FONA
CLOSER TO YOU

MyCrown Design software

Operator's Manual

English

Table of contents

1 Introduction

1.1. Dear Customer,

Thank you for purchasing your MyCrown Design software from FONA Dental.

In connection with the MyCrown Design acquisition unit and MyCrown Mill grinding and milling unit, this software enables you to produce computer-assisted dental restorations, e.g. from ceramic material with a natural appearance.

Improper use and handling can create hazards and cause damage. Therefore, please read and carefully follow this manual and the relevant operating instructions. Always keep them within easy reach.

You should train on the exercise model in order to operate MyCrown Design safely for the first time.

To prevent damage to third parties and property, adhere to both the safety instructions provided in this document regarding the units and the instructions provided in the software.

Your
MyCrown Design team

1.1.1 Contact information

Customer Service Center

In the event of technical queries, please use our online contact form at *http://www.fonadental.com/support*. Take advantage also of our online offer.

Manufacturer

Sirona Dental Systems GmbH

Distributor

FONA Dental, s.r.o.
Stefanikova 7,
811 06, Bratislava
Slovak Republic
Phone: +421 2 322 32 455
E-Mail: info@fonadental.com
www.fonadental.com

1.2. Intended use

MyCrown Design consists of a mobile image acquisition and image processing unit. The cavity is measured in 3D using the 3D oral camera. A 3D model is created from the 3D measuring data with the geometry available. Using the CAD software, a restoration body is constructed on this model. This is processed on a separate material processing machine from one block of material, using CAM software at the end.

The unit may be operated only by medically trained and qualified personnel.

This unit must not be used for any other purpose. If the unit is used for any purpose other than the one mentioned above, it may be damaged.

Intended use also includes compliance with these Operating Instructions and the relevant maintenance instructions.

> ⚠ **CAUTION**
>
> **Follow the instructions**
>
> If the instructions for operating the unit described in this document are not observed, the intended protection of the user may be impaired.

1.3. Copyright and trademark

Copyright

The information contained in this manual may be changed without notice.

The software and all related documentation are protected by copyright. You must therefore handle it in the same way as any other protected material.

Anyone who copies this software to any medium for any purpose other than his own personal use without the written permission of Sirona Dental Systems will be liable to prosecution.

Trademarks

Microsoft® and Windows 10® are registered trademarks.

Windows™ is a trademark of Microsoft Corporation.

All other trademarks are the property of their respective holders.

Notes on 3rd party code libraries must be stored in license.pdf in the installation directory.

2 General data

Please read this document completely and follow the instructions exactly. You should always keep it within reach.

Original language of the present document: German

2.1. Certification

CE mark

This product bears the CE mark in accordance with the provisions of the Council Directive 93/42/EEC of June 14, 1993 concerning medical devices (MDD).

2.2. General safety information

Only use original software

Only use original software or software which has been released by FONA Dental. To produce restorations and equipment, manipulated or non-released software components must not be used.

Software and software components must not be installed using incorrect data.

Please check that each installed component has been granted approval in its country. Contact your dealer for more information.

Restoration to be checked by trained personnel

Each restoration which is performed with this software must be checked for suitability by a trained person (e.g. dental technician or dentist).

Please observe the processing instructions and combination options of the material manufacturers applicable in your country.

2.3. Structure of the manual

2.3.1 Identification of the danger levels

To prevent personal injury and material damage, please observe the warning and safety information provided in this document. This information is highlighted as follows:

⚠ DANGER
An imminent danger that could result in serious bodily injury or death.

⚠ WARNING
A possible dangerous situation that could result in serious bodily injury or death.

⚠ CAUTION
A possible dangerous situation that could result in slight bodily injury.

NOTICE
A possible harmful situation which could lead to damage of the product or an object in its environment.

IMPORTANT
Application instructions and other important information.

Tip: Information for facilitating work.

2.3.2 Formats and symbols used

The formats and symbols used in this document have the following meaning:

✓ Prerequisite **1.** First action step **2.** Second action step or ➢ Alternative action ↳ Result ➢ Individual action step	Requests you to do something.
see “Formats and symbols used [→ 9]”	Identifies a reference to another text passage and specifies its page number.
• List	Identifies a list.
“Command / menu item”	Identifies commands, menu items, or quotations.

2.3.3 Step-specific help

The step-specific help explains the aims and implementation of the step. There is a full view which provides a complete overview and a window view for parallel working. An illuminated lightbulb indicates that this help is available.

By clicking on the lightbulb illuminated in yellow in the phase bar, you can access the step-specific help.

When accessing the ACQUISITION phase for the first time after installation, the step-specific help opens automatically.

If the lightbulb is not illuminated in yellow, there is no step-specific help available.

2.3.4 Formats of the manual

HTML format

You can access the Operator's Manual in HTML format by clicking on the *"Help"* button in the system menu.

PDF format

The PDF format user manual can be found on the supplied storage medium or on the Internet (http://www.fonadental.com/public-files/).

This format is page-oriented and is well suited for printing out the desired pages.

2.3.5 Odontogram used

The software can be adjusted to the international odontogram (FDI) or the USA odontogram (ADA) (ADA/FDI odontogram [→ 28]).

In this documentation teeth are named as follows:

Principle:	FDI	(#ADA)
Example:	13	(#6)

2.3.6 File format

You can assign one or more cases to any patient in the software. Depending on the editing status, a case comprises optical impressions, the virtual models reconstructed from them, and one or more virtual restorations.

In this manual, patient data is generally referred to as "cases".

The software uses its own file format (*.fona) to export a case. This format contains all of the case data including patient information.

A .stl format can also be generated.

The further processing of stl files in other systems shall be carried out at the user's own risk. If you have questions regarding the construction of other CAD or CAM systems, please contact the manufacturer of the other CAD/CAM systems.

2.4. Operating conventions

Example	Meaning
Click	Single pressing and subsequent release of the left mouse button or the left trackball button on the acquisition unit
Double-click	Double pressing and release in quick succession of the left mouse button or left trackball button on the acquisition unit
Moving the mouse in one direction	On the acquisition unit: Moving the trackball in the corresponding direction.
Seizing a point	Pressing the left mouse button (left trackball button on the acquisition unit) and keeping it pressed.
"Ctrl+N"	On the keyboard: Press the **Ctrl** and **N** keys simultaneously.
Drag & drop	. Press and hold an element (e.g. a pictograph) and drop / release it onto a potential destination.

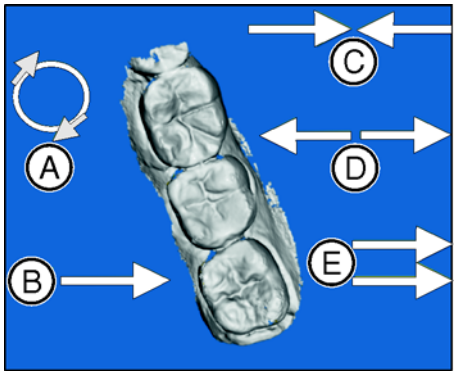
Multi-Touch Technology

The screen is equipped with multi-touch technology. You can navigate and enter content using your finger. Icons open if you tap them with your finger.

Navigating in the software

Example	Meaning
Tap	Single tap on the screen using your finger. To execute functions in the software you must tap once on the corresponding button.
Double-click	Two taps on the screen in rapid succession using your finger. **Tip:** To open programs in Windows you must tap the corresponding button twice (double-click).
Call up shortcut menus	Tap the corresponding point and hold the finger on the screen for a longer period. A shortcut menu opens at this point.
Drag & drop	. Tap an element (e.g. pictograph), drag and drop onto new potential destination.

Edit a 3D model with multi-touch



You can edit the 3D model using multi-touch.

Item	Function
A	➢ Complete a rotary movement using 2 fingers. ➪ The object is rotated in the plane.
B	➢ Drag with 1 finger. ➪ The model is rotated out of its current plane.
C	➢ Pull 2 fingers in together. ➪ The object is minimized.
D	➢ Pull the fingers apart. ➪ The object is maximized.
E	➢ Drag with 2 fingers. ➪ The model is dragged.

3 Getting started

3.1. Installing the software

3.1.1 Installation via USB stick or download

Preparing the installation

✓ The PC is powered up and all programs are terminated.

1. Insert the USB stick.
   ↳ A window opens with the content of the USB stick.
2. Alternatively: If you have downloaded the software as a .zip archive from the homepage, unzip this by right-clicking and selecting *"Extract All..."* in a new folder.
3. Double-click the *"Setup.exe"* file in the root directory.
   ↳ This installation program starts.

Installing the application

1. Select the language for the following installation and then click the *"Next"* button.
2. Read the information on copyright carefully and then click on the *"Next"* button.
3. In the next step, select the language and region for the application and then click the *"Next"* button.
4. In the next step you have the option of defining another folder for the installation of the application and, if necessary, an alternative folder for the data folder. We highly recommend storing the data folder on the second hard disk in all cases and not on the Windows drive. The default setting is `D:\Data\`.
   Then click on the *"Next"* button.
5. In the next step, the license agreement appears. Read through the license agreement carefully.
   If you accept the license agreement, then check the *"I accept the terms in the license agreement"* option and subsequently click the *"Next"* button.
6. In the next step, your license is checked on the USB license stick. Make sure the USB license stick is inserted properly for this purpose before clicking on the *"Next"* button.
   Tip: You may skip this step. To do this check the *"Skip License Check and continue with application installation"* option and then click on the *"Next"* button.
   ↳ The application is now installed. This may take several minutes.
7. Following successful installation, click on the *"Start"* button to complete the installation and to start the application immediately after this.
   Tip: If you do not want to start the application immediately, remove the tick from the *"Start application directly"* check box and then click on the *"Exit"* button. This installation program closes.

3.2. Uninstalling the software

✓ The program is closed.

1. Open the start menu and click on the gearwheel for *"Settings"*.
2. Click on the *"System"* icon.
3. Click on *"Apps & Features"* on the left.
4. Search for the FONA Dental software entry and click on it.
   ↳ Buttons appear, including a few gray buttons.
5. Click on the *"Uninstall"* button and follow the instructions displayed.

3.3. Copy protection

The software can be started only when the USB license stick is plugged in. The USB license stick is included in the scope of supply of the acquisition unit and inserted in the housing – not visible from the outside – at the factory. If you require additional licenses, please contact your dealer.

All authorizations (interface and software licenses) can be installed as electronic licenses on the USB license stick. You must enter a 25-digit license key for this purpose.
You will receive the license key once you have attended a training session. Alternatively, you can order it separately from your dealer.

Following an update, you may require a new license that is not available on your USB license stick. For more information, refer to the "License manager [→ 31]" section.

3.4. Downloading software

As soon as a new software version is available, FONA Dental will inform you of this.

You have to pay for major software upgrades, and these also require a license. If you do not have a new license, you can only work in the demo version.

Contact your dealer for information on how to obtain new licenses for an upgrade.

3.5. Starting the software

✓ The MyCrown Design software is installed. You will find the start icon on the desktop.

✓ The USB license stick is activated with a valid, current license.

➢ Double-click the MyCrown Design start icon.

or

➢ Open the Windows start menu. Look for the *"MyCrown Design"* entry in the list and tap it. You may need to move the list upwards.

↳ The software is started.

Tip: You can affix the icon permanently to the right side of the start menu as well as add it to the taskbar at the bottom edge of the screen. To do this, proceed as follows:

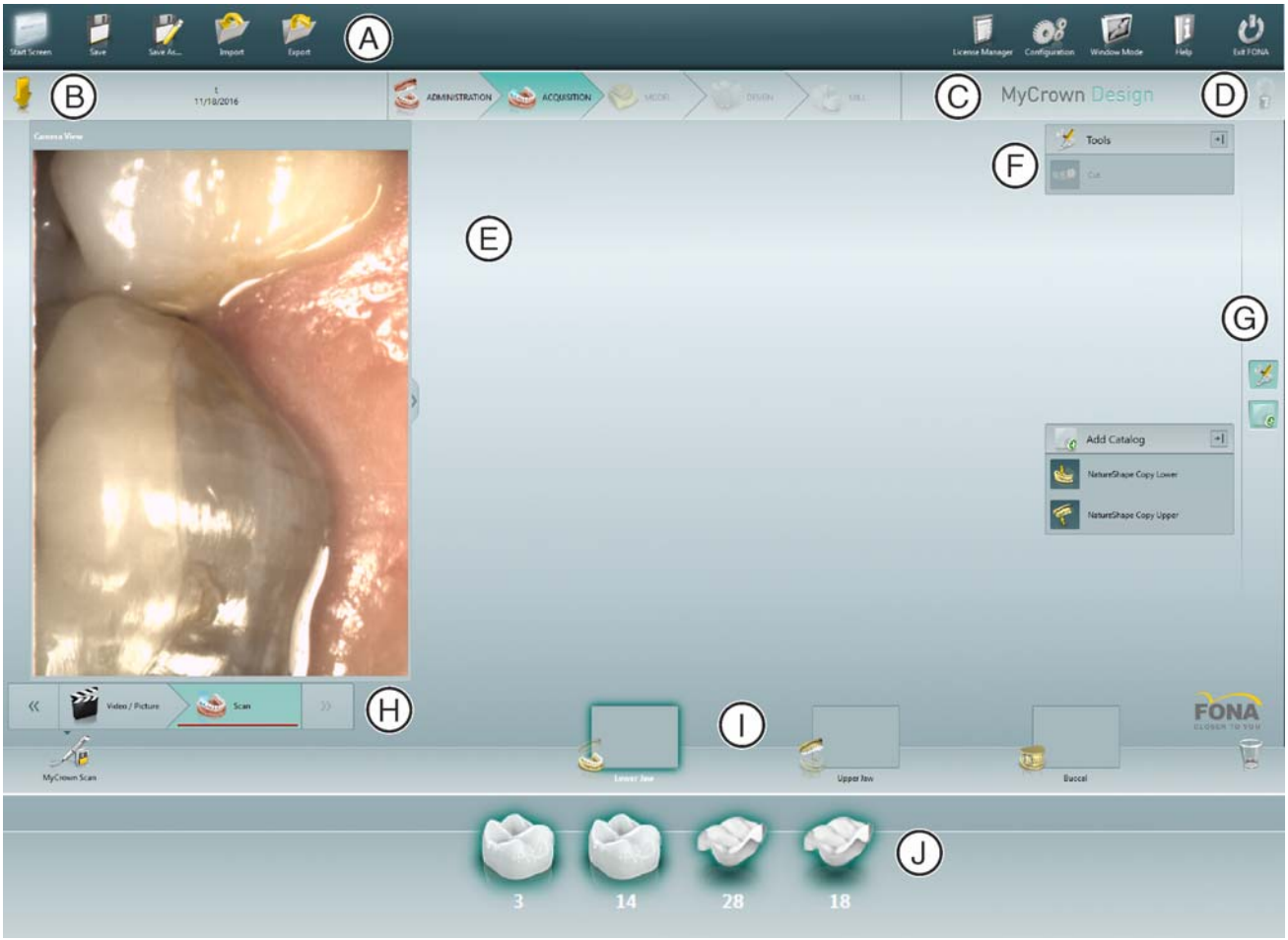
1. Tap the icon for longer and then take your finger away or right-click the icon.
2. Select *"Pin to Start"* in the shortcut menu or tap *"More"* first and then *"Pin to Taskbar"*.
3. You can move the icon on the right side of the start menu by tapping and holding it while moving it to the desired position.

3.6. Set the Windows system language

The system language and the layout of the on-screen keyboard can be changed.

1. Open the start menu and select the *"Settings"* gearwheel system to get to the Windows settings.
2. Select the *"Time & language"* group and then *"Region & language"*.
3. Now you can switch to another language, by selecting this and tapping *"Set as default"*.
4. In order to activate the new language, you have to log out of Windows and then log in again. To do this open the start menu, tap on the user symbol above the gear wheel and on *"Sign out"* in the menu that then opens up.
5. Via *"Add a language"*, even more languages that are not pre-installed can be added to the system. Please be advised that an Internet connection is required for this and that the process in this instance takes some time to complete.

4 User interface



Overview of the user interface

A	System menu	F	Tool box
B	Phase bar	G	Page palette
C	Information dialog	H	Step menu
D	Quick help	I	Object bar
E	Main window	J	Expanded object bar

4.1. Phase bar

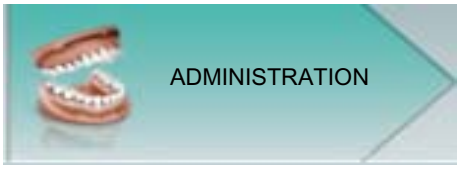
The workflow is illustrated in the software in 5 phases.

Phase bar

- ADMINISTRATION
- ACQUISITION
- MODEL
- DESIGN

- MANUFACTURE

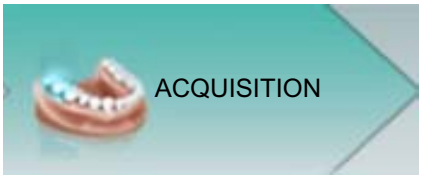
4.1.1 ADMINISTRATION



In this phase, you can perform the following:

- Create restorations and determine their type
- Determine the tooth number
- Select restoration material
- Choose a material color.

4.1.2 ACQUISITION



In this phase, you can perform the following:

- Creating acquisitions with the MyCrown scan
  - lower jaw,
  - upper jaw,
  - buccal bite registration
- View a 3D preview of the acquisitions
- Activate other image catalogs

4.1.3 MODEL

In this phase, you can perform the following:

- Adjust the virtual models,
- Complete the buccal registration of the bite situation,
- Determine the model axis,
- Draw and edit preparation limits,
- Determine the insertion axes of the restorations.

4.1.4 DESIGN

In this phase, you can perform the following:

- Have initial restoration suggestions generated
- Rotate and position the restoration
- Form and process restorations

4.1.5 MANUFACTURING

In this phase, you can perform the following for each restoration:

- Check and adapt the positioning of the restoration in the block
- Define the sprue location of the restoration
- Determine the block size
- Defining milling/grinding options
- Start the milling/grinding process

4.1.6 Current program version

If you click on the lettering *"MyCrown Design"* in the phase tab, you obtain information on the current program version.

4.2. Object bar

The buttons for restoration selection are located in the object bar.

Each restoration is represented by a tooth or a bridge icon with the corresponding tooth number. You can switch back and forth between the teeth by clicking on the corresponding icon.

Active elements are highlighted in green.

If restorations span multiple tooth positions, the object bar is extended downwards.

4.3. Tool box

In the MODEL and DESIGN phases, the toolbox provides the most common tools for simplifying access. The tools available vary depending on the current step.

1. Right-click in the workspace.
   - The toolbox opens.
2. Click with the right mouse button anywhere in the workspace.
   - The toolbox moves to the position of the mouse pointer.
3. Select a tool.
   - The selected tool is available. The toolbox closes automatically.

Tip: Alternatively, you can open the tools using the touch screen by tapping on the toolbox in the page palette.

4.4. Step menu

Each phase is divided into steps. They are shown in the step menu at the bottom edge of the screen. The step menu changes depending on which phase the current restoration is located in at the time.

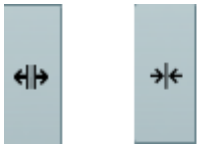
This menu guides you through the process step-by-step. The system runs through all steps in a phase with the restoration(s). Changes in the individual steps are accepted by clicking on the next step.

The double arrow keys can be used to switch between phases.

Steps

Mandatory steps are displayed in the step menu.

Optional steps can be shown/hidden by clicking on the left edge of the step menu.



4.5. System menu

In the system menu the following sub-menus are offered:

"Start Screen"	Switch to the start window to start a new case.
"Save"	Saves currently opened case.
"Save As..."	To save a case under a different name or dentist.
"Import"	Imports case from the file system.
"Export"	Exports currently opened case.
"License Manager"	Opens the license manager.
"Configuration"	Configure hardware and software.
"Window Mode"	Toggles between full-screen and window mode.
"Help"	Open help information.
"Exit MyCrown Design"	Close the *"MyCrown Design"* software.

4.6. Start view

In the start view you can perform the following functions:

- Browse patients,
- Open patient database.
- Create a patient.

5 Design technique

5.1. General information on NatureShape

The NatureShape enables the MyCrown Design software to reconstruct teeth in a natural way.

All teeth recorded by the camera are analyzed with respect to their position and morphology. Based on this analysis the relevant restoration can be produced in fully automated fashion.

For the NatureShape to deliver ideal suggestions, it is important that entries are correct and complete. This applies to the following steps in particular:

- Exposure
  The exposure should be good and complete. For single tooth provision, the neighboring teeth must also be recorded at a minimum. Scanning holes around the preparation and the proximal contacts should be avoided.
- Model axis
  The model axis should be aligned precisely (see “Setting the model axis [→ 62]”).

5.2. NatureShape Individual

In the *"NatureShape Individual"* design technique, the exposure taken is analyzed and the restoration suggestion is calculated on the basis of this information. The more information that is available, the more successful the calculation. A full image of at least one neighboring tooth should therefore be taken from the occlusal/incisal direction. For anterior and corner teeth, an image of the labial surface should also be taken.

5.3. NatureShape Copy

Select the *"NatureShape Copy"* design technique to transfer parts of an existing occlusal surface to the restoration and enhance the rest using the NatureShape technique.

To do this, acquire the status separately in the *"NatureShape Copy Upper"* or *"NatureShape Copy Lower"* image field prior to the preparation.

This technique can be used for inlays, onlays, partial crowns, crowns, and bridges.

6 Configuration

The *"Configuration"* menu contains the following submenus:

- Parameters [→ 20]
- Devices [→ 24]
- Settings [→ 28]

6.1. Parameters

General information

The *"Parameters"* menu is structured by restoration type. You can adjust the settings for each of the restoration types separately.

The global parameters in the configuration are used as default values for all restorations when calculating the initial suggestions.

Should you wish to set different parameter values for individual restorations, you can do this through the local parameters in the *"Always review parameters"* step within the DESIGN phase.

Parameter default settings

In the *"Configuration"* menu, you can define parameter default settings. Through this menu you can define and save different parameter sets for all restoration types.

1. Duplicate the default settings with the manufacturer specifications.
2. Adjust the new default settings to your needs and then save them.
   - ↳ You can then use these default settings both as global and local parameters.

Crown

Parameters	Description	Default values
Spacer	• Increase or decrease space for adhesive underneath crown (not on the preparation margin).	120 µm
Occlusal Milling Offset	• Apply or remove material in the occlusal direction over the entire occlusal surface. • This value concerns only the milling result. • The effects are not visible in the DESIGN phase or in the preview. • Change this parameter as compensation if the occlusal surfaces of your restorations are generally too high or too low in practice.	0 µm
Proximal Contacts Strength	• Set the thickness of the approximal contacts. • The software tries to achieve this stored thickness in the restoration suggestions.	25 µm
Occlusal Contacts Strength	• Set the thickness of the occlusal contacts. • The software tries to achieve this stored thickness in the restoration suggestions.	25 µm

Parameters	Description	Default values
Minimal Thickness (Radial)	• Set the minimum wall thickness in the horizontal direction. • The software tries not to fall below this thickness when calculating the restoration suggestions. • DESIGN and MANUFACTURE phases: The value is displayed on the preparation as a semitransparent geometry together with the minimum occlusal thickness and the instrument geometry setting. Areas where the thickness falls short of the minimum level in the design phase are thus made visible. • Observe the material manufacturer's recommendations when setting the minimum thickness. • Can be switched on and off.	500 µm ON
Minimal Thickness (Occlusal)	• Set the minimum wall thickness in the occlusal direction. • The software tries not to fall below this thickness when calculating the restoration suggestions. • DESIGN and MANUFACTURE phases: The value is displayed on the preparation as a semitransparent geometry together with the minimum radial thickness and the instrument geometry setting. Areas where the thickness falls short of the minimum level in the design phase are thus made visible. • Observe the material manufacturer's recommendations when setting the minimum thickness. • Can be switched on and off.	700 µm ON
Margin Thickness	• Reinforce restoration margins with additional material. – Simplifies handling of the restoration. – Prevents splitting of the material. • The additional material can be milled off manually before inserting the restoration. • Can be switched on and off.	50 µm ON

Inlay/onlay

Parameters	Description	Standard value
Spacer	• Increase or decrease space for adhesive.	120 µm
Marginal Adhesive Gap	• Adjust width of gaps on preparation margin. • The adhesive is a buffer between the ceramic material and the tooth substance. • The adhesive gap cannot be larger than the spacer value.	60 µm

Parameters	Description	Standard value
Occlusal Milling Offset	• Apply or remove material in the Z direction over the entire occlusal surface. • This value concerns only the milling result. • The effects are not visible in the DESIGN phase or in the preview. • Change this parameter as compensation if the occlusal surfaces of your restorations are generally too high or too low in practice.	0 µm
Proximal Contacts Strength	• Set the thickness of the approximal contacts. • The software tries to achieve this stored thickness in the restoration suggestions.	25 µm
Occlusal Contacts Strength	• Set the thickness of the occlusal contacts. • The software tries to achieve this stored thickness in the restoration suggestions.	25 µm
Minimal Thickness (Radial)	• Set the minimum wall thickness in the horizontal direction. • The software tries not to fall below this thickness when calculating the restoration suggestions. • DESIGN and MANUFACTURE The value is displayed on the preparation as a semitransparent geometry together with the minimum occlusal thickness and the instrument geometry setting. Areas where the thickness falls short of the minimum level in the design phase are thus made visible. • Observe the material manufacturer's recommendations when setting the minimum thickness. • Can be switched on and off.	500 µm ON

Parameters	Description	Standard value
Minimal Thickness (Occlusal)	• Set the minimum wall thickness in the occlusal direction. • The software tries not to fall below this thickness when calculating the restoration suggestions. • DESIGN and MANUFACTURE phases: The value is displayed on the preparation as a semitransparent geometry together with the minimum radial thickness and the instrument geometry setting. Areas where the thickness falls short of the minimum level in the design phase are thus made visible. • Observe the material manufacturer's recommendations when setting the minimum thickness. • Can be switched on and off.	700 µm ON
Margin Thickness	• Reinforce restoration margins with additional material. – Simplifies handling of the restoration. – Prevents splitting of the material. • The additional material can be milled off manually before inserting the restoration. • Can be switched on and off.	50 µm ON

Veneer

Parameters	Description	Default values
Spacer	• Increase or decrease space for adhesive.	120 µm
Veneer Thickness	• Set to minimum thickness. • The software tries not to fall below this material thickness when calculating the restoration suggestions. • The value is displayed on the preparation as a semitransparent cover in the DESIGN phase. Areas where the thickness falls short of the minimum level in the design phase are thus made visible.	500 µm

Parameters	Description	Default values
Occlusal Milling Offset	• Apply or remove material in the occlusal direction over the entire occlusal surface. • This value concerns only the milling result. • The effects are not visible in the DESIGN phase or in the preview. • Change this parameter as compensation if the occlusal surfaces of your restorations are generally too high or too low in practice.	0 µm
Margin Thickness	• Reinforce restoration margins with additional material. – Simplifies handling of the restoration. – Prevents splitting of the material. • The additional material can be milled off manually before inserting the restoration. • Can be switched on and off.	50 µm ON

Pontic (anatomical)

Parameters	Description	Default values
Proximal Contacts Strength	• Set the thickness of the approximal contacts. • The software tries to achieve this stored thickness in the restoration suggestions.	25 µm
Occlusal Contacts Strength	• Set the thickness of the occlusal contacts. • The software tries to achieve this stored thickness in the restoration suggestions.	25 µm
Gingival Spacing	• Here you can set the distance from the bottom of the bridge elements to the gingiva.	0 µm

Accepting settings

➢ Click on the *"Ok"* button.

Discarding settings

➢ Click on the *"Cancel"* button.

Resetting settings

➢ Click on the *"Reset All Group Parameter"* button.

↳ The settings for this restoration type are reset to the factory settings.

6.2. Devices

All connected devices can be displayed and configured under the menu item *"Devices"*.

A green check mark on a device indicates its availability.

A red warning triangle with an exclamation mark shows that the device cannot be reached.

Adding devices automatically

You can add additional devices with the *"Scan for New Devices"* function.

✓ The unit is connected to the PC.

1. Click the *"Scan for New Devices"* button on the step by step menu.
   ↳ The system now looks for new or previously deleted devices that are currently connected to your acquisition unit. If an available device is recognized by the system, a dialog box prompt will ask you whether or not you want to install the found device.
2. Confirm the dialog box to close the installation of the device.

Adding devices (manual)

You can add devices manually with the *"Add Device (Manual)"* function. This is mandatory for units which cannot be operated at the maximum speed of 115,200 baud. This concerns devices with long cable connections or when certain radio modules (e.g. Futaba, 19,200 baud) are used.

1. Click on the *"Add Device (Manual)"* button.
2. Choose whether the device should be connected via the network or a serial connection.
3. Network: Enter the network address.
   Serial: Enter the COM port and the baud rate.
4. Click on the *"Ok"* button.
   ↳ The software attempts to contact the device.

If the connection fails, check the connection. If necessary, ask a qualified technician.

Refresh Devices

With the *"Refresh Devices"* button you can:

- Refresh the status display; e.g. check whether a grinding and milling unit has finished milling/grinding
- Check the current availability of a device.

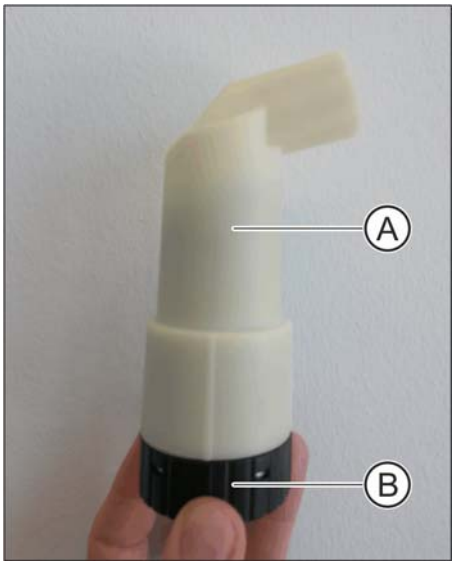
6.2.1 MyCrown Scan

6.2.1.1 Calibration

The measurement procedure used by the system requires the use of a MyCrown Scan calibrated camera. MyCrown Scan is factory calibrated.

Calibrate MyCrown Scan after every reinstallation and after each time that it is transported.

IMPORTANT
In the event of errors that occur in the acquisition process In general, carrying out a calibration is the correct process in the event of errors in the acquisition process (such as poor image quality or the lack of a 3D preview). In many cases, the errors can be corrected in doing so.



The calibration set supplied is available for the calibration process.

A	MyCrown Scan calibration attachment
B	Calibration screwdriver

In order to achieve optimum results, the MyCrown Scan must be allowed to warm up for 15-20 minutes before calibration.

Recalibrate the MyCrown Scan camera in the following cases:

- Following transportation (shaking stress) or during first commissioning
- After storage in unheated or non-air-conditioned rooms (temperature differences exceeding 30°C)
- With temperature differences of over 15°C between the last calibration and operation
- If errors occur in the acquisition process, such as poor image quality or the lack of a 3D preview.

Starting calibration

1. Tap on the *"Configuration"* button in the system menu.
2. Tap the *"Devices"* button and then MyCrown Scan.
3. Tap the *"Calibrate"* button.
   ↳ The camera view is displayed in one window.

Calibrate the camera

1. Remove the protective cap from the calibration set.
2. Place the calibration attachment (A) on the camera as shown in the image and turn the calibration screwdriver (B) clockwise to the stop point.

3. Insert the camera as far as possible into the calibration attachment (A) and fasten it there using your finger.
4. Tap the *"OK"* button.
   - The measuring process starts.
   - The software prompts you to proceed on the calibration screwdriver to the next latching.
5. Turn the calibration screwdriver approx. a further 90 degrees counterclockwise until it locks into place.
6. IMPORTANT: Hold the MyCrown Scan camera still with this. Tap the *"OK"* button.
   - The software confirms the calibration process.
   - The software prompts you to proceed on the calibration screwdriver to the next latching.
7. Repeat this process until 12 images have been taken.
   - The software provides status updates on the calibration and informs you once the procedure is complete.
   - You will be prompted to measure the position of the exit window (see next section).

Measuring the position of the exit window

1. Mount the bottom side of the calibration set to the tip of the camera.
2. Tap the *"OK"* button.
   - The calibration process is continued.
   - Once the calibration is complete, a message is displayed indicating this.
3. Tap the *"OK"* button to confirm the message.

- The MyCrown Scan camera is calibrated.

Error message during calibration

The software indicates if an error occurs during calibration. If the calibration process resulted in errors, restart the software.

End calibration

✓ The software indicates that the calibration was completed successfully.

➢ Click the *"OK"* button.
   - The MyCrown Scan camera is calibrated.

6.2.2 Grinding and milling unit

6.2.2.1 Editing settings

MyCrown Mill

You can subsequently edit the following settings via the relevant menu item:

- Name

- Connection settings
  - Retrieve IP settings automatically
  - Specify IP settings manually
- Firmware Update
  - Button is visible if firmware is not up-to-date.
  - Manually starts the upload of the firmware on the grinding and milling unit.

6.2.2.2 Calibration

1. Click on the *"Calibrate"* button.
2. Then simply proceed as prompted by the software.

6.2.2.3 Changing instruments

1. Click on the *"Change Instruments"* button.
2. Then simply proceed as prompted by the software.

6.2.2.4 Removing the grinding and milling unit

1. Click on the *"Delete Device"* button.
2. Then simply proceed as prompted by the software.

6.3. Settings

The menu item *"Settings"* has the following subitems:

- *"ADA/FDI Notation"*
- *"Warning messages"*
- *"Patient Database"*
- *"Language"*

6.3.1 ADA/FDI odontogram

You can set the odontogram using *"ADA/FDI Notation"*:

- International (*"FDI Notation"*)
- USA (*"ADA Notation"*)

6.3.2 Warning messages

Here, all warnings can be displayed again.

6.3.3 Patient database

In the menu item *"Patient Database"*, you can determine where patient data and cases are saved.

You have the option to rename patients and cases in the patient overview table (accessible via the start view).

You can specify a folder for this data. This allows you, for example, to save all data on a secure server on the practice network.

You can export a support container (*.zip) that contains all the data for analyzing problems: .fona file, image data, log files, etc.

Tip: Use the Support Container if you send cases to FONA Dental for analysis.

6.3.4 Language

Here, you can set the language of the software.

7 System menu

In the system menu the following sub-menus are offered:

"Start Screen"	Switch to the start window to start a new case.
"Save"	Saves currently opened case.
"Save As..."	To save a case under a different name or dentist.
"Import"	Imports case from the file system.
"Export"	Exports currently opened case.
"License Manager"	Opens the license manager.
"Configuration"	Configure hardware and software.
"Window Mode"	Toggles between full-screen and window mode.
"Help"	Open help information.
"Exit MyCrown Design"	Close the *"MyCrown Design"* software.

Opening system menu

➢ Click or tap the upper edge of the window.

or

➢ Click the start window button.

↳ The system menu is displayed.

Closing system menu

➢ Click or tap the Start window button.

or

➢ Click into the main window with the left mouse button.

↳ The system menu is closed.

7.1. Save case

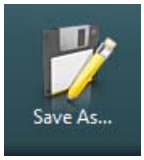
In this dialog, you can save the actual case.

➢ Select *"Save Case"* in the system menu.

↳ The current processing status of the case is saved.

7.2. Save the case under a different name

This dialog allows you to save the current case under a new name or assign it to a different patient.



1. Select *"Save Case As..."* in the system menu.
   ↳ The patient list is opened.
2. Select the appropriate patient.

or

   ➢ Create a new patient via *"Add New Patient"*.
3. You can give the case a new name in the *"Case"* column via the pencil icon.

7.3. Import case

✓ The .fona file of a case is stored on the acquisition unit or on a storage medium connected to it.

1. Click the *"Import Case..."* button in the system menu.
   ↳ The *"Import Case..."* dialog box opens.
2. Select the folder where the case is located.
3. Select the relevant file.
4. Click the *"Open"* button.

↳ The optical impression is imported and opened.

7.4. Exporting a case

You can store a case in any location.

✓ You have opened a case in the software.

1. Click the *"Export Case..."* button in the system menu.
   ↳ The *"Export Case..."* dialog box opens.
2. Select the target folder to which you want to export the case.
3. Assign any name to the case.
4. Click on the *"Save"* button.

↳ The case is exported as a .fona file by default.

NOTE: You can also save the data record in STL format.
In the STL format, only the geometries are written.

If you would like to transfer the optical impression to another PC, you can use a USB stick or a network drive for this purpose.

7.5. License manager

The license manager is used for the installation of new software licenses on the USB license stick. To do this, start the license manager via the system menu. Keep the license certificate with 25-digit license key ready, which you either obtained with the unit or ordered separately from your dealer.

Tip: You can also start the license manager via *"All apps"*.

✓ To activate the license you must have an Internet connection and the USB license stick must be connected.

1. Click the Windows logo in the bottom left corner to open the Windows start menu.

2. If the software is not already provided on the list under *"Most used"*, click on the *"All apps"* text below.
3. Scroll down to letter **F**.
   ↳ Find the *"FONA Dental"* entry there.
4. Click this to expand it.
   ↳ Find the *"License Manager"* entry under this.
5. Click *"License Manager"* to start.

Licenses and code libraries

For information on licenses and code libraries from third parties, see licenses.pdf. The file is in the installation directory under *"All apps"* / *"License Manager"*.

7.6. Configuration

The configuration is described in the section “Configuration [→ 20]”.

7.7. Window mode

The *"Window Mode"* function can be used to exit full-screen mode or enter it again. You can also activate/deactivate the window mode via `F11`.

7.8. Exit program

The *"Exit"* function can be used to close the software.

8 Start view

In the start view you can perform the following functions:

- Browse patients,
- Open patient database.
- Create a patient.

Switching to the start view

You can switch to the start view at any time.

1. Open the system menu.
2. Click on the *"Start Screen"* button.

8.1. Create a new patient

In the data structure, a patient is uniquely identified by one of the following two entries:

- Surname, first name and date of birth
  or
- Patient ID
  Tip: We recommend that our customers work solely with one reference number. Please observe the data protection regulations applicable to you.

Add patients

1. Click on the *"Add New Patient"* button.
   ↳ An empty patient card is opened.
2. Enter a surname, first name, and date of birth. A real-time search function is active during the input which should prevent duplicate entries.

or

   ➢ Enter the patient ID.

   ↳ Once you have entered enough information, the bar in the *"Edit Patient"* step turns from red to green.

3. Click on the *"Add New Case"* button.
   ↳ The program switches over to the *"ADMINISTRATION"* phase.

8.2. Patient search

Displaying all patients

The *"Show All Patients"* function can be used to display all patients.

Searching for individual patients

You can view individual patients by searching for them.

1. Click into the search text box.
2. Enter the surname or the patient ID and tap *"Enter"*.
3. Click the magnifying glass to start.
   ↳ The program now shows all the search results.

8.3. Editing patient data

8.3.1 Editing a patient card

✓ You have found the patient with the search function.

1. Click on the patient card.
2. Click on *"Edit Patient"*.
   ↳ The patient card/case view is opened for editing.
3. Carry out the changes.
4. Confirm your changes by clicking the *"Ok"* button.
   ↳ The changes are saved in the memory.
5. Click the double arrow on the left side of the step menu.
   ↳ The patient card/case view is displayed.

8.3.2 Deleting patients

✓ You have found the patient with the search function.

1. Click on the patient card.
2. Click on *"Delete Patient"*.
3. Confirm the deletion by clicking the *"Ok"* button.
   ↳ The patient is deleted.

8.3.3 Opening a case

✓ You have found the associated patient with the search function.

1. Click on the patient card.
2. Select the case.
3. Click on *"Open Case"*.
   ↳ The case opens.

8.3.4 Add a new case

✓ You have found the associated patient with the search function.

1. Click on the patient.

2. Click on *"Add New Case"*.
   ↳ The program switches over to the *"ADMINISTRATION"* phase.

9 Page palette

Various functions and options are offered to you in the page palette, depending on the restoration phase currently active.

You can open several page palettes at the same time. All page palettes are initially closed. Mandatory palettes are automatically shown as open upon entry in the respective step. Opened page palettes share the available height.

Should this display be inadequate for you, you can remove any page palette of your choosing from the fixed state of the magnet bar. To do this, press and hold the left mouse button on the header of the page palette and then drag the palette to the desired position within the main window.
Tip: If you are using MyCrown Design in window mode or on multiple screens, then you can also pull the page palettes out of the application window and position them in any point on your screen.

All changes to a page palette (size and position) are saved separately for each step. You can therefore configure each work step as you want.

IMPORTANT
If a page palette is closed, the size and position are retained when next opened. If a page palette is stuck back on the magnet bar, however, the saved size and position are lost.

In order to affix a page palette back onto the magnet bar on the right side, drag any page palette over the magnet bar on the right side. The magnet bar lights up, suggesting various positions for the window. The window then snaps into place as soon as you release the left mouse button. The page palette will now automatically put itself back in order with the other page palettes.

To close a page palette, click on the right button in the page palette header or once more on the respective right button in the magnet bar.

9.1. View options

Different views are available to you in the *"View Options"* page palette. These view options are split into global and local views. The global views are based on the model axis of the upper and lower jaw.
Tip: You can adjust the global model axis in the *"Set Model Axis"* step.

The local views are determined by the element currently selected in the object bar. Each element in the object bar therefore has its own coordinate system. Depending on the current step, the following views are available to you:

Global views

- *"Top"*
- *"Bottom"*
- *"Right"*
- *"Left"*
- *"Front"*

- *"Back side"*

Local views

- *"Mesial"*
- *"Distal"*
- *"Buccal"* | *"Labial"*
- *"Lingual"*
- *"Cervical"*
- *"Occlusal"* | *"Incisal"*

Enlarge or reduce 3D preview

In the *"View Options"* page palette on global and local views you will find the zoom options.

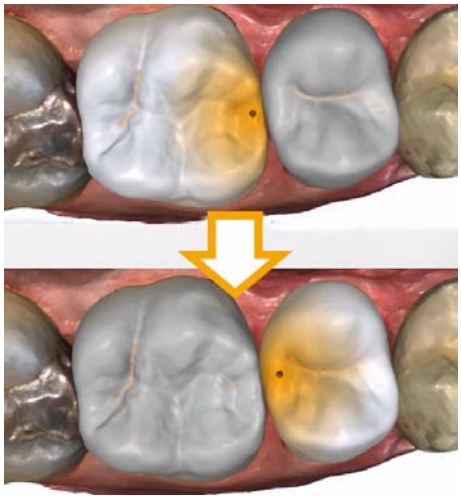
Using the slide you can enlarge or reduce the 3D preview.

In the attendant text field, the current degree of enlargement is displayed in percent. Here you can also manually enter a value from 0 to 100 percent and confirm with the Enter button.

Tip: If the mouse pointer is inside the 3D preview, then you can also change the view with the center mouse button pressed down while simultaneously moving the mouse up and down.

Zoom adjustment via the mouse's scroll wheel and zooming in using the touch function of the screen are also supported.

9.2. Tools



Tip: Automatic tooth change is possible when using the tools for several restorations. You do not have to make a selection via the restoration selector or by clicking.

Tools which can be used on the active restoration element are always active. The other tools are grayed out.

The most important tools are also offered to you in the tool box. More information on the tool box can be found in the section "Tool box [→ 17]".

You will find all tools as a sub-menu under *"Tools"*. The available tools are displayed for each step.

To change a tool, click on the button of another tool in the left column of the page palette.

To close a tool, click on the button of the active tool once more in the left column.

Undo and Reset

With the *"Undo"* button in the tools you can undo all changes made on the selected restorations since the tool was started.

With the *"Reset"* button in the tools you can undo all changes made on all restorations since the tool was started.

9.2.1 Tool box

The tool box provides the most common tools for simplifying access. The tools available vary depending on the current step.

In the MODEL and DESIGN phases, the toolbox provides the most common tools for simplifying access. The tools available vary depending on the current step.

1. Right-click in the workspace.
   ↳ The toolbox opens.
2. Click with the right mouse button anywhere in the workspace.
   ↳ The toolbox moves to the position of the mouse pointer.
3. Select a tool.
   ↳ The selected tool is available. The toolbox closes automatically.

Working with the toolbox

✓ You are now in the MODEL or DESIGN phase.

1. Click inside the main window with the right mouse button.
   ↳ The toolbox opens at the mouse pointer.
2. Position the mouse above the desired tool.
   ↳ For tools with several variants, all variants will be displayed.
3. Click on the desired tool.
   ↳ The desired tool is then activated.

9.2.2 Buccal registration

If there is sufficient data available, the lower and upper jaw are correlated using the buccal scan. Should the automatic buccal registration fail, you can assign it manually.

Move buccal image

If no green check mark appears, the automatic buccal registration has not been possible.

With the *"Drag Buccal"* function, you can displace the buccal image.

1. Click on the *"Buccal"* button.
2. Click on the *"Drag Buccal"* button.
3. Click on the buccal image and displace it to the same region on the upper or lower jaw.
   ↳ The image is accepted.
   Tip: If the buccal scan cannot be superimposed with the scan of the jaw, align the jaw in such a way that it is in the same position as the buccal scan.
   If registration is still not possible, check whether the buccal sections in the jaws and in the buccal scan are sufficient.
4. If the image was accepted, move the image to the corresponding region of the opposite jaw.

Turn Buccal Impression

With the *"Turn Buccal Impression"* function, you can rotate the buccal image.

1. Click on the *"Buccal"* button.
2. Click on the *"Turn Buccal Impression"* button.
   ↳ The buccal image is then rotated.

9.2.3 Shaping

With the *"Form"* function, you can

- apply
- smoothen
- remove

You can enter the *"Size"* and *"Strength"* properties with a slider or numerically in advance (see “Properties [→ 39]”).

Apply material

1. Click the *"Form"* button.
2. Click on the *"Add"* button.
3. Click with the mouse cursor on the area you wish to shape.
4. Press and hold the left mouse button and apply the material to the surface location by moving the mouse.

Smoothing

When smoothing, you are able to smooth the surface locally.

1. Click the *"Form"* button.
2. Click the *"Smooth"* button.
3. Click with the mouse cursor on the location you wish to smoothen.
4. Press and hold the left mouse button and smoothen the surface location by moving the mouse.

Removing material

1. Click the *"Form"* button.
2. Click the *"Remove"* button.
3. Press and hold the left mouse button and remove the material from the surface location by moving the mouse.

9.2.3.1 Properties

Modifying the size

You can use the *"Size"* slider to modify the size of the area affected. The area affected is shown as an orange-colored area on the current restoration in the 3D preview.
The size of the area affected can be modified for each shaping tool.

1. Click the *"Size"* slider and press and hold the mouse button.
2. Now drag the slider to the right or left to enlarge or reduce the area affected.
   ↳ The orange-colored area (area affected) will be expanded or reduced in the 3D preview.

Tip: You can also change the size of the area affected by dragging the mouse up or down with the right mouse button held down on the restoration.

Adjusting thicknesses

You can use the *"Strength"* slider to modify the intensity of the area affected. The thicknesses of the affected area can be modified for each forming tool.

1. Click the *"Strength"* slider and press and hold the mouse button.
2. Now drag the slider to the right or left to increase or reduce the intensity.

Hiding the neighboring restoration

You can hide the neighboring restoration with the *"Clip Neighbors"* function. This option is only available as long as the jaw is shown.

Apply global

This function allows you to use the tool on two adjacent restorations simultaneously. For this to happen, the teeth must be grouped in advance and the check box should subsequently be checked. Grouping takes place via the page palette and becomes visible when more than one restoration has been selected.

9.2.4 Cut out model areas

With the *"Cut"* function, you can cut out model areas. The cut out model areas are then discarded. You cannot display cut out areas later on.

Removing the model area

The *"Discard Part"* function enables model areas to be removed.

When performing this activity, be careful not to accidentally cut out any areas that e.g. are located behind the model or are otherwise cut away from the line.

1. Click the *"Cut"* button.
2. Begin the cut line with a double-click.
3. Click to set additional points.
4. Finish the cut by double clicking.
   ↳ The model area is cut off.

Inverting the model area

With the *"Invert Selected"* function, the model area that is cut out can be inverted.

✓ The *"Cut"* tool is selected.

✓ You have created a cut.

➢ Click the *"Invert Selected"* button.

↳ The model area which was cut out is displayed.
The rest of the model area is hidden.

Tip: You can invert the model area that is cut out by double-clicking on the semitransparent cut-out area.

9.2.5 Correcting defects

With the *"Replace"* function, you can correct defects and artifacts on the model (e.g. holes or elevations).

To do so, drag a line around the defect in your model and select the appropriate function.

1. Click the *"Replace"* button.
2. Set the starting point with a double-click.
3. Click to set further points in order to enclose the defect tightly. The line must be located completely on the model.
4. Set the line end by double-clicking.
5. Click on the *"Apply"* button.
   Tip: The tool can also be triggered by pressing the Enter key.
   ↳ The software smoothens everything within the line by interpolation.

9.2.6 Resetting the model (MODEL phase)

With the *"Reset Model"* function, all changes will be reset.

1. Click the *"Tools"* button.
2. Click on the *"Reset Model"* button.
3. Confirm with *"Apply"*.

9.2.7 Trimming

With the *"Trim"* function, you can isolate the preparation. You can thus e.g. draw in the preparation margin more easily. Trimmed image regions can be optionally displayed and hidden later on.

Hiding image regions

The *"Discard Part"* function enables you to hide image regions.

The trim line can also be placed over the preparation line. Only the region underneath the preparation will then be hidden automatically. The prepared region remains fully intact.

1. Click on the *"Trim"* button.
2. Click on the *"Discard Part"* button.
3. Start by double-clicking in the vicinity of the model or on the model.

4. Click to set additional points. Draw the line close to the preparation around which you want to trim.
5. Finish the line by double clicking.
   ↳ The smaller region of the model is hidden.

Inverting an image region

With the *"Invert Selected"* function, an image region which was hidden can be restored.

✓ An image region has been hidden using the *"Trim"* tool.

➢ Click on the *"Invert Selected"* button.
   ↳ The hidden image region will be shown.
   The image region shown will be hidden.

Tip: You can invert the hidden image area by double-clicking on the semitransparent hidden region.

9.2.8 Entering the preparation margin

More information on using this tool can be found in the section “Entering the preparation margin [→ 64]”.

Automatic edge detection

With *"Margin"* / *"Auto"*, you can work with automatic edge detection.

1. Click on the *"Margin"* button.
2. Click on the *"Auto"* button.
   ↳ Automatic edge detection is switched on.

Manual drawing

With *"Manual"* you can draw in the preparation margin manually. With this technique, you must place the individual points close together in order to clearly define the contour of the preparation margin even in difficult situations.

✓ The *"Margin"* tool is open.

➢ Click on the *"Manual"* button.
   ↳ The manual technique is switched on.

9.2.9 Positioning and rotating

With the *"Move"* function, you can displace, rotate, and scale the restoration.

Displacing and rotating

With the *"Position and Rotate"* tool, you can displace and rotate the restoration.

Displacing and rotating the restoration

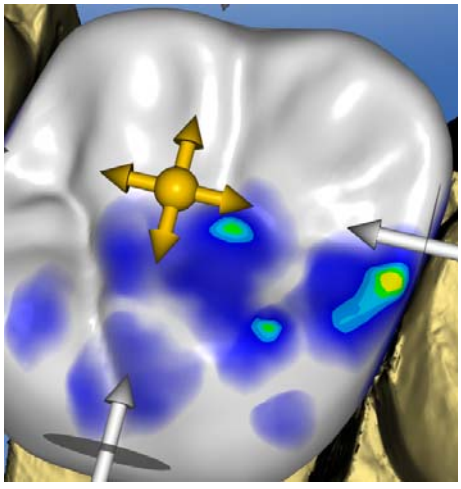
➢ Left-click on an arrow symbol and hold the button down.
   ↳ You can displace or rotate the restoration in the corresponding direction.

Changing axes

➢ Right-click on an arrow symbol and hold the button down.

↳ You can change the axis on which the object is rotated or moved.

Scaling



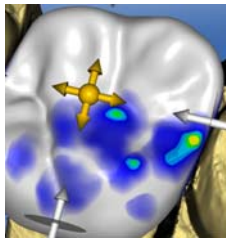
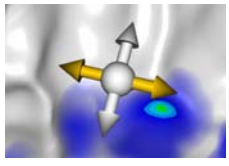
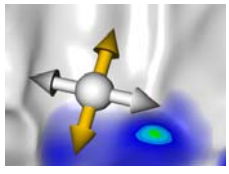
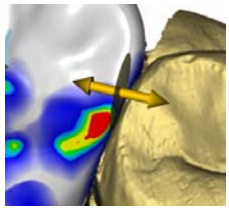
With the *"Scale"* function, you can change the size of the restoration. The area affected is shown as an orange-colored area.

1. Click on the *"Move"* button.
2. Click on the *"Scale"* button.
3. Use the mouse cursor to click with the arrow on the selected scaling direction.

   ↳ The arrow is shown in orange.

4. Hold the left mouse button down and drag the mouse to enlarge or reduce the restoration.

   ↳ The orange-colored area will be expanded or reduced.

Layout	Effect
	Click on the ball in the center to enlarge or reduce the entire restoration.
	Drag the mouse and click on the arrow to enlarge or reduce the restoration in the mesio-distal direction.
	Drag the mouse and click on the arrow to enlarge or reduce the restoration in the bucco-lingual direction.
	Drag the mouse and click on the arrow to enlarge or reduce the restoration in the direction shown. The restoration is enlarged or reduced to half-page size.

9.2.10 Designing

Anatomical

The *"Anatomic"* function is used to preselect regions of morphology, e.g. cusps or fissure lines, for designing.

Circular

The *"Circular"* is used to preselect a circular region for designing.

The *"Shape"* function enables you to shape a selected region.

You can shape the restoration in 2 ways:

Function	Description
2-Direction	The movement is possible along one axis orthogonal to the restoration surface.
4-Direction	The movement is possible along two axes parallel to the restoration surface.

9.2.10.1 Properties

Changing size
This option is available only for the circular variant.

You can use the *"Size"* slider to modify the size of the area affected. The area affected is shown as an orange-colored area on the current restoration in the 3D preview.

1. Click the *"Size"* slider and press and hold the mouse button.
2. Now drag the slider to the right or left to enlarge or reduce the area affected.
   ↳ The orange-colored area (area affected) will be expanded or reduced in the 3D preview.

Tip: You can also change the size of the area affected by dragging the mouse up or down with the right mouse button held down on the restoration.

Hiding the neighboring restoration

You can hide the neighboring restoration with the *"Clip Neighbors"* function. This option is only available as long as the jaw is shown.

9.2.11 Adjusting contacts (DESIGN phase)

If you modify the restoration, the contact surfaces also will be displaced. The *"Adjust Contacts"* tool is used to reset the contacts to the thickness set in the parameters.

1. Click on the *"Adjust Contacts"* button.
2. Click the *"Mesial"*, *"Distal"*, *"Occlusal"*, or *"FGP"* button.

↳ The respective contact surface is then reset.

Hiding the neighboring restoration

You can hide the neighboring restoration with the *"Clip Neighbors"* function. This option is only available as long as the jaw is shown.

9.2.12 Editing the baseline

Phase *"DESIGN"* – Step *"Edit Restoration"*

Using the *"Edit Base Line"* function, you can retroactively edit the contact areas between a pontic and the gingiva.

IMPORTANT
The initial drawing in of the baseline for the pontic is omitted in the phase MODEL. This is created automatically. The start and end point of your new line must always be on the existing baseline.

For a retroactive editing of the baseline, proceed as follows:

1. Start the editing of the baseline by double-clicking on the existing baseline.
2. Draw a new line by clicking on the desired line course.
3. Close the editing by double-clicking on the existing baseline.

9.2.13 Incisal variation

Phase *"DESIGN"* – Step *"Edit Restoration"*

Using the *"Incisal Variation"* function, you can generate mamelons (vertical structures) and growth lines (horizontal structures) on your anterior restorations.

Strength

Using the *"Strength"* slider you can set the intensity at which the selected structure acts on a restoration.

Variation

Using the *"Variation"* slider you can select the desired structure type.

- Items 1 to 4 stand for mamelons (vertical structures).
- Items 5 to 6 stand for growth lines (horizontal structures).

Positioning structures

If you have set the structure type and the desired intensity, you can now adjust the position of the structure.

1. To do this click on your current anterior restoration in the 3D preview and then hold down the left mouse button.
   ↳ The tools effect area is colored in orange.
2. Now move the mouse to position the structure as you want it.

Applying structures

1. If you are satisfied with the structure created, click on the *"Apply"* button. The created structure is now saved.

IMPORTANT
In order to combine multiple structures together, first complete a structure and then save this with the *"Apply"* button.

2. Now create additional structures and save every other structure here once they are completed.

9.2.14 Disabling / enabling tools

Phase *"MODEL"* and phase *"DESIGN"*

Using the *"Lock / Unlock Tools"* function, you can unblock a restoration if it has been blocked by the system automatically after grinding or milling; e.g. to make later changes and alter the restoration again.

9.2.15 Adjusting sprue location

This option is only available for the *"MANUFACTURE"* process.

The *"Sprue"* function enables you to rotate the position of the sprue location on the restoration in 2 ways:

- Step-by-step, by clicking on the arrow in the circle segment.
- Continuously, by clicking and holding the left mouse button inside the circle segment and moving the mouse.

9.2.16 Positioning blocks

This option is only available for the *"MANUFACTURE"* process.

Move

The *"Position Block"* function enables you to displace the block surrounding the restoration in all spatial directions until the restoration strikes one of the block margins.

You can move the block in 3 ways:

- Step-by-step, by clicking on one of the arrows showing the movement axes on the semitransparent cube.
- Continuously in 2 directions, by clicking on one side of one of the cube surfaces, holding the button down and moving the mouse.
- Continuously in all 4 directions, by clicking in the center of a cube surface, holding the button down and moving the mouse.

Rotating

With the *"Rotate"* function, you can rotate the restoration about the axis of the block.

This function is only available for the *"MANUFACTURE"* manufacturing process.

You can rotate the restoration in the block in 2 ways:

- Step-by-step, by clicking on the arrow in the circle segment.
- Continuously, by left-clicking on or inside of the circle segment and moving the mouse.

9.3. Display objects

Opening view options

Click on the *"View Options"* button. Here you will find all currently available options for setting visibilities in the 3D preview. The options available depend on the current step.

Showing and hiding the upper jaw

With the *"Upper Jaw"* button, you can display and hide the upper jaw.

➢ Click on the *"Upper Jaw"* button.

↳ The upper jaw is displayed or hidden.

Showing and hiding the lower jaw

With the *"Lower Jaw"* button, you can display and hide the lower jaw.

➢ Click on the *"Lower Jaw"* button.

↳ The lower jaw is displayed or hidden.

Display upper/lower jaw transparently

You can adjust the transparency of the upper/lower jaw continuously.

1. Click the slider of the "Upper/lower jaw" and press and hold the mouse button.
2. Now drag the slider to the right or left to increase or reduce the transparency.

   ↳ The transparency of the jaw concerned is changed.

Showing and hiding the minimum thickness (DESIGN or MANUFACTURING phase)

With the *"Minimal Thickness"* button, you can show and hide the display of minimum thicknesses.

➢ Click *"Minimal Thickness"*.

↳ The display of the minimum thickness is then displayed or hidden.

You can set the minimum thickness under *"Parameters"*. For more information, refer to the section onParameters [→ 20].

Showing and hiding the restoration

The *"Restoration"* button enables you to display and hide the restoration.

➢ Click *"Restoration"*.

↳ The restoration is displayed or hidden.

Transparent display of restoration

You can adjust the transparency of the restoration continuously.

1. Click the *"Restoration"* slider and press and hold the mouse button.
2. Now drag the slider to the right or left to increase or reduce the transparency.

   ↳ The transparency of the currently selected restoration is increased or reduced.

Displaying and hiding the trimmed region

With the *"Trimmed Model"* button, you can display and hide the trimmed region.

✓ You have trimmed a region in the MODEL phase.

➢ Click on *"Trimmed Model"*

↳ The trimmed region of the virtual model is displayed or hidden.

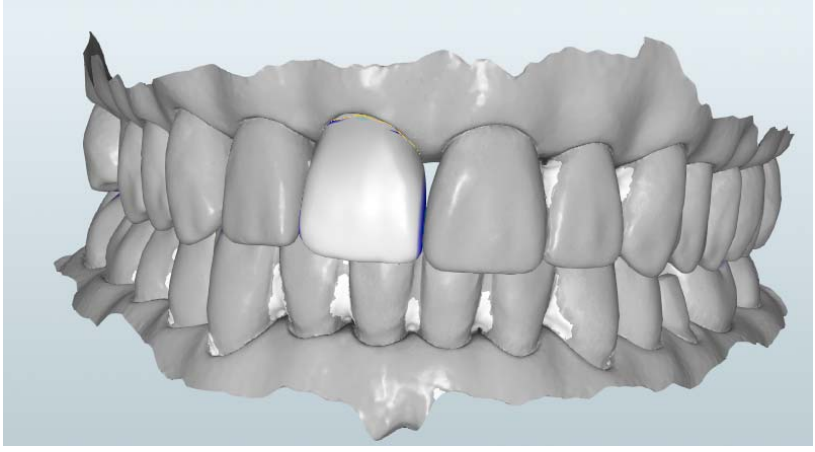
9.4. Activating analysis

Activating Analyzing Tools

➢ Click the *"Analyzing Tools"* button in the page pallet to activate the analysis tools.

Color model

Using the *"Color Model"* button, you can change the color of models that were acquired with the MyCrown scan camera.



Contact surfaces on the virtual model

Using the *"Model Contacts"* button, the contact surfaces on the virtual model can be displayed or hidden.

➢ Click on the *"Model Contacts"* button.

↳ The contact areas on the model are displayed or hidden.

Penetration/pressure:	> 100 µm
	100 - 50 µm
	50 - 0 µm
Distance:	0 - 50 µm
	50 - 100 µm
	> 100 µm

Side and bottom surfaces

Using the *"Model Box"* button, the virtual model can be displayed without the sides and bottom.

➢ Click on the *"Model Box"* button.

↳ The virtual model is displayed without side and bottom surfaces.

Tip: In the MANUFACTURE phase show the relevant jaw model and hide the bottom of the model in order to check the fit from all sides.
This enables you to check the tightly sealed preparation limit and check whether the ceramic extends through the preparation. This is a reference to areas where the restoration may be too low.

Contacts

Through the *"Contacts"* button, the contact points of the restoration(s) of the shown jaw which are displayed in color can be switched on or off.

➢ Click on the *"Contacts"* button.

↳ The restoration is displayed with or without occlusal contacts.

Model Contacts

Through the *"Model Contacts"* button, the contact points of the entire model which are displayed in color can be switched on or off.

This function is only available when the upper and lower jaw have been scanned.

➢ Click on the *"Model Contacts"* button.

↳ The restoration is displayed with or without proximal contacts.

Restoration Color

Using the *"Restoration Color"* button, the restoration can be displayed in the model color.

1. Click on the *"Restoration Color"* button.
   ↳ The virtual model is shown in white or the model color.
2. Click on the *"Restoration Color"* slider and hold the mouse button down.
3. Drag the slider to the right or left to show or hide the restoration color.
   ↳ The restoration color of the respective object (or object group) is changed.

Slice (DESIGN and MANUFACTURE phase)

Using the *"Slice"* button, a cut can be created through the restorations and model in the screen plane.

1. Click on the *"Slice"* button.
   ↳ A cut is created in the screen plane through the virtual model and all restorations.
2. Click on one of the drag points in the 3D preview and hold down the mouse button. By moving the mouse at the same time, you can move the height of the cutting plane or rotate the cutting plane.

Slice (DESIGN and MANUFACTURE phase)

Via the *"Cursor Details"* button, you can have the height and thickness of the restoration displayed. The cursor details are displayed at the bottom left of the screen.

➢ Click on the *"Cursor Details"* button.

↳ The height and thickness of the restoration are displayed on the mouse cursor and updated in real time.

Depending on the type of restoration, the following information is displayed:

Height	Distance from this point to the bottom of the model
Fissure height	Minimum thickness in fissure.
Thickness	Thickness of the restoration at this point

Distance

You can use the *"Distance"* button to measure distances.

1. Click on the *"Distance"* button.
2. Click on the restoration to define the starting point and the end point.
   ↳ The distance is then displayed.

Grid Mode

With the *"Grid Mode"* function, you can display a grid comprised of vertical and horizontal lines. It serves as an orientation guide.

➢ Click on the *"Grid Mode"* button.
   ↳ The grid is displayed in the 3D preview.

10 ADMINISTRATION phase

Creating restorations

Define the desired supply in the ADMINISTRATION phase. To do this, you must perform the following steps.

1. Select the type of provision (single restorations, bridge restorations) from the left column of the *"Indications"* page palette.
2. Select the restoration type, design mode, material and the milling and grinding device in the right column of the *"Indications"* page palette one after the other.
   ↳ If all selection items in the *"Indications"* page palette are chosen, the odontogram is activated.

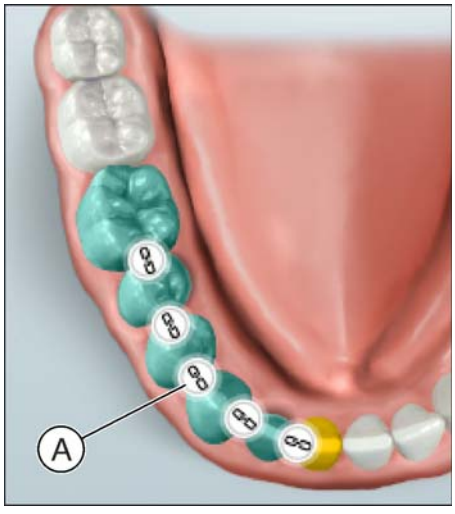
IMPORTANT
Depending on the type of restoration selected, only certain teeth are active in the odontogram.

3. Place the restoration in the desired position in the odontogram. You can also place multiple restorations of the same type after another.

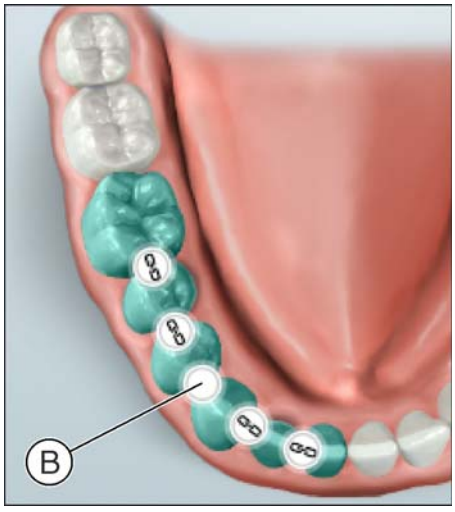
IMPORTANT
If you want to place a restoration type which differs from the current definition (restoration type, design mode, material, or milling and grinding unit), adjust your selection in the *"Indications"* page palette and then place the modified restoration in the odontogram.

Adding bridges

When placing bridge restoration elements, anatomical connections are automatically created between the individual elements. If two bridges are immediately adjacent to one another, you must remove the automatically created connector manually.



1. To do this, click on the connecting element between the two bridges (e.g. **A**).



2. To connect two bridges back together again, click on the empty connecting element between the two bridges (e.g. **B**).

IMPORTANT
A valid bridge must always consist of at least two connected restoration elements.

Editing and deleting restorations

If you want to adjust or delete a restoration that has already been placed, then select the relevant restoration from the *"Case Details"* page palette. The buttons for editing (pen icon) and deleting (trash can icon) are located on the right side of a selected restoration.

1. Click on the button for editing a restoration.
2. Change the associated options via the drop-down menu lists.
3. Confirm or discard your changes via the *"Apply"* and *"Cancel"* buttons.

Tip: By clicking on the right mouse button, you can also delete a restoration directly from the odontogram.

Tip: You can select a restoration through the odontogram, the object list or the case details.

Closing the ADMINISTRATION phase

Once at least one restoration has been added to the odontogram, you can jump to the *"ACQUISITION"* phase.

✓ At least one restoration is added to the odontogram.

✓ The *"ACQUISITION"* phase can be selected.

➢ Click on the *"ACQUISITION"* button in the phase bar.

or

➢ Click on the “Next” arrow in the step menu.

↳ The program switches over to the *"ACQUISITION"* phase.

11 ACQUISITION phase

11.1. MyCrown Scan

11.1.1 Scanning with the camera

When switching on the system, the camera needs to warm up for 15 - 20 minutes. If the sapphire glass of the camera is not sufficiently warm, it may steam up during the exposure. As such, it is not possible to carry out the exposure.

NOTICE

Image brightness

The image brightness during the exposure is controlled automatically so that there is always optimum image brightness, largely independent of the distance between the camera and the tooth.

The surroundings of the tooth to be scanned should be as weakly illuminated as possible. Avoid any type of external light. Switch off the operating light.

IMPORTANT

Do not use cotton rolls in the scan area

Do not use any cotton rolls or other moving parts in the vicinity of the scan area.
Should any pieces of cotton roll contaminate this area, the acquisitions will be inaccurate.

Principle of data acquisition

For data acquisition, the 3D model is developed externally based on 3D data that has already been acquired. You cannot therefore scan a molar and then switch to an incisor if the 3D data between these two teeth is not scanned.

Rapid camera movements can cause the system to lose its position.

Therefore, do not interrupt the exposure area and guide the camera with smooth movements.

Scanning in 3D

The software starts automatically in the image catalog where the preparation is located.

1. Bring the camera on the occlusion into position and hold the camera still to start the scan. The scan starts automatically.
   - ↳ During the continuous data acquisition, a 3D model is generated automatically on the screen. Use both windows on the screen to navigate. The acoustic signal is interrupted if the camera loses its position and the scan flow is interrupted. In this case, move the camera to any area which has already been scanned, preferably an occlusal surface. The scanning procedure continues.
2. Scan the occlusal surface first of all. For this scan rapidly from distal to mesial, e.g. from 47 to 43. Next tilt the camera 45 to 90 degrees

before scanning the vestibular / buccal surfaces and the lingual or palatinal surfaces.

3. To check during the scan whether all areas have been recorded, you can stop the scan by taking the camera out of the mouth and examining the model. The model can be maximized and rotated for this. Guide the camera to a point already scanned so that the software can find the re-entry point. Rescan the missing areas. If the powder layer has e.g. been removed through tongue exposure, you need to pause the scan, respray and then continue the scan.
4. The preparation itself, as well as the proximal surfaces of the neighboring teeth, must be recorded completely. You can simply rescan any missing information. The software will reconcile the different scans with each other.
5. To terminate the scan switch to a different image catalog or to the model phase for the next steps.

Scanning in 2D

⚠ CAUTION

No diagnosis with 2D scans

The photos and videos are used solely for patient communication.

➢ Do not use the photos and videos for diagnosis.

In the *"Video"* / *"Photo"* step, you can make intraoral videos and individual intraoral images with the MyCrown scan for patient communication.

➢ Click the *"Video"* / *"Photo"* button on the step by step menu for this and select *"Video"* or *"Photo"*. Bring the camera to the area around the patient's mouth which you wish to scan. The scan starts automatically.

11.1.2 Cut out model areas

With the *"Cut"* function, you can should be able to cut out model areas. These can be areas in which parts of cotton rolls or cheeks were unintentionally acquired.

When performing this activity, be careful not to accidentally cut out any areas that e.g. are located behind the model or are otherwise cut away from the line.

You can execute another scan of the area which you have cut out using the crop function. To do so, close the tool window, by clicking on the top right corner. You can refill the area with another acquisition.

Undo and Reset

With the *"Undo"* button in the tools you can undo all changes made on the selected restorations since the tool was started.

With the *"Reset"* button in the tools you can undo all changes made on all restorations since the tool was started.

11.2. Image catalogs

In the *"ACQUISITION"* phase, 3 image catalogs are available as standard:

- Lower Jaw
- Upper Jaw
- Buccal

In addition, further image catalogs can be shown:

- NatureShape Copy Lower
- NatureShape Copy Upper

For each of these image catalogs, only one acquisition is saved in the corresponding image catalog.

Opening the image catalog

1. Click on the icon of the desired image catalog.
2. Move the mouse pointer or touch the screen at the bottom left edge.
   ↳ The active image catalog is opened, the individual acquisitions are visible.

Deleting acquisitions

If an acquisition is not suitable, you can delete it. You can then execute a new acquisition for the corresponding image catalog.

➢ Grab the image with your mouse or touch the catalog with your finger and move the image using drag & drop to the recycle bin.

↳ The image is deleted.

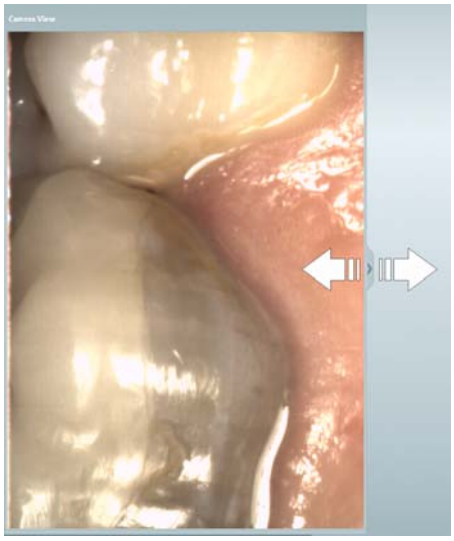
11.2.1 Adding image catalogs

Using the *"Add Catalog"* button, you can create additional image catalogs in the page palette.

1. Click the *"Add Catalog"* button in the page palette.
   ↳ The possible image catalogs are offered.
2. Click on the required image catalog.

↳ The image catalog is displayed next to the standard image catalogs.

11.3. Camera view



Change window size

You can adjust the size of the camera view proportionally.

1. Click the arrow at the right edge with the mouse and hold down the mouse button.
2. Drag the camera view to enlarge or reduce it.

11.4. 3D Preview

In the default setting, the data are displayed from the occlusal direction in the 3D preview.

You can freely select the viewing direction of the virtual model in the 3D preview window by using the mouse.

Rotating a 3D preview

1. Click on the 3D preview with the left mouse button and hold it down.
2. Move the mouse.

↳ The 3D preview is rotated.

Tip: Alternatively, use the touch function and touch the model on the screen. Move your finger to rotate the model.

Moving the 3D preview

1. Click on the 3D preview with the right mouse button and hold it down.
2. Move the mouse.

↳ The 3D preview moves.

Tip: Alternatively, use the touch function and touch the model on the screen. Move your finger to rotate the model.

Zooming into/out of the 3D preview

1. Click on the 3D preview with the middle mouse button and hold it down.
2. Move the mouse up or down as desired.
   ↳ The 3D preview is enlarged or reduced.

Tip: Alternatively, use the touch function and touch the model on the screen with two fingers. Now drag your fingers together to make the model smaller and move them apart to zoom out.

11.5. Finishing the phase

✓ All required scans are present (jaw, if necessary the opposing jaw and buccal bite exposure).

✓ The *"MODEL"* phase can be selected.

➢ Click on the *"MODEL"* phase.

or

➢ Click on the double arrow.

↳ The program switches over to the *"MODEL"* phase.

12 MODEL phase

In the *"MODEL"* phase, the virtual models are reconstructed based on the acquired image catalogs.

If you would like to edit the model, change to the *"Edit Model"* step.

The *"Edit Model"*, *"Bite Registration"* and *"Set Model Axis"* refer to the entire model (upper and lower jaw).
All other steps in the *"MODEL"* phase refer to the restoration currently selected. These steps must be performed individually for each restoration.

In the *"MODEL"* phase the next mandatory step or the next phase in the step menu is displayed.

12.1. Buccal registration

The software joins the models together automatically und shows this with a green check mark at the buccal window. If this is not possible, the software will attempt to correlate the jaws in the following process. If this is not possible, you can also correlate the models together manually.

Manual correlation

In this step the virtual models of the upper and lower jaw should be aligned with one another with the help of the buccal image in its correct position.

In the *"Buccal Bite Registration"* step, you can work with the following tools in the page palette:

- Drag Buccal
- Turn Buccal Impression

Rotating the lower and upper jaw

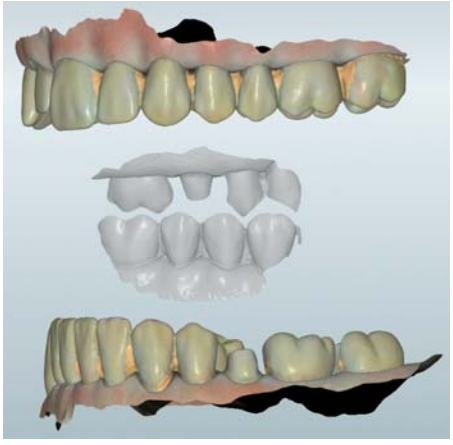
➢ Click in the blue area with the left mouse button and hold the button down.

↳ The lower jaw and upper jaw can be rotated about the vertical axis simultaneously.

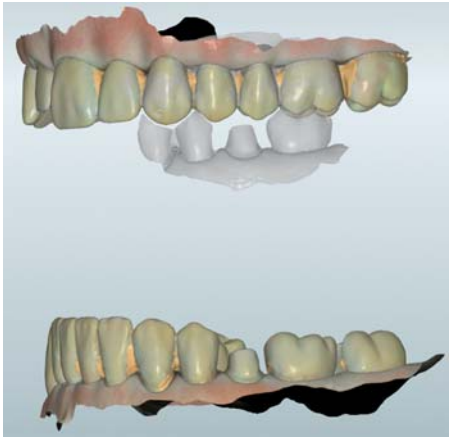
➢ Click on the lower jaw or upper jaw with the left mouse button and hold the button down.

↳ The arches can be rotated freely, individually.

Drag Buccal



1. Rotate both models so that you can see the overlap area of the buccal acquisition and of the upper jaw and lower jaw.
2. Now drag the buccal acquisition to the corresponding area of the upper jaw with the mouse and let go of the mouse button (drag & drop).



   ↳ The buccal acquisition automatically registers itself on the upper jaw. If the registration was successful, this will be indicated by a "leopard pattern". If the registration was not successful, the buccal acquisition returns to its original position. In this case, you must repeat the drag&drop procedure in order to find a better correlation surface.

3. Now click on the buccal acquisition once again and drag it onto the appropriate area of the lower jaw (drag & drop).

   ↳ If the registration was successful, this will be indicated by a "leopard pattern". If the registration was not successful, the buccal acquisition returns to its original position. In this case, you must repeat the drag&drop procedure in order to find a better correlation surface.

It is irrelevant whether you drag the buccal acquisition onto the lower jaw or onto the upper jaw first.

Turn Buccal Impression

In some cases, the buccal acquisition may be displayed upside down in relation to the lower jaw and the upper jaw. Proceed as follows in such cases:

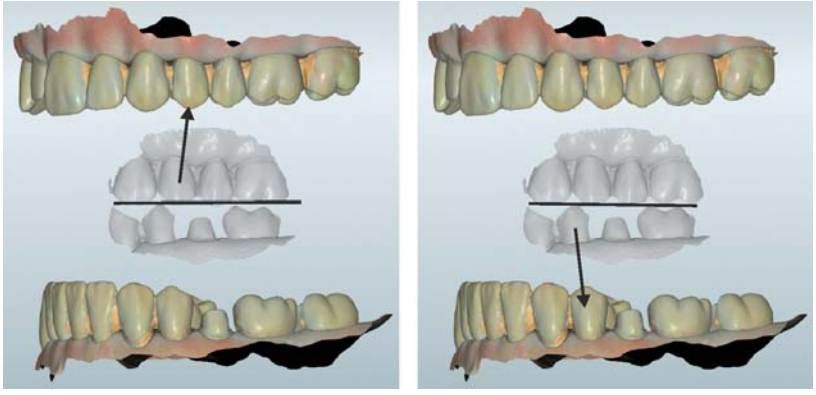
➢ Click on the upper area of the buccal image and drag it onto the lower model.

or

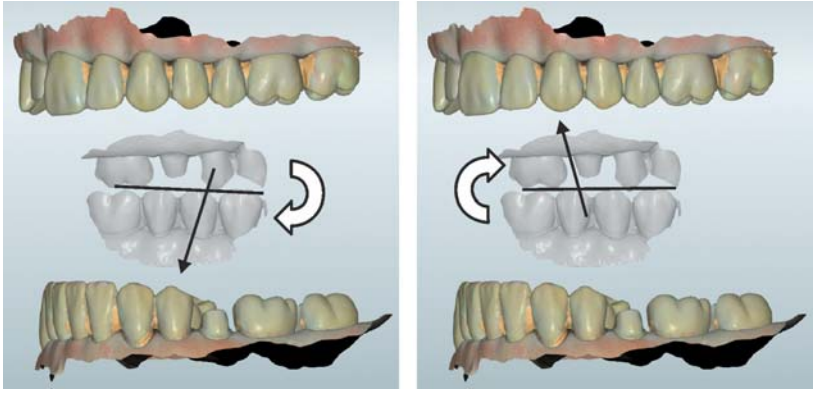
   ➢ Move the mouse via *"Tools"* onto the *"Bite Registration"* button and activate the *"Turn Buccal Impression"* command.

   ↳ The buccal acquisition will automatically flip, and you can then register it on the jaw using the drag & drop technique.

This works in the same way vice versa, i.e. if you click on the lower area of the buccal image and then drag it onto the upper model.



The buccal image is then displayed right side up. Registration is possible without rotation.



The buccal image is then displayed upside down. When you begin the registration, the software detects this and automatically flips the image right side up.

Moving to the next step

✓ The step is completed.

➢ Click on the next step to continue.

12.2. Manual correlation for image fields

If automatic correlation of the image fields does not occur, you can compose the image fields via manual correlation. To do so, three points must be set by double-clicking on both models.

1. Select the *"Set Points"* tool.
2. Double-click a prominent location in a model to set a point.
3. Then double-click the corresponding location on the other model.
   ↳ This pair of points is marked by an orange curve.
4. Repeat this process until you have defined a total of three reference points.
5. Click on *"Apply"*.

12.3. Setting the model axis

If the positioning in the model axis does not match the tooth number, a message appears. This way poor initial suggestions are prevented.

In this step, adapt the alignment of the jaw model to the software specifications. This alignment is required to calculate optimal initial suggestions.

IMPORTANT
Through the buccal registration, aligning one of the two jaws will suffice. You can switch between the upper and lower jaw with the *"Display Objects"* page palette.

Aligning the occlusal view (A)

1. Align the model using the schematic mandibular arch. Each tooth must be in the correct quadrant.
2. Align the incisors using the center lines displayed.
   The following markings should help you with the alignment:
   - T-shaped cross hairs for the incisal points of the incisors
   - Dotted area for the molars
   - Dashed area for the premolars
   - Filled area for the anterior teeth
3. Hold down the left mouse button to rotate the jaw; or the right mouse button to move the jaw.
4. Click on the green *"Ok"* button in the step menu to confirm the defined model axis or *"Cancel"* to discard an entry.

Aligning the buccal view (B)

1. Align the jaw so that the incisal point and distobuccal cusp of the first molars are parallel with the horizontal guiding lines.

2. Hold down the left mouse button to rotate the jaw; or the right mouse button to move the jaw.
3. Click on the green *"Ok"* button in the step menu to confirm the defined model axis or *"Cancel"* to discard an entry.

Aligning the mesial view (C)

1. Align the quadrants of the jaw parallel with the horizontal guiding line.
2. Hold down the left mouse button to rotate the jaw; or the right mouse button to move the jaw.
3. Click on the green *"Ok"* button in the step menu to confirm the defined model axis or *"Cancel"* to discard an entry.

12.4. Editing the model

This step is optional. To reach this step, you have to open the step menu by clicking on both arrows on the outside left.

In the *"Edit Model"* step, you can work with the following tools:

- Shaping
- Cut
- Replace
- Reset

Use of the individual tools is described in the section “Page palette”.

12.5. Trimming the preparation

This step is optional. To reach this step, you have to open the step menu by clicking on both arrows on the outside left.

In the *"Trim Area"* step, you can hide image regions outside of the preparation; e.g. mesial and distal neighbors.

If the virtual model is trimmed in this design step, both the sides and the bottom are subsequently displayed as closed.

In the step *"Trim Area"*, you can work with the following tool:

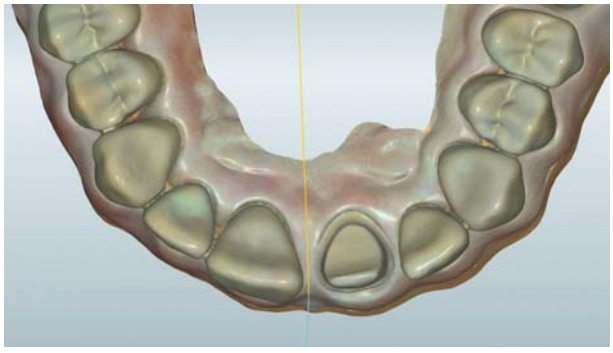
- *"Trim"*

The use of the tool is described in the Page palette [→ 36] section.

Trimming image regions

You can trim several image regions.

1. Rotate the model to a perspective in which you can see all areas that you want to trim. The model cannot be rotated while you are drawing the line.
2. Double click in any location to set the starting point of the trim line.



3. Click to set further points of the line, e.g. in the interdental space.
4. Double click in any position to end the line. Ensure that the closing end of the line does not cut any areas of the model that you want to keep.
   - The smaller image region to the side of the line is hidden.
     Tip: If the wrong image region is hidden, you can switch to the other image region by double-clicking the hidden region.

12.6. Entering the preparation margin

In the step *"Draw Margin"*, you can work with the following tool:

- Margin

The use of the tool is described in the Page palette [→ 36] section.

General information

IMPORTANT
You can enlarge or reduce the 3D view during the input or editing of the preparation margin (see “3D Preview [→ 57]”) in order to ensure the correct positioning of the preparation margin. Be sure to hold down the left mouse button for a long time. A short click adds a point to the preparation margin.

The tooth number is displayed after completing the preparation margin. This way confusion and thus poor suggestions can be avoided.

The preparation margin must always form a closed line.

You can edit the finished preparation margin after entering the last line.

Once the preparation margin is complete and has a tooth number, only the *"Manual"* tool will be available. This can be used for editing.

To enter the preparation margin, a technique can be selected in the page palette:

Technique	Layout	Usage
"Auto"	Height image	With clear preparation margins, for initially drawing in the margin.
"Manual"	Height image	For unclear preparation margins, for subsequent correction of the initial limit.

Entering the preparation margin in the case of clear preparation edges

Tip: You can rotate the model during input in order to obtain a better view of the preparation limit.
Click and hold the left mouse button and move the model with the mouse.

1. Start the entry by double-clicking anywhere on the preparation margin.
2. Move the cursor along the preparation margin.
3. Continue this procedure until you are back at the starting point.
4. Conclude the entry by double-clicking the starting point.

Entering the preparation margin in the case of blurred preparation edges

If you change to *"Manual"* in the page palette while entering the preparation margin, you can draw in the limit yourself.
Be careful to set the points exactly on the edge and place them close together.

Moving to the next step

✓ The step is completed.

➢ Continue with the preparation limits for the next restoration by clicking on the desired restoration in the object bar.

or

➢ Click on the next step.

12.7. Defining the insertion axis

In the *"Set Restoration Axis"* step, you can work with the following tools:

- Insertion Axis

Use of the individual tools is described in the section “Page palette”.

12.7.1 Redefining the insertion axis

Tip: Regions within a preparation margin that show an undercut from the viewing direction are marked yellow.

1. Change the position of the preparation such that all yellow markings disappear.
   If this is not possible, (e.g. in the case of diverging stumps) make sure that all preparation margins are completely visible from the viewing direction and the yellow-marked undercuts are as far away as possible from the preparation margin.
4. Confirm with the *"Ok"* button.

↳ The insertion angle of the restoration is determined.

12.8. Finishing the phase

✓ The next phase is can be selected.

➢ Click on the next phase.

or

➢ Click on the double arrow.

↳ The program switches over to the next phase.

13 DESIGN phase

13.1. Checking parameters

You can check the parameters for this restoration prior to further processing. The values entered here only apply to the current restoration.

This step is optional. If you skip this step, global parameters are used.

You can change the parameters as described in section Parameters [→ 20] .

13.2. Editing the restoration

The virtual model provides a visualization and design of a restoration in 3D.

Once the restoration has been calculated, you can change the restoration with the tools in the toolbar.

The tools are described in the section "Page palette [→ 36]".

13.3. Finishing the phase

✓ The next phase is can be selected.

➢ Click on the next phase.

or

➢ Click on the double arrow.

➪ The program switches over to the next phase.

14 MANUFACTURING phase

14.1. Selecting the color

14.1.1 CEREC Blocs C In

You can set the color of the restoration and the incisal edge for "CEREC Blocs C In" materials.

✓ You have selected the "CEREC Blocs C In" material in the ADMINISTRATION phase.

1. Select the *"Select Color"* step.
2. Select the desired color by clicking on the color in the color center.
3. Click *"Incisal Edge"*.
4. If necessary, adjust the dentine core of the individual situation in the incisal or apical direction.
5. Click the *"OK"* button.
6. The software sets the restoration in the block according to the selected parameters.

14.2. Page palette manufacture / export

You can determine a grinding and milling unit in this page palette.

Here you can also select the editing options as a sub-menu of the relevant machine (see “Changing editing settings [→ 68]”).

14.2.1 Manual firmware update

If the grinding and milling unit firmware is not up to date, this is indicated by a red exclamation mark and a tooltip (pop-up window that appears if you hover over the symbol for 1-2 seconds). If you click on the symbol, you are taken to the corresponding configuration menu of the grinding and milling unit. You can perform the update there manually via the *"Update Firmware"* button, which appears approximately 5 seconds after a check is performed to check the current firmware version.

14.2.2 Changing editing settings

14.2.2.1 Veneer mode

Veneer mode

Veneer mode ensures that grinding and milling takes even the finest structures into account. This stops the veneer and anterior crowns binding.

14.3. Block size selection page palette

Block Sizes

In the *"Block Sizes"* page palette, you can select the right block size. The last selected block size is always preselected to start with.

IMPORTANT
The block sizes which are smaller than the currently selected restoration are indicated with a yellow warning sign.

14.4. Positioning restorations in the block

You can use the positioning tools to move the block around the restoration, turn it, and determine the sprue location.

The tools are described in the section "Page palette [→ 36]".

2 pinned connection options are available for grinding purposes. Nesting the restoration in a block is always attempted (multiple sprue locations). To take full advantage of the block, the software switches to one sprue location for individual elements. You can generate a nest again at any time by selecting a larger block.

14.5. Starting the production process

Once you have completed the design and assessed the restoration in the preview, you can produce the restoration.

For further information on milling or grinding, please see the corresponding Operating Instructions for the units.

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