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CEREC Premium CAM SW

Software Version 4.5.x

Operator's Manual

English



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1 Introduction

1.1 Dear Customer,

Thank you for purchasing your CEREC Premium CAM SW software from Sirona.

In conjunction with the CEREC MC X, CEREC MC XL, and inLab MC XL production machines, this software enables you to produce computer-assisted dental restorations in the laboratory, for example 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.

Also pay attention to the safety instructions to prevent personal injury and material damage.

Your
CEREC 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.

Trademarks

Microsoft® and Windows 7® 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 General safety information

Only use original software

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

For the USA only

CAUTION: According to US Federal Law, this product may be sold only to or by instruction of physicians, dentists, or licensed professionals.

2.2 Accessories

In order to ensure product safety, this device may be operated only with original Sirona accessories or third-party accessories expressly approved by Sirona. The user is responsible for any damage resulting from the use of non-approved accessories.

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 the present 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.

NOTICE

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 on making work easier.

2.3.2 Formats and symbols used

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

<ul style="list-style-type: none"> ✓ Prerequisite 1. First action step 2. Second action step or <li style="padding-left: 20px;">➤ 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.

2.3.3 Conventions

Example	Meaning
Clicking	Single pressing and subsequent release of the left mouse button or the left trackball button on the acquisition unit
Double-clicking	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	(Drag & drop) Press and hold an element (e.g. pictograph), and drop onto new potential destination.

2.3.4 Manual formats (assistance)



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

The PDF-format user manual can be found on the supplied software DVD or on the Internet (<http://www.sirona.com/manuals>).

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

3 First steps – CEREC Premium CAM SW

3.1 Installing the software

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

At least one CEREC AC acquisition unit with an LP hardware version is required for the software.

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

NOTICE

Installation only with administrator rights

You must have administrator rights on the PC on which you want to install the software!

- ✓ The license stick firmware is available in version 2.00.
- ✓ The PC is powered up and all programs are terminated.
- 1. Insert the DVD in the DVD drive.
 - ↳ The setup program starts automatically.
- 2. If this is not the case, run the *"Setup.exe"* file in the root directory of the DVD.
 - ↳ The installation wizard opens.
- 3. Click on the *"OK"* button.
- 4. Select the language for the installation and click on *"Next"*.
- 5. In the next dialog, click the *"Next"* button.
- 6. Select the language for the software from the drop-down menu, and select the region you are in from the download menu below it. Then click on *"Next"*.
- 7. In the next step, you can choose the installation folder. You can also change the path for the patient data folder and the path for the CAM data. Click on *"Next"*.
- 8. Read the license agreement carefully. If you accept the license agreement, then activate the *"I accept the terms in the license agreement"* option button and click the *"Next"* button.
 - ↳ The installation starts. This may take several minutes.
- 9. 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 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 units. If you require additional licenses, please contact your dealer.

Always keep the USB license stick near the unit.

All authorizations (software licenses) can be installed as electronic licenses on the USB license stick. You must enter a 25-digit license key for this purpose.

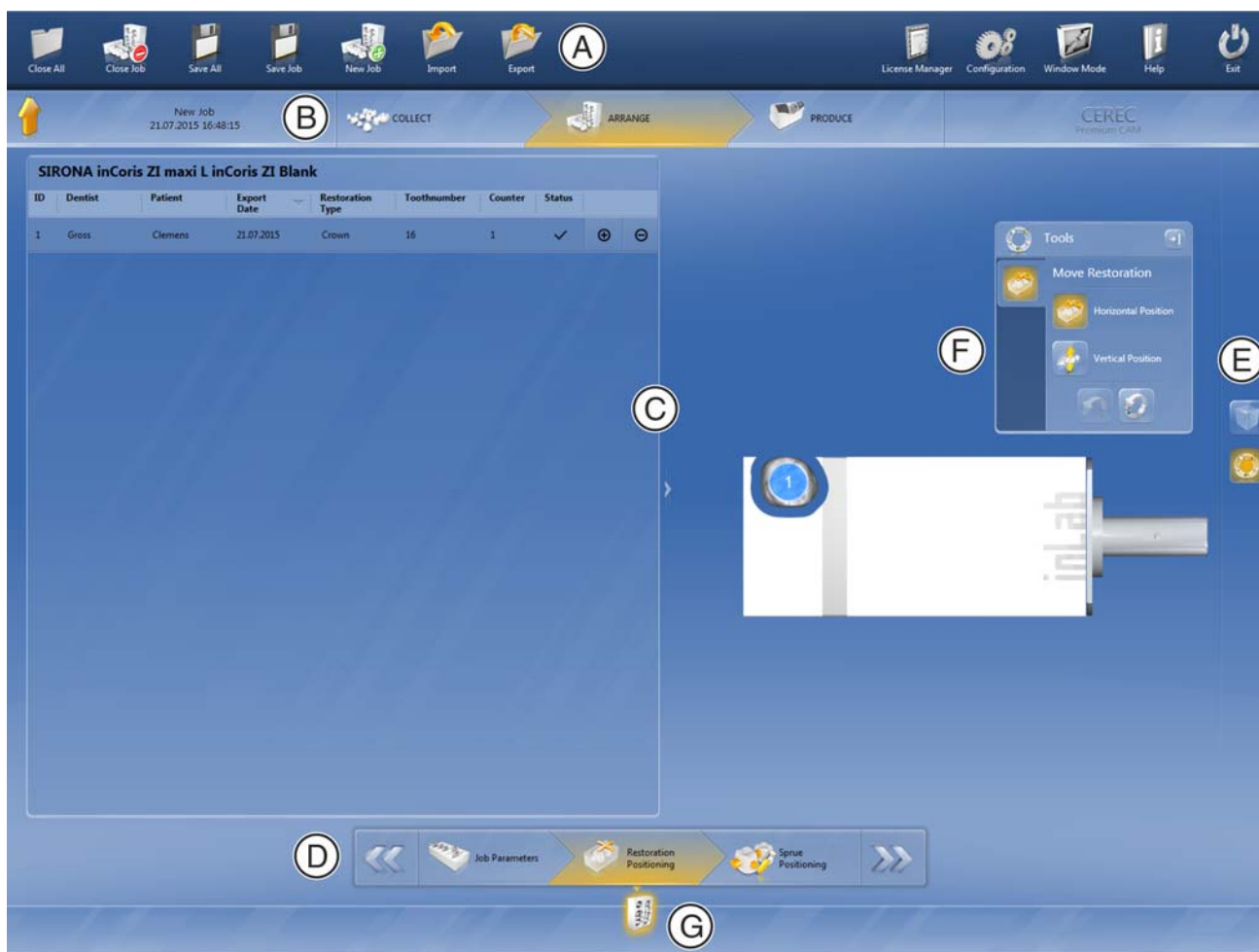
You will receive the license key along with the unit. Alternatively, you can order it separately from your dealer.

Following an update, you may require a new license that is not available on your USB license stick. For more information, refer to the section License manager [→ 15].

3.3 Starting the software

- ✓ The "*CEREC Premium CAM SW*" software is installed. You will find the start icon on the desktop.
 - ✓ The USB license stick is connected with a valid, current license.
 - Double-click the "*CEREC Premium CAM SW*" start icon.
- or
- Click on "Start / All Programs / Sirona Dental Systems/ CEREC Premium CAM SW / CEREC Premium CAM SW".
- ↪ The software is started.

4 User interface



Overview of the user interface

A	System menu	E	Page palette
B	Phase bar	F	Tool kit
C	Main window	G	Job selector
D	Step menu		

4.1 Phase bar

The workflow is illustrated in the software in 3 phases.

	COLLECT
	ARRANGE
	PRODUCE

Restorations are produced with the milling unit by defining jobs. The definition of each task passes through multiple phases (see the phase tab at the top of the screen). This is how you are guided through the process. It starts with selecting the type of machine, then you have to choose the restoration to be developed, as well as the positioning of the restorations in the workpiece. Finally the job is produced using the selected machine in the last phase.

4.2 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 job is in.

This menu guides you through the process step-by-step.

The individual work steps for creating and preparing jobs in the software are split into phases.

4.3 System menu



In the system menu, you can:

- Close all active jobs to return to the job database
- Close a job to switch to the workpiece database.
- Save all active jobs
- Save a job
- Create a new job
- Import a job
- Export a job
- Open license manager
- Configure hardware and software
- Change window mode
- Open help information
- Close the software

Opening system menu

➤ Move the mouse cursor to the top of the window.

or

➤ Click the start window button.

↪ The system menu is displayed.



Closing system menu

➤ Click the start window button.

or

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

↪ The system menu is closed.



4.3.1 Closing all active jobs

By clicking on this button, you can close all active orders and return to the workpiece database to start a new case.



4.3.2 Closing a job

By clicking on this button you can close the current job.

➤ Select "Close Job" in the system menu.

↪ The current job is closed.



4.3.3 Save all active jobs



By clicking on this button you can save all active jobs. In this dialog, you can save the current status of all jobs that are open.

4.3.4 Save a job



By clicking on this button you can save the current job.

- Select "Save" in the system menu.
 - ↳ The current processing status of the job is saved.

4.3.5 Create a new job



By clicking on this button you can create a new job.

- Select "New Job" in the system menu.
 - ↳ You switch to the dialog to create a new job.

4.3.6 Import a job



✓ The file to be imported is stored on the inLab 4 PC or on a storage medium connected to it.

1. Click on the "Import" button in the system menu.
 - ↳ The dialog window for file import opens.
2. Select the folder where the job is located.
3. Select the relevant file.
4. Click the "Open" button.
 - ↳ The job is now imported and opened.

4.3.7 Export a job

You can store a job in any location.

✓ You have opened a job in the software.

1. Click on the "Export" button in the system menu.
 - ↳ The dialog window for file export opens.
2. Select the target folder to which you want to export the case.
3. Assign any name to the order.
4. Click on the "Save" button.
 - ↳ The job is exported as a CBLC file.

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

4.3.8 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/CEREC Premium CAM SW/Tools/License Manager".

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

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 "C:/Programs/Sirona Dental Systems/CADCAM".

4.3.9 Configuring hardware and software



Configuring hardware and software is described in the "Configuration [→ 16]" section .

4.3.10 Window mode



The "*Window Mode*" function can be used to exit full-screen mode or enter it again.

4.3.11 Current program version

If you click on the lettering "*CEREC Premium CAM*" in the phase tab, you obtain information on the current program version.

4.3.12 Exit program



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

5 Configuration

The "Configuration" menu contains the following submenus:

- Parameters
- Machine and Instrument tray Management
- Settings



5.1 Parameters

In the "Parameters" menu, you can adapt the presets for the production process.

The values can also be adjusted when creating a job.

The changes in the values are displayed graphically.



5.1.1 Stack parameters (stacks)



Parameter	Description	Default value
Horizontal Connector	<ul style="list-style-type: none"> • Additionally generates a horizontal connection • Can be switched on and off 	NO
Connector Cross Section	<ul style="list-style-type: none"> • Sets the diameter of the connector 	3.0 mm
Restoration Distance	<ul style="list-style-type: none"> • Sets the horizontal distance of the restorations from each other 	1.2 mm

Accepting settings

- Click on the "Ok" button.

Discarding settings

- Click on the "Cancel" button.

Resetting settings

- Click the "Reset All Group Parameter" button on the step by step menu.
 - ↪ The settings for this production method are reset to the factory settings.

5.1.2 Milling parameters



You can define individual parameters for milling.

The values can also be adjusted when creating a job.

Parameter	Description	Standard setting
Amount of Sprues	The parameter determines the number of pinned connections per unit that are automatically suggested. Minimum: Minimum quantity Standard: Normal quantity Maximum: Maximum quantity	Standard
Sprue Size	The parameter sets the radius of the pinned connections.	1.4 mm
Front block frame	The parameter determines the thickness of the front block frame which remains.	1.5 mm
Side block frame	The parameter determines the thickness of the lateral/lower block frame which remains.	1.5 mm
<i>"Sinter Support Thickness"</i>	The parameter determines the thickness of the sinter support.	2mm

5.2 Machine management



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

A green check mark on a device indicates its availability.

Adding devices automatically

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

- ✓ The unit is connected to the PC.
- 1. Click on the *"Scan for New Devices"* button.
 - ↳ All units connected to the PC are recognized. In the case of new units, you will be prompted to enter a name.
- 2. Enter a name for the new unit.

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.

Updating devices

With the *"Refresh Devices"* button you can

- display the status; e.g. check whether a machine has in the meantime finished producing, or
- Check the current availability of a device.

5.2.1 Configuring the device

In the *"Machine Management"* software *"CEREC Premium CAM SW"* area you can make subsequent amendments to the various settings for your unit.

1. Click the *"Configuration"* button in the system menu.
2. Click on the *"Machine Management"* button.
3. Click on the unit that you wish to configure.

5.2.1.1 Editing MC XL unit settings

CEREC/inLab milling unit

You can later edit the following settings via the menu item *"MC XL"*:

- Name
- Connection settings
 - Retrieve IP settings automatically
 - Specify IP settings manually
- Manual block fixing
 - If you use manual block fixing, a check mark must be placed in front of *"Manual block fixation"*.
 - Models can only be milled using manual block fixation.
- Second motor set
 - The check mark must be placed in front of *"Two Bur Sets"*.
 - You can deactivate instrument sets individually. A deactivated instrument set will simply be ignored during production, calibration etc.
NOTICE! The restoration may be damaged if longer instruments are present in the deactivated instrument set than in the active set. Ensure that the instruments installed in the deactivated instrument set are not longer than those in the active set.
- Scanner
 - If the grinding unit has an integrated scanner, a check mark must be placed in front of *"Scanner"*.
 - Use the scanner to read bar codes.
- Bar code reader
 - If a bar code reader is used, this option must be activated.
- External tank
 - If the external water tank is connected and the check mark has been placed, you will not be reminded to change the water until a later point in time.
- Firmware Update
 - Click on the *"Firmware Update"* button to load the firmware related to the software on the MC XL.

Firmware download

Each device requires a firmware version which is compatible with the respective version of the software CEREC Premium CAM.

You start the download of the appropriate firmware for CEREC Premium CAM via this button.

IMPORTANT

If a unit does not have the correct firmware version, this is in fact detected by the software, yet it cannot be used for production. It is indicated as "invalid firmware" both in the device management and in the production phase.

5.2.1.1.1 Calibration

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

5.2.1.1.2 Changing instruments

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

5.3 Settings

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

- Select odontogram
- Reset notes
- Change database path
- Print legend
- Display legend
- Generate name automatically
- Calculate jobs automatically
- Automatic positioning
- MC XL milling

5.3.1 ADA/FDI odontogram

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

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

5.3.2 Reset notes

Here, all warnings can be displayed again.

- Click on "*Reset*" to display the warnings again.



5.3.3 Changing a database path

Under "*Blank Database*" you can adjust the directory for saving the restoration data for the production (CCAM files) and the workpieces saved in the software (CBLC files).

IMPORTANT
For the restoration data to appear automatically in the list of elements, when these have been exported from the CEREC Premium SW, ensure that the same data path is also selected in the CEREC Premium SW.

5.3.4 Printing a legend

Here you can select whether a legend will be printed out. This option can be used to print a legend of the restorations with the relevant job information for the current job.

Setting	Description
YES	A legend will be printed.
NO	A legend will not be printed.

5.3.5 Display legend

Here you can select whether a legend should be displayed following processing.

Setting	Description
YES	A legend will be displayed.
NO	No legend will be displayed.

5.3.6 Generate name automatically

Here you can select whether a job name will be generated automatically.

5.3.7 Calculating jobs automatically

Here you can select whether the restorations of a job are automatically calculated in the workpiece.

Setting	Description
YES	The restorations of the job are automatically calculated in the workpiece when switching to the ARRANGE phase.
NO	The restorations must be positioned manually in the workpiece in the " <i>Restoration Positioning</i> " step.

5.3.8 Automatic positioning

Here you can select whether the restorations of a job are automatically positioned.

Setting	Description
YES	Restorations are positioned in the blank or the block.
NO	Restorations are placed near the blank or the block and must be manually pushed into the blank or block.

5.3.9 Milling

You can activate and deactivate the milling manufacturing option for zirconium oxide, plastic and metal here.

When this option is activated, you can choose between the grinding and milling manufacturing processes for zirconium oxide, plastic and metal materials in the material selection step.

Milling of zirconium oxide, plastic and metal is possible using machines with the following serial numbers:

Machine type	Serial number
inLab MC XL	129001
CEREC MC XL	129001
CEREC MC XL Premium Package	302001
CEREC MC	202001
CEREC MC X	231001

Other machines must be equipped with the milling starter kit, Design 2011 (REF: 64 48 893) or with the milling starter kit for connected motors (REF: 64 51 079).

5.3.10 Material

In the *"Material"* tab you can freely configure which materials you want to use in the software for the processing.

You can deactivate materials by unchecking the check box. These are then not displayed when newly creating workpieces.

5.4 Installing and setting up the unit

5.4.1 Setting up the unit

You must connect the unit to the PC before putting it into operation. This is described in the chapter "Connecting the PC/interfaces".

5.4.1.1 Automatic unit search

- ✓ The unit is connected to the PC using a direct connection via Ethernet cable.
- ✓ The unit is switched on.
 1. Start the "CEREC Premium CAM SW" software.
 2. Move the cursor to the upper edge of the window or click the Start window button.



3. Click the "Configuration" button in the system menu.
4. Click on the "Machine Management" button.
5. Click on the "Scan for New Devices" button.
 - ↳ All units connected to the PC are recognized.
6. Enter a name for the new unit.

5.4.1.2 Manual unit search

- ✓ The unit is connected to the PC using a direct connection via Ethernet cable.
- ✓ The unit is switched on.
 1. Start the "CEREC Premium CAM SW" software.
 2. Click the "Configuration" button in the system menu.
 3. Click on the "Machine Management" button.
 4. Click on the "Add Device (Manual)" button.
 5. Select "Network".
 6. Enter the network address.
 7. 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.

5.4.1.3 Remove the unit

If you no longer require a unit (e.g. a unit is replaced), you can remove it.

- ✓ The unit is not in operation.
- 1. Click the "*Configuration*" button in the system menu.
- 2. Click on the "*Machine Management*" button.
- 3. Click on the unit that you wish to uninstall.
- 4. Click on the "*Delete Device*" button.
 - ↳ You will be asked if you would like to remove the unit.
- 5. Click on the "*YES*" button.
 - ↳ The device is removed.

6 Job management

6.1 Workpiece database

6.1.1 Workpiece database structure

All created and ground blocks are located in the workpiece database.

The workpiece database is available in the start view for opening newly created and not yet finished jobs from this view for production.

The workpiece database is also displayed during the course of defining a new job when the appropriate workpiece should be selected for the elements to be produced (see "Selecting workpieces [→ 31]").

When you click on a workpiece / block, a preview of it is displayed on the right.

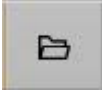
The following information is displayed for each workpiece/job. The workpieces can be sorted according to the relevant properties by clicking on the column header:

- **"Blank ID":**
Each workpiece is provided with a unique ID number during creation. As a rule, this should be marked on the workpiece.
- **"Material":**
The associated material which has been selected for a workpiece is displayed for each workpiece.
- **"Blank Size":**
The respective block number is specified for each workpiece.
- **"Date":**
The date of this workpiece's last date of processing is specified.
- **"Machine Type":**
The type of machine for which this workpiece/job has been defined is displayed.
- **"Status"** (display only in the start view):
The **"Status"** column displays the current status of the workpiece / job.
 - **"produced":**
The workpiece has already been processed, but there are currently no elements to be prepared of a job defined for this workpiece.
 - **"not produced":**
The workpiece has not yet been processed. However, a job for preparation from this workpiece has been defined.
 - **"Jobs to produce":**
The workpiece has already been processed in an earlier job, and a new job has already been created for the workpiece.
- **"LOT-Number"** (not visible in the start view):
Displays the lot number of the relevant workpiece.

- *"Fits in Blank"* (not visible in the start view):
Indicates whether the selected restorations fit in the respective workpiece.

6.1.2 Opening workpieces

Click on *"Open Blank"* to open a workpiece.



6.1.3 Deleting workpieces

NOTICE

Data loss

When you delete a workpiece from the list the file is also deleted from the PC.

- Click on *"Delete"* (trash can icon) to delete a workpiece.



6.1.4 Searching the database (free text search)

- Search the database by entering the first letters of your search term.



6.1.5 Creating a new workpiece



1. Click on *"New Blank"* to create a new workpiece.
2. A new line will be added to the top of the list.
3. Click on the tick to create the workpiece.
4. A newly created workpiece is displayed in first place in the list. In order to use this workpiece for the job, place a tick on the right at the end of the line.

IMPORTANT

When creating new MISC workpieces, please observe the processing instructions of your material manufacturer with regard to indication restrictions and construction parameters.

You can provide the following details when creating new workpieces:

- *"Manufacturer"*
- *"Material Name"*
- *"Production Method"*
- *"Blank Size"*
- *"Blank ID"*
- *"LOT-Number"*
- *"Date"*
- *"Enlargement"*
- *"Fits in Blank"*

Manufacturer

From the list select from which manufacturer you would like to create a workpiece.

Material Name

From the list select the material name of the workpiece that you would like to create. The options are determined by the respective manufacturer.

Production Method

Filled out automatically with *"Grinding"* or *"Milling"* and depends on the selected material.

Blank Size

From the list select the desired workpiece size. The options are determined by the respective manufacturer and material.

Blank ID

Open text field in which you can enter a custom workpiece name. A workpiece ID is suggested.

LOT-Number

Here you can enter the LOT number of the workpiece.

Date

Is automatically filled in with the date of the workpiece system.

Enlargement

Enter the magnification factors for zirconium oxide workpieces here.

- For MC XL enter the Z-value.

Fits in Blank

Is filled out once the restorations for the workpiece are selected.

6.2 Element database

6.2.1 Element database structure

In the element database, you can find all the restorations that you have constructed or imported using the software CEREC Premium SW (see "Importing elements [→ 30]").

IMPORTANT

If you are using the software CEREC Premium SW for the design, elements appear in this list automatically if the workpiece database folders are synchronized in CEREC Premium SW and CEREC Premium CAM SW (see "Changing a database path [→ 21]"). In other words, the same data path has been selected in the CEREC Premium SW as in the CEREC Premium CAM SW.

When you click on a restoration, a preview of it is displayed on the right.

The following information is displayed for each element: The elements can be sorted according to the relevant properties by clicking on the column header:

- *"Dentist"*:
Information on the dentist of the present case
- *"Patient"*:
Information on the patient of the present case
- *"Technician"*:
Creator of the element of the present case
- *"Restoration Type"*:
Indicates what type of element this is
- *"Toothnumber"*
Indicates the service area of the present case.
- *"Restoration Height "*:
Indicates the actual height of the element.
- *"Optimized Height "*:
Indicates the height to which the element can be reduced using the machine kinematics to achieve material savings
- *"Material"*:
For each element the related material is displayed for which the element has been selected.
- *"Export Date"*:
Specifies the date on which the element was exported from the CEREC Premium CAD SW.

6.2.2 Deleting elements

NOTICE

Data loss

When you delete a restoration from the list the file is also deleted from the PC.

- Click on *"Delete"* to delete a restoration.



6.2.3 Importing elements

- Click on *"New Item"* to import a new restoration into the database. You can import *.ccam files.



6.2.3.1 Importing *.ccam files

- ✓ The *.ccam file is stored on the inLab 4 PC or on a storage medium connected to it.
- 1. Click on *"Import Element"* to import a restoration for the job.
 - ↳ The dialog window for file import opens.
- 2. Select the folder where the file is located.
- 3. Select the relevant file.
- 4. Click on the *"Open"* button.
 - ↳ The file is then imported and opened.

6.2.4 Filtering lists

You can sort the list based on different time filters. To do this select the desired filter from the drop-down list.

- All
- Last two weeks
- Last eight weeks
- Today (last 24h)

7 Editing orders

7.1 Create a new job



1. Click on "New Job" to start a new job and, in so doing, to add restorations to an existing workpiece or a new workpiece for production.
2. Assign a custom name to the job and select the type of machine with which you want to produce this job.
3. Confirm your entry by pressing "Ok". Alternatively, you can also open an existing workpiece from the start view, to add new elements to it or to produce a job that has already been prepared.

7.2 COLLECT phase

7.2.1 Adding an element to a job



1. From the element database select the elements that you want to produce with relevant job.
2. Place a tick on the right next to the line of a restoration to add it to a job. You can tick several restorations.

7.2.2 Selecting workpieces



1. Click in the relevant line to display a preview of the respective workpiece on the right.
2. Select the workpiece that you would like to use for the job from the workpiece database by ticking it. Various information (such as "Manufacturer", "Material Name", etc.) is available to you to help you with your selection (see also "Creating a new workpiece [→ 27]"). If no appropriate workpiece is available, you can define an additional workpiece through "New Blank" (see "Creating a new workpiece [→ 27]").
3. Click on the pin to edit the details of the workpiece.
 - ↳ The individual fields become active and can be changed.



7.3 ARRANGE phase

If you have selected "Automatic Positioning" from the options, the restorations are automatically placed in the workpiece during transition to the "ARRANGE" phase.

Inserting restorations

- Insert the restorations into the workpiece, by clicking on the plus sign behind the restoration in the list on the left on the screen.
 - Tip:** You also can place restorations repeatedly.
 - ↳ The restorations are inserted in the workpiece and positioned.

Removing restorations

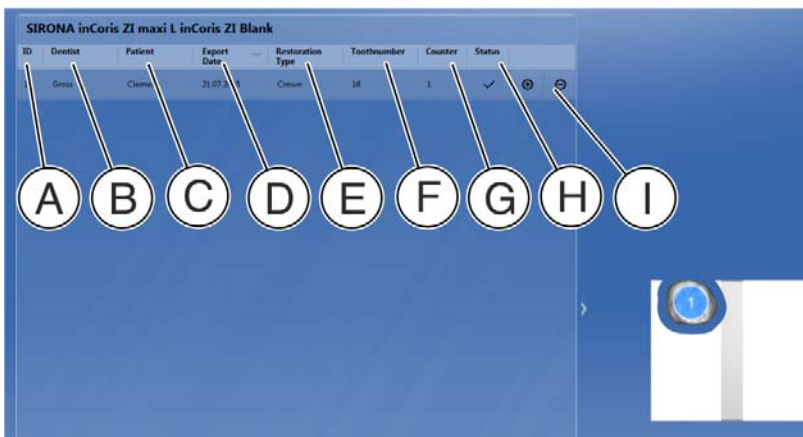
- You can remove restorations again by clicking on the minus sign.

Changing parameters for the current workpiece

If you want to change the parameters for the current workpiece, click on *"Job Parameters"* in the step menu. The global parameters that you have set in the options are not changed.

7.3.1 Restoration list

You can find all the restorations selected in the *"COLLECT"* phase in the restoration list of the workpiece / job (see image).



A	<i>"ID"</i> : Each element is assigned a unique ID number in the workpiece. This is also visualized on the element in the workpiece.
B	<i>"Dentist"</i> : Information on the dentist of the present element.
C	<i>"Patient"</i> : Information on the patient of the present element.
D	<i>"Export Date"</i> : Displays the export date.
E	<i>"Restoration Type"</i> : Indicates what type of element this is.
F	<i>"Toothnumber"</i> : Indicates the service area of the present case.
G	<i>"Counter"</i> : Elements can be positioned multiple times in a workpiece. The counter increases by "+1" each additional time an element is placed in the workpiece.
H	<i>"Status"</i> : Each element has a status. This is displayed via a tooltip (pop-up window) in each case.*
I	<i>"+/-"</i> : Position the element in the workpiece or remove the element from it. With multiple additions, the counter increases by "+1" for each time.

* Status explanations:

- Yellow warning triangle: The element is outside the workpiece or the tools are too short. Proceeding to the next step is not prevented. For MC XL jobs in the stacking process, this symbol indicates that the pin / the pin point no longer fits in the workpiece.
- Single tick: Restoration added to workpiece.
- Double tick: Restoration has already been prepared in a previous job.

- Red warning triangle: "Horizontal collision". This means between restorations or with the edge of the workpiece. Proceeding to the next step is prevented. For MC XL jobs in the stacking process, this status indicates that the restoration is partially or wholly outside the workpiece.

7.3.2 Positioning restorations

7.3.2.1 CEREC/inLab MC XL

7.3.2.1.1 Horizontal positioning

If you go to the restoration with the mouse, you can position and rotate the restorations.

Crowns can be positioned freely in the block and rotated by **360°**.

Bridges can be positioned freely in the block and rotated by **180°**.

7.3.2.1.2 Vertical positioning

If you go to the restoration with the mouse, you can position the height of the restorations in the workpiece.

7.3.2.1.3 Positioning multiple restorations for MC XL grinding orders (stacks)

To produce multiple restorations from one workpiece through grinding, add these to the workpiece via the restoration selection list. The restorations are automatically positioned in the block. The positioning is made optimally for grinding processing. Manual position adjustment is not possible.

7.3.3 Invalid position

If restorations have an invalid position due to positioning (e.g. are positioned too close to one another), they are colored in red and must be moved until they become white. Then they regain a valid position.

7.3.4 Sinter support

With the "*Sinter Supports*" tool you can activate and deactivate the calculation of sinter support for sinter metal and zirconium dioxide. A calculation is then performed automatically, depending on the size of the restoration.

7.3.5 Positioning pins

Adding pins

Move near the restoration with the cursor. In the positions where a pin can be placed, the cursor is displayed transparently. If you want to place the pin, click the left mouse button.

Deleting pins

Go to the pin which you want to delete with the cursor. It becomes orange-colored. Left-click to delete the pin.



Moving pins

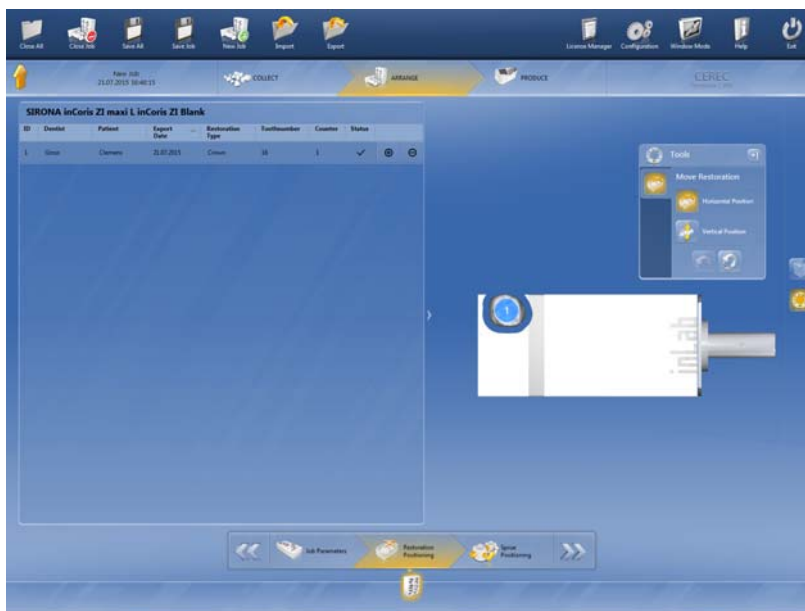
Press and hold the left mouse button and move the ball to the desired position.



7.4 PRODUCING phase

7.4.1 Production preview

Setting production quality



You can set up to two different production qualities per element.

7.4.1.1 MC XL milling

Coarse – wide path distances; use of: Shaper 25 RZ and Finisher 10

Fine – standard path distances; use of: Shaper 25 RZ and Finisher 10

7.4.1.2 MC XL grinding

Fine – Normal processing using material-specific grinding instruments.

Extra fine – Extra fine processing using material-specific grinding instruments and the grinding instruments cylinder bur 12 EF and cylinder pointed bur 12 EF.

IMPORTANT

For the extra fine processing, all 4 motors must be fitted with the relevant instruments at the time of processing.

7.4.2 Changing machine

If you have more than one machine, in this window you must select the machines on which you wish to start the job.

1. Click "*Change Production Device*".
2. Select the machine on which you wish to start the job.

7.4.3 Changing production settings

The thinning out of the pins is activated by default. If you do not want to have the pins thinned out, deselect the thinning out option next to the selected device.



7.4.4 Display legend

- Click "*Show Legend*" to display a printable legend.
- Click on the printer icon to print the legend. To do this a printer must be connected to the PC.
- 1. Click on the disk icon to save the legend.
- 2. Select the folder path on which you want to save the legend and click on "*Save*".
- Click on the magnifier+ icon to enlarge the display.
- Click on the magnifier- icon to minimize the display.
- Click on the document icon to re-establish the standard size.
- Click on the pen icon to add free text to the legend. Enter the text into the window that opens and click on the pen icon again to display the text in the legend.



7.4.5 Starting the production process

- Click "*Start Production*" to start the production process. Follow the instructions that appear on the screen.

7.4.6 Editing multiple jobs

You can also define new jobs during processing and prepare these in parallel on additional units, if available.

1. Click on *"New Order"* in the menu bar.
2. If you subsequently wish to switch between orders, you can do this using the job selector. To do this, click on the icon of the job in the selector bar.
3. If you point on one of the jobs with the mouse, a tooltip / pop-up window appears with all the information on the job in question.

We reserve the right to make any alterations which may be required due to technical improvements.

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