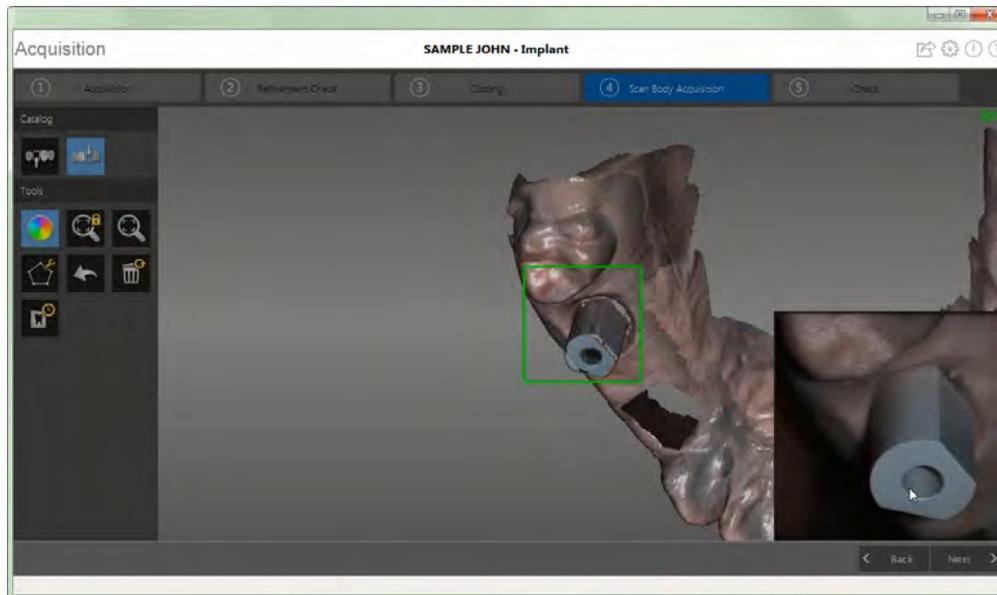
4   After you acquire the scan body, proceed to the check step.

> **Note:** If there is excessive soft tissue around the scan body, click [image] or [image] to remove it before proceeding to the next step.

Check

The check step combines the implant image and the scan body image and enables you to further process the 3D image to obtain the highest accuracy.

To check the 3D model and further examine it, follow these steps:

1   Click [Next >] to refine the image.
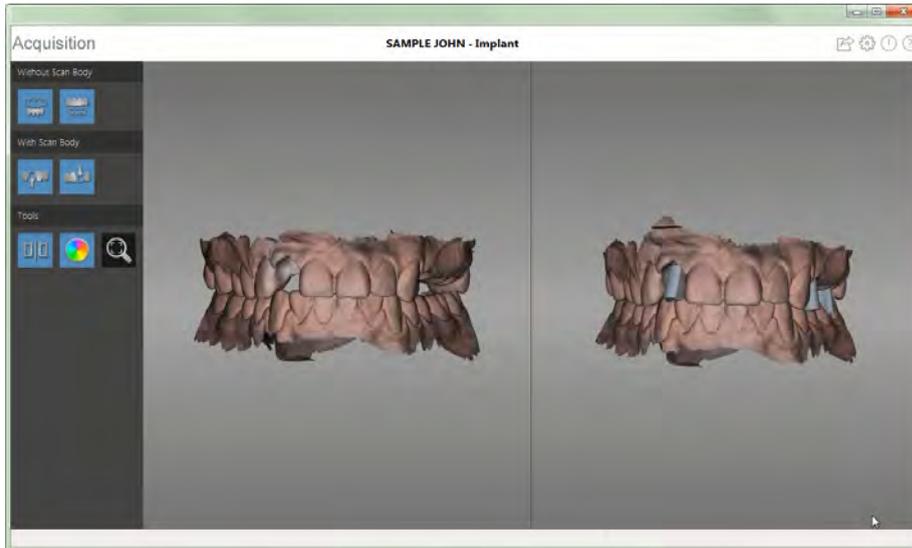
2   Manipulate both images in the split-screen view at the same time using the following methods:

- Right-click and hold on a 3D model to move both models in the window.
- Left-click and hold on a 3D model to rotate both models.
- If your mouse has a scroll wheel, use the wheel to zoom in or zoom out on the 3D models.

- Click [🔍] to scale the models to their best view.

- Click [▯|▯] to leave the split-screen view, which enables you to modify the 3D model. Images in the split-screen view cannot be modified.
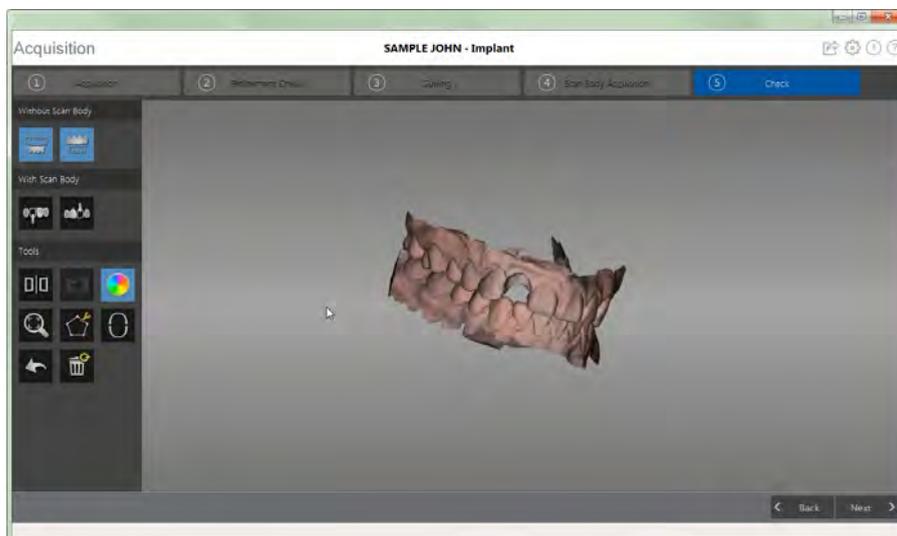
- Click ![Without Scan Body buttons] or ![With Scan Body buttons] to view the image without the scan body or with the scan body.

- Click ![scissors icon] to select and delete excess soft tissue in the image.
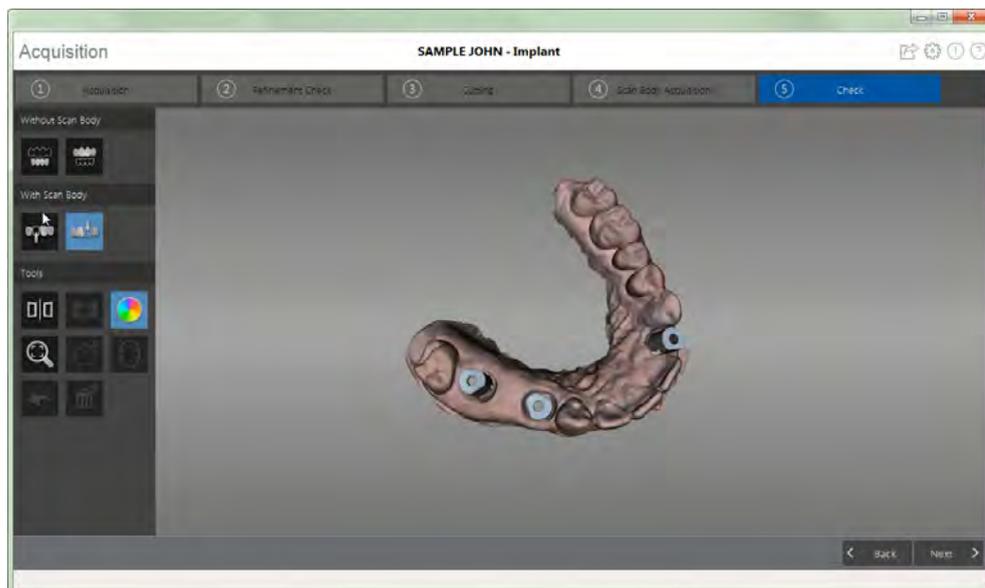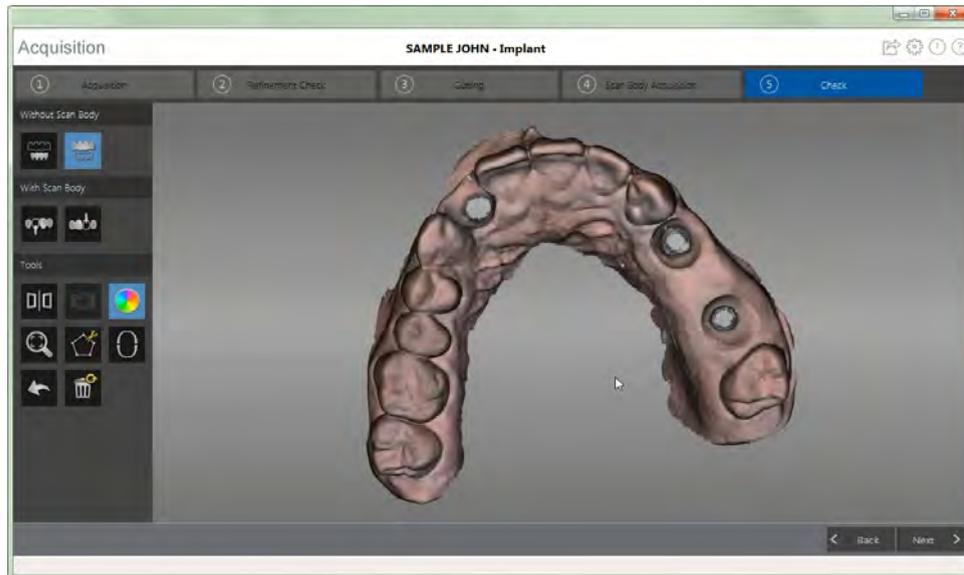
3   If you find holes in the implant area, click ![Back button] and re-scan the teeth that are missing data.
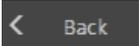
4   Repeat steps 1 through 3 until you are satisfied with the 3D model.
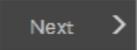
5   Click [Next >] . The **Preparation Check** window is displayed.
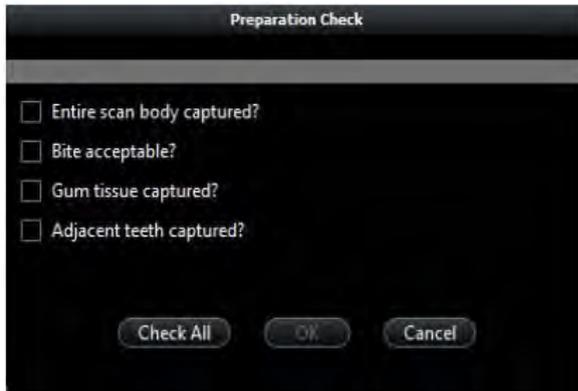
6   Examine the scan body in the 3D model and do one of the following:

-   If the entire scan body is visible, click the corresponding option in the **Preparation Check** window.

-   If the entire scan body is not visible, click **Cancel**. Click [< Back] and re-scan the scan body.
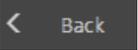
7   Examine the bite on the 3D model and do one of the following:

-   If the bite is acceptable, click the corresponding option in the **Preparation Check** window.

-   If the bite is not acceptable, click **Cancel**. Click [< Back] , make the necessary adjustments to the implant area, and then re-scan the implant area and surrounding teeth.
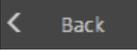
8   Examine the gum tissue surrounding the implant in the 3D model and do one of the following:

-   If all of the gum tissue is clearly visible, click the corresponding option in the **Preparation Check** window.

-   If all of the gum tissue surrounding the implant is not visible, click **Cancel**. Click
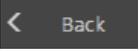
    [< Back] and re-scan the affected tissue.

9   Examine the teeth adjacent to the implant in the 3D model and do one of the following:

-   If the teeth are completely captured and there are no holes in the adjacent teeth, click the corresponding option in the **Preparation Check** window.

-   If the teeth adjacent to the implant are missing or contain holes, click **Cancel**. Click
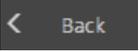
    [< Back] and re-scan the affected teeth.

10 Click ![arch icon] . The arch diagram is displayed.
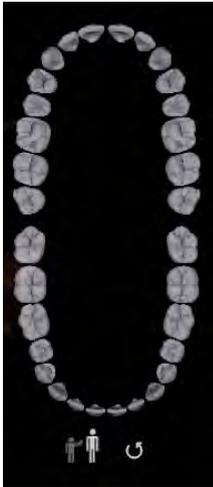
11 Click the **Adult** or **Child** icon to display the appropriate arch.

12 Select the teeth on the arch that were acquired for the 3D model, including those on the upper and lower jaw.

13 When satisfied with the 3D model, click ![OK] to send the 3D model to the imaging software.

> ⚠ **Important: To view your 3D models, use the CS Mesh Viewer that was installed on your desktop. For instructions on using the mesh viewer, click the ? button in the CS Mesh Viewer interface. If you are sending the DCM file to a lab, ask the lab to download the CS Mesh Viewer from the following link:**
> **http://sas-origin.onstreammedia.com/origin/carestreamhealthinc/CSMeshViewer/CSMeshViewer.zip**

Selecting 2D Images

You can select 2D images from the 3D model to send to the dental lab along with the 3D model.

> **(i) Note:** The 2D image selection feature is available only during the acquisition step.

To select 2D images, follow these steps:

1 Click ⬛ .

2 Manipulate the 3D model to the position you want to view.

3 Click on the areas of the 3D model for which you want 2D images. The images are displayed on the **Views** tab.

4 Click the checkmark on the upper-right corner of an image on the **Views** tab to move the image to the **Saved Views** tab.

5 When you are finished selecting 2D images, click ⬛ to return to the **Acquisition** interface.

Reviewing a Scan and Removing Unwanted Views Using Scan History Check

The scan history check feature enables you to go backward and forward in a 3D model to check the scan. If you have areas of the scan containing mismatched or unwanted views, and you cannot remove these areas using the tool, you can use the scan history check feature to return to the portion of the scan just prior to where the mismatch occurred. Then you can re-scan the area.

To use the scan history check feature, follow these steps:

1   Click . The scan history check view is displayed.

2   Manipulate the 3D model to the position you want to view.

3   Click on the slider, and drag it to the left to remove portions of the scan. Moving the slider back to the right replaces the portions you removed.

4   When you have removed the unwanted views from the scan, click **OK** to return to the **Acquisition** window.

> ⓘ   **Note:** Views removed using the scan history check feature cannot be restored.

5   To return to the **Acquisition** window without making any changes, click ▢ or **Cancel**.

9 Maintenance

Cleaning, Disinfecting, and Sterilizing

You must clean, disinfect, and sterilize the CS 3600 and accessories regularly.

The removable CS 3600 scanner tips are autoclavable up to 20 cycles. After 20 cycles, discard the tip.

> ⚠️ **Important: For information on cleaning, disinfecting, and sterilizing, see the CS 3600 Safety, Regulatory, and Technical Specifications User Guide.**

10 Contact Information

Factory Address

Rayco (Shanghai) Medical Products Company Limited
1510 Chuanqiao Road
Jinqiao Export Processing Zone
Pudong, Shanghai, China 201206

Manufacturer's Address

Carestream Health, Inc.
150 Verona Street
Rochester, NY USA 14608
www.carestreamdental.com

Authorized Representatives

Authorized Representative in the European Community

EC | REP

Carestream Health France
1, rue Galilée
93192 Noisy-Le-Grand Cedex, France

Importer for European Union

Carestream Health Netherlands B.V.
Bramenberg 12
3755 BZ Eemnes
The Netherlands

Representante no Brasil Carestream do Brasil Comércio e Serviços de Produtos MédicosLtda.

Rua Pequetita, 215 cjs.
31 E 32 Edifício Atrium VII - Vila Olímpia
São Paulo - Brazil
CEP (Zip code): 04552-060

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Carestream Dental

A Division of Carestream Health, Inc.
150 Verona St.
Rochester, NY 14608
USA

For more information, visit: **www.carestreamdental.com**
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