inLab Splint
Software Version 19.x

Operator’s Manual
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# Dentsply Sirona
**Operator’s Manual inLab Splint**

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1 Introduction

1.1 Dear Customer,

Thank you for purchasing your inLab Splint software from Sirona. When combined with the scanner inEos X5, this software enables you to record models and construct splints and individual impression trays. Improper use and handling can create hazards and cause damage. Therefore, please read and follow this manual carefully. You should always keep it within reach.

Train using practice models in order to master the software safely. Also pay attention to the safety instructions to prevent personal injury and material damage.

Your
inLab team

1.2 Copyright and trademark

Copyright © Sirona Dental Systems GmbH. All rights reserved.

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.

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 General safety information

Only use original software

Only use original software or software which has been released by Dentsply Sirona. 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).

Models to be checked by trained personnel

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

Observe the information from the material manufacturer

Please observe the processing instructions and combination options of the material/implant manufacturer applicable in your country.
2.2 Structure of the manual

2.2.1 Identification of the danger levels

To prevent personal injury and material damage, please observe the warning and safety information provided in these operating instructions. Such information is highlighted as follows:

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

- **WARNING**
  A possibly dangerous situation that could result in serious bodily injury or death.

- **CAUTION**
  A possibly dangerous situation that could result in slight bodily injury.

- **NOTE**
  A possibly 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 simplifying work.

2.2.2 Formats and symbols used

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

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
</tr>
</thead>
</table>
| ✔️     | 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 [→ 7]" | Identifies a reference to another text passage and specifies its page number. |
| ● List | Designates a list. |
| "Command / menu item" | Indicates commands / menu items or quotations. |
2.2.3 Conventions

<table>
<thead>
<tr>
<th>Example</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clicking</td>
<td>A single click down and releasing of the left mouse button.</td>
</tr>
<tr>
<td>Double-clicking</td>
<td>Clicking and releasing of the left mouse button twice in quick succession.</td>
</tr>
<tr>
<td>Moving the mouse in one direction</td>
<td>Moving the mouse in the described direction.</td>
</tr>
<tr>
<td>Seizing a point</td>
<td>Press the left mouse button and hold it down.</td>
</tr>
<tr>
<td>Drag &amp; drop</td>
<td>(Drag &amp; drop) Press and hold an element (e.g. pictograph), and drop onto new potential destination.</td>
</tr>
</tbody>
</table>

2.2.4 Manual formats (assistance)

You can access the manual via the Help button or by pressing "F1".

A PDF version of the user manual can be found online at (http://www.dentsplysirona.com/manuals).

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

2.2.5 File format

Depending on the status of processing, an order consists of calculated virtual models and a splint or individual tray.

The software uses its own file format (*.sp) to export an order. This format contains all of the order data. SPD files can be opened with other inLab Splint 18 versions or higher. Under certain circumstances, older software versions cannot open data exports from a more recent version.
3 Getting started

3.1 Installing the software

The software requires at least the 2.00 firmware version of the USB license stick. Update the firmware version if necessary. For more information, refer to the "License manager [→ 15]" section.

You need at least one inLab-PC V 3.0.1 for the software. An inLab 4 PC V 4.0.2 is recommended.

Use the version of the license manager provided with this version to import licenses from the license certificate provided.

**NOTE**

An inLab SW 16.0 or higher is required for installing the inLab Splint module.

- The license stick firmware is available in version 2.00.
- The PC is powered up and all programs are terminated.
- The installation file of the inLab Splint is downloaded and saved onto the hard disk or onto removable data storage media.

1. Go to the directory and start the "Setup.exe" file.
2. In the next dialog, click the "Next" button.
   - The license agreement is shown.
3. Read through the license agreement carefully.
4. If you accept the license agreement, then check the "I accept the terms in the license agreement" option and subsequently click the "Next" button.
5. In the next dialog, click the "Next" button.
6. Select to which inLab software version inLab Splint should connect.
7. In the next dialog, click the "Install" button.
   - The program continues the installation routine. This may take several minutes.
8. Click the "Finish" button once installation is complete.
   - The software is installed.
3.2 Uninstalling the software

1. Click on "Start / All Programs / Sirona Dental Systems / inLab Splint / Tools / Deinstallation" to uninstall the software.

2. During the uninstall procedure, you will be asked whether you want to delete the patient data or the entries in the registration database (e.g., the calibration data).

2. Depending on your decision, click either the "Yes" or "No" button.

The software is uninstalled.

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. If you require additional licenses, please contact your dealer.

Always keep the USB license stick near the acquisition unit/PC.

All authorizations (interface and software licenses) can be installed as electronic licenses on the USB license stick. To do this, you must enter the 25-digit license key.

You obtain the license stick when purchasing an inEos X5 scanner or inLab MC X5 or inLab MC XL. Alternatively, you can also order the license stick separately from your dealer.
3.4 Starting the software

- The inLab Splint software is installed. You will find the start icon on the desktop.
- The USB license stick is connected with a valid, current license.
- They are located in phase MODEL in the inLab Splint software, and a 3D model is already calculated.

1. Open the software inLab Splint.
2. Click the "Run Application..." button in the system menu inLab Splint.

3. Then click on the inLab Splint button.
   - The software is started.

Alternative start options

- The inLab Splint software is installed. You will find the start icon of the inLab Splint software on the desktop.

1. Double-click on the start icon of the inLab Splint software.
   or
   > Select "Start" / "All Programs" / inLab Splint / inLab Splint in the Windows Start menu.
4 User interface

4.1 Phase bar

The workflow is illustrated in the software in 3 phases.

Phase bar

- PREPARE
- DESIGN
- FINALIZE

4.1.1 PREPARATION

In this phase you can do the following:
- Assess model,
- Align model,
- Define insertion direction,
- Process blocking-out wax.
4.1.2 DESIGN

In this phase, you can perform the following:
- Enter the contour of the splint or tray.
- Place the elements on the splints and trays.

4.1.3 FINALIZATION

In this phase, you can perform the following:
- Fuse elements for trays
- Shape splints and trays
- Consider opposing jaws for splints,
- perform average articulation.

4.2 Object bar

The jaw button is located in the object bar.

4.3 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.
4.4 System menu

In the system menu, you can:
- Open a case,
- Save a case,
- Save a case under a different name,
- Open license manager
- Configure software
- Change window mode
- Retrieve software information
- Close the software

Opening system menu
1. Move the mouse pointer onto the system menu button.
or
➢ Click on the system menu button.
   - The system menu is displayed.

Closing system menu
1. Click on the system menu button.
or
➢ Click into the main window with the left mouse button.
   - The system menu is closed.

4.4.1 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.
4.4.2 **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.
2. Select the desired save location and enter a file name.

4.4.3 **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 and follow the instructions on the screen. 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 "StartAll Programs / Sirona Dental Systems/inLab SplintToolsLicense Manager".

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

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**IMPORTANT**

Software license for inLab Splint is pre-installed.

No separate license needs to be installed for the inLab Splint software. This is pre-installed on every USB license stick.

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**Firmware update**

You can update the firmware for the license stick manually.

1. Change to step "Status".
2. Select the license stick in the selection list.
3. Click on the "Firmware Update" button.
   - The license stick selected is updated.

If you have more than one license stick, you must repeat the step for each license stick.

**Licenses and code libraries**

For information on licenses and code libraries from other providers, see licenses.pdf. The file is in the installation directory under "C:/Programs/Sirona Dental Systems/CADCAM".

4.4.4 **Configuration**

The configuration is described in the section “Configuration”.

4.4.5 **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.
4.4.6 **Open help**

You can access the manual via the Help button or by pressing "F1".

4.4.7 **Exit program**

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

5.1 Settings

5.1.1 Warning messages

Here, all warnings can be displayed again.

Warnings may appear in pop-up windows when using the software. Many of these messages can be deactivated by clicking on the "Don't show this message again" check box. If this check box is already selected or if a new user uses the software, all warnings can be reset here. All warning messages are displayed once again by clicking the "Reset" button.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
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<tbody>
<tr>
<td>YES</td>
<td>Displays all the deactivated warnings in the workflow again.</td>
</tr>
<tr>
<td>NO</td>
<td>Warnings which were previously hidden, remain hidden.</td>
</tr>
</tbody>
</table>

5.1.2 Language

Here, you can set the language of the software.
6 Editing orders

The section "Shortcut keys [→ 38]" describes how the following tools and options can be opened through shortcut keys. Some tools are not available in all phases.

6.1 Tools and functions of the page palette

The page palette offers you various different functions, depending on the current step.

6.1.1 Views

"View Options"

You can use the "View Options" button to display six predefined views.

- "Top"
- "Bottom"
- "Right"
- "Left"
- "Front"
- "Back side"

Changing the view

1. Click on the "View Options" button.
2. Click on one of the proposed views.
   - The virtual model rotates to the corresponding view.

Enlarge or reduce 3D preview

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 is also supported.
6.1.2 **Tools**

The design tools are provided in the page palette in the phases DESIGN and FINALIZE.

*"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.

6.1.2.1 **Form**

With the "Form" tool you can process the blocking-out wax in the PREPARE phase and process the model casting in the FINALIZE phase.

With the "Form" function, you can do the following to material

- apply
- remove
- smoothen

You can enter the "Size" and "Strength" properties with a slider or numerically in advance (see "Properties").

**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.

**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.

**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.
6.1.2.1.1 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.

6.1.2.2 Consider opposing jaws option

You can use this option to design the impressions of the opposing jaw in the splint. The impressions of the opposing jaw are not altered for Add, Remove, and Smooth if this option is active.

6.1.2.3 "Reline" the tool

The "Reline" tool can be used to apply a line of wax in a defined quantity in a flat area via the drawing.

1. Use the "Thickness" parameter to set the thickness of the wax application.
2. Use the "Smooth" parameter to define whether the wax application is sharp or rounded.
3. Then draw a closed line.
6.1.2.4 Editing lines

Drag Line
You can change the lines of the elements with "Drag Line".
1. Click on the "Edit Lines" button.
2. Click on the "Drag Line" button.
3. Select the active area (the yellow part) of the line by holding down the right mouse button and dragging the mouse up and down.
4. Drag the line by moving the mouse to the desired point.

Edit Line
You can redraw the lines of a connector with "Edit Line".
1. Click on the "Edit Lines" button.
2. Click on the "Edit Line" button.
3. Redraw the lines at the desired points by starting with a double-click, setting points with left-clicks, and ending the line by double-clicking.

6.1.2.5 Select active jaw
You can use this tool to select the jaw on which the design should be performed for the design of splints or impression trays. By default the lower jaw is always the active jaw.

Switching jaws
1. Click "Select Active Jaw".
2. Select "Upper Jaw" if the upper jaw is to be the active jaw or Select "Lower Jaw" if the lower jaw is to be the active jaw.

6.1.2.6 Undercut clearance
With this tool you can determine how deep the edge of the splint should be placed in the Undercut. To do this, move the slide controller to the required value using the left mouse button. Alternatively, you can also enter the value into the number field via the numeric keypad.

6.1.2.7 Suggesting splints or trays
The software offers two options through which you can have impression trays or splints suggested.
6.1.2.8 Drawing lines

You can enter the shape of the tray or the splint by drawing the baseline.

1. Click on "Create by Line".

2. Start the process by double-clicking on any starting position.
3. You can pin the line down during entry with single clicks.
4. Finish the line by double clicking at the starting point.

6.1.2.9Inserting levels

You can also generate the suggestion of a line by inserting a level.

1. Click on "Create by Plane".
2. Adjust the height of the level using the arrow. Left-click on the arrow and move the mouse up and down.
3. Adjust the tilt of the level using the small disk. Left-click on the disk and move the mouse in the required direction.
4. Click on "Apply" to have the line suggested.

6.1.2.10Jaw opening

You can virtually disable the bite using the "Open Jaw" tool. You can set the required opening with the slider. Alternatively, you can also enter the value into the number field via the numeric keypad.

6.1.2.11Canine guidance

You can create removable stumps using this tool. When the tool is turned on, the opposing jaws are automatically shown, and contour of the splint is displayed. The mouse can be moved above the opposing jaws, so that the element is shown and can be placed with a double-click at the desired position.

The elements can be activated again with a simple click to rearrange them.
6.1.2.12 **Articulation**

With the tool "Articulation" an articulation for the splint according to average values can be performed.

Regions on the splint, which are not supposed to be grinded, can be selected with the mouse. The elements of the canine guidance are selected automatically. The regions can be added or deleted via the plus or minus symbol.

6.1.2.13 **Apply text**

You can apply text to the model using this tool.
1. Click on the "Enter Text" button.
2. Enter the required text in the textbox on the page palette.
3. Move the mouse to the required point and click to insert the text.

6.1.2.14 **Edit text**

1. Click on the text. The text becomes active.
2. Once you move the mouse to the text the cursor changes into a crosshair and you can reposition the text.
3. You can tilt the text by moving the cursor to the arrows.
4. The "Recess" button allows you to engrave the text onto the model. The text is raised as standard.
5. The "Delete" button allows you to delete the text again.
6.1.2.15 **Display objects**

You can use these functions to display and hide the regions of the model and that of the restorations.

**View Options**

1. Click on the "View Options" button.
2. Click the respective button.
3. The affected region is then displayed or hidden.

**Transparency**

You can adjust the transparency of the elements seamlessly.

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.

**Showing and hiding**

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

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

With the "Splint" button, you can display and hide the upper jaw.

With the "Trays" button, you can display and hide the upper jaw.

With the "Contacts" button, you can display and hide the colored contact point scheme on the surface of the splint.

Penetration/pressure:

- > 100 μm
- 100 - 50 μm
- 50 - 0 μm

Distance:

- 0 - 50 μm
- 50 - 100 μm
- > 100 μm
7 Designing impression trays and splints

7.1 Scanning jaws in the inLab CAD software

Scan the model with the inEos X5 in the software inLab SW and have the model calculated (see also inLab SW, user manual).

*.stl models can also be imported using the inLab software.

7.2 Starting inLab Splint

The inLab SW software is installed. You will find the start icon on the desktop.

✓ The USB license stick is connected with a valid, current license.
✓ They are located in phase MODEL in the inLab SW software, and a 3D model is already calculated.

1. Open the software inLab SW.
2. Click the "Run Application..." button in the system menu inLab SW.
3. Click on the "inLab Splint" button.
   ☑ The software is started.

7.3 Phase preparation

7.3.1 Selecting the design process step

Following the import of the jaw, you can specify whether a splint or an individual impression tray should be designed in the first step.

You can open the page palette and select what should be designed through the button in the right corner.
7.3.2 Setting the model axis step

In step "Set Model Axis" you can align the model on the displayed template. This step may only be performed if the jaw has not been aligned in the software inLab SW. The tool is based on the corresponding tool in the software inLab SW; it is just a simpler form. Since the incisal point is not relevant for the designing of a splint or a tray, the jaw need only be aligned roughly here.

7.3.3 Editing the model step

In step "Set Model Axis" you can apply, remove, and smoothen using the shaping tool "Material".

7.3.4 Defining the insertion axis step

The "Set Restoration Axis" tool allows you to set the axis for blocking out the jaw. The undercut depth is visualized using a direct color gradient – from light-green for a low depth to dark red for great depth. The color changes every 0.1 mm of undercut depth. The Insertion Axis itself is displayed with the yellow arrow above the center of the jaw.

To adjust the axis, you can move the arrow with the left mouse button or via the disk and the orange colored-ball.

When designing splints, you use the parameter "Undercut Clearance" to specify how deep the edge of the splint should be in the Undercut.
7.3.5 Checking the blocking step

The blocking can be checked in the last step. This was made by means of the setting in the insertion axis.

For a splint the interdental spaces are blocked out up to around 2 mm.

The wax can then be processed with the shaping tool. You apply, remove, or smoothen wax. Through the parameter "Use Max. Distance" you can define how much wax you want to apply.
8 Design phase

8.1 Designing impression trays

There are two options for producing the contour of the impression tray.
- "Create by Plane"
- "Create by Line"

8.1.1 Inserting levels

If you click on the button "Create by Plane", you can create the contour of the tray by inserting a level.

A level is then displayed using the model. This can be shifted upwards or downwards using the arrow and tilted using the disk illustrated.

If you click on "Apply" in the page palette the contour of the tray is generated.

8.1.2 Drawing lines

If you click on the "Create by Line" button, you can create the tray by drawing in the line.

You can start with the line by double-clicking, fix the line with single clicks, and terminate the drawing by double-clicking at the start point.
8.1.3 Processing suggestions

Only the contour of the tray is displayed through the line at first. You can activate this by double-clicking and then redraw the line.

You can activate the "Drag Line" tool by toggling with the space bar. It cannot be selected yet through the user interface.

You can specify the thickness of the impression tray through the "Thickness" parameter, as well as the distance between the jaw and tray interior through the parameter "Lift".

You can adopt changes by clicking on "Apply". You can discard the suggestion with "Delete".
8.1.4 **Add handle**

You can create two different types of handle using the "Add Handle" button: A front handle and a side handle. Select the button for the appropriate handle. You can create as many handles as you like.

If you bring the cursor near to the model, the handle is displayed. The handle is placed at the displayed point by double-clicking.
Clicking again will activate it once more, so that its position and tilt can be adjusted.

The handle can be adjusted further with the following parameters. The set values are saved and adopted for the next handle.

You can set the width of the handle using "Width".

You can set the length of the arm using "Length".

You can set the thickness of the handle using "Thickness".

Via "L Shape Offset" the form of the handle can be determined.

8.1.5 Impression stop

You can design a support point in the tray using the "Impression" button. To design a support, draw a closed line. The support is then created between the jaw and the inside of the tray.
8.1.6 Shaft for implant impression posts

For implant impressions, you can design appropriate channels in the tray using the "Add Implant Chimneys" tool. If you bring the cursor near to the model, a channel is displayed, and can be positioned by double-clicking. You can perform this for all implant positions. Click on "Apply" to have the channels calculated in the tray. When the tool is active, the last set channel can be deleted by right-clicking.

Following the calculation, you can re-activate the channels by clicking, and alter their position and tilt using the arrows.

You can specify the diameter and the height of the channel in advance using the parameters in the page palette.

You can also design a tray for a closed implant impression using the option "Closed Chimney".
8.2 Designing splints

To design a splint, select the Michigan Splint in step "Select Design Type".

8.2.1 Disabling the bite

Before designing the splint, you can disable the bite using "Open Jaw". In this respect, the slide controller represents the incisal pin of the articulator. If settings have been made in the inLab CAD software through the virtual articulator, these are adopted when the models are imported. You can also set the bite block in your articulator and scan the situation with the inEos X5.

8.2.2 Create to level

If you click on the button "Create by Plane", you can create the contour of the splint by inserting a level.

A level is then displayed using the model. This can be shifted upwards or downwards using the arrow and tilted using the disk.

8.2.3 Create to line

If you click on the "Create by Line" button, you can create the splint by drawing in the line.

You can start with the line by double-clicking, fix the line with single clicks, and terminate the drawing by double-clicking at the start point.
8.2.4 Processing suggestions

Only the line is displayed at first. You can activate this and then redraw it by double-clicking.

You can activate the “Drag Line” tool by toggling with the space bar. It cannot be selected yet through the user interface.

The material thickness of the splint can be determined in the occlusal direction via the “Occlusal Thickness” parameter.

Checking the “Plane Occlusion” checkbox allows the user to stipulate that the splint should be proposed with a plane occlusal surface. If the checkbox is not enabled the splint is proposed in accordance with the occlusal relief for the teeth and the height set.

Via the parameter “Radial Thickness” the material strength of the splint can be circumferentially determined.

A spacer can be set for the splint via the “Spacer” parameter.

If you click on “Apply”, the splint is calculated. You can discard the suggestion with “Delete”.

After you have calculated the splint, you can add the canine guidance (see „Canine guidance [- 22]“).
9 Phase finalization

9.1 Impression tray

9.1.1 Surface processing

You can process the surface using the shaping tool. You can apply and remove material, as well as smoothen the surface.

9.1.2 Hole-punching tool

With the "Punch Holes" tool, you can specify areas in which holes are to be introduced.

To do this, you must highlight the area. The is displayed in orange.

If you click on "Apply", the holes are then created.

9.1.3 Single-hole-punching tool

You can specifically introduce individual holes in the surface using this tool. If you bring the cursor near to the tray, the hole is displayed. You can set it by double-clicking.
9.1.4 Add label

Apply text
You can add text to the tray or the splint using this tool.
1. Click on the "Enter Text" button.
2. Enter the required text in the text box in the page palette.
3. Move the mouse to the desired point and click to insert the text.

Edit text
1. Click on the text.
   The text is activated.
2. If you move the mouse to the text the cursor changes to a crosshair and you can reposition the text.
3. Moving the cursor to the arrows allows you to tilt the text.
9.2 Splint

9.2.1 Opposite jaw impression

9.2.1.1 Shaping tool

Using the "Consider Opposing Jaw" option in the shaping tool, you can design the impressions of the opposing jaw in the splint. The impressions of the opposing jaw are not considered for Add, Remove, and Smooth. You can adjust the size of the tool using the right mouse key.

9.2.1.2 Articulation

With the tool "Articulation" an articulation for the splint according to average values can be performed.

Regions on the splint, which are not supposed to be grinded, can be selected with the mouse. The elements of the canine guidance are selected automatically. The regions can be added or deleted via the plus or minus symbol.

9.2.2 Exporting a case

You can save the case in *.stl file format using the "Export" button in the step menu.
# 10 Tips and Tricks

## 10.1 Shortcut keys

<table>
<thead>
<tr>
<th>Shortcut keys</th>
<th>Validity</th>
<th>Meaning</th>
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</thead>
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<tr>
<td>Ctrl + O</td>
<td>In every phase</td>
<td>Open</td>
</tr>
<tr>
<td>Ctrl + S</td>
<td>Case loaded</td>
<td>Save</td>
</tr>
<tr>
<td>Ctrl + Shift + S</td>
<td>Case loaded</td>
<td>Save as ...</td>
</tr>
<tr>
<td>Ctrl + X,Z</td>
<td>Case loaded</td>
<td>Undo</td>
</tr>
<tr>
<td>Ctrl + Y</td>
<td>Case loaded</td>
<td>Redo</td>
</tr>
<tr>
<td>E</td>
<td>Case loaded</td>
<td>Displays the context menu</td>
</tr>
<tr>
<td>Del</td>
<td>Element selected</td>
<td>Deletes the element</td>
</tr>
<tr>
<td>Enter</td>
<td>Element selected</td>
<td>Calculates the element</td>
</tr>
</tbody>
</table>

1. In the PREPARE phase, in the Select Design Type stage, Start/End the "Select Active Jaw" tool
2. In the PREPARE phase, in the Select Design Type stage, Start/End the "Open Jaw" tool
3. In the DESIGN phase, in the Select Design Type stage, Start/End the "Select Design Type" tool
4. In the DESIGN phase, in the Select Design Type stage, Start/End the "Create Imprint Tray" tool
5. In the DESIGN phase, in the Select Design Type stage, Start/End the "Add Handle" tool
6. In the DESIGN phase, in the Select Design Type stage, Start/End the "Add Implant Chimneys" tool
7. Enter in the Add Implant Chimneys step, Calculates the tray element from scratch
### Shortcut keys

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<th>Validity</th>
<th>Meaning</th>
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<td>1</td>
<td>In the FINALIZE phase, construction trays</td>
<td>Start/End the &quot;Form&quot; tool</td>
</tr>
<tr>
<td>2</td>
<td>In the FINALIZE phase, construction trays</td>
<td>Start/End the &quot;Punch Holes&quot; tool</td>
</tr>
<tr>
<td>3</td>
<td>In the FINALIZE phase, construction trays</td>
<td>Start/End the &quot;Punch Single Hole&quot; tool</td>
</tr>
<tr>
<td>4</td>
<td>In the FINALIZE phase, construction trays</td>
<td>Start the &quot;Add Label&quot; tool</td>
</tr>
<tr>
<td>1</td>
<td>In the FINALIZE phase, in the Select Design Type stage</td>
<td>Start/End the &quot;Form&quot; tool</td>
</tr>
<tr>
<td>2</td>
<td>In the FINALIZE phase, in the Select Design Type stage</td>
<td>Start/End the &quot;Open Jaw&quot; tool</td>
</tr>
<tr>
<td>3</td>
<td>In the FINALIZE phase, in the Select Design Type stage</td>
<td>Start/End the &quot;Imprint Front&quot; tool</td>
</tr>
<tr>
<td>4</td>
<td>In the FINALIZE phase, in the Select Design Type stage</td>
<td>Start the &quot;Add Label&quot; tool</td>
</tr>
<tr>
<td>Ctrl + E</td>
<td>FINALIZE</td>
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We reserve the right to make any alterations which may be required due to technical improvements.