SOFTWARE FEATURES
inLab SW 4

This list contains the indications, tools and materials according to each software version starting from inLab SW 4.0.0. The following describes the respective changes to the previous versions.

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sirona.

inLab SW 4.0.0

APRIL 2012

GENERAL

NEW LICENSE SYSTEM

The version is now protected via software licenses with a 25-digit license code rather than with a hardware dongle.
Milling dongles have also been changed to milling licenses.

NEW USER INTERFACE

PHASE BAR
Navigation through the CAD/CAM process has 5 phases: administration, scan, model, design and mill.
In these phases, you can jump from one step to the next and back without losing any changes that have previously been made.

STEP MENU
The phases are divided into logical steps that are labeled as mandatory or optional.

SIDE PANEL
The page palette gives you access to standard views, view options, tools and analysis tools.

OBJECT BAR
The object bar allows you to switch between different elements of a restoration or case.

SYSTEM MENU
In the system menu, you can import and export cases, change configurations and start the license manager.

NEW OPERATING CONCEPT

By clicking on the right mouse button, you can open a tool wheel at the cursor position: this wheel makes the tools available for each phase. Furthermore, it is possible to work directly on the tooth using these tools.

INSTALLATION REQUIREMENTS

The software requires Windows 7 64 bit. An inLab 4 PC is recommended; however, it is also possible to install the software on hardware version Lx. In this case, it is recommended to upgrade the RAM to 12 GB (REF. 63 75 849).

QUALITY LABEL FOR ZIRCONIUM OXIDE

Zirconium oxides from Sirona, VITA and Ivoclar Vivadent with an inLab Quality Label can be processed. Installation of inLab SW 4.0 automatically activates 100 units of the Sirona Block License (SBL), allowing the customer to start 100 milling processes for blocks without a quality seal. This means that customers can use up their residual stock and they do not have to exchange any materials.

THE FOLLOWING FILE FORMATS ARE SUPPORTED:

FILE FORMAT	DESIGN TECHNIQUES
*.lab	Can be used for all design modes.
*.dxd	Can be used for all design modes.
*.cdt Import	This format is supported if the origin is an inLab 3D V3.8x. Only scan data (without designs and restorations) can be imported.
*.cdt Export	Only scan data of the UJ and LJ models and the buccal scan can be exported.
*.3si / *.3se	These formats can be imported or exported if the user has an OPEN 3Shape license (successor to OPEN 3Shape interface)
*.ssi	This format can be exported if the user has an OPEN GALILEOS Implant license (successor to OPEN GALILEOS Implant interface)
*.stl (Export)	Scan data (inEos Blue) can be exported in this format if the user has an OPEN inEos Blue license (activated as standard in the inLab SW 4.0 license). Model data (designed models) can be exported in this format if the user has an OPEN Model license (NEW). Restoration data can be exported in this format if the user has an OPEN inLab license (NEW). Intraoral scan data (CEREC AC) can be exported in this format if the user has an OPEN CEREC Connect license (successor to OPEN CEREC Connect interface).
*.cam	Single restorations for processing with inLab Stack SW 4 are saved as *.cam files.
*.blc	inLab Stack SW 4 generates the data format with the *.blc extension.

INTERFACES

THE FOLLOWING INTERFACES ARE AVAILABLE:

- **OPEN Model (*.stl)**
  Export model data designed in the inLab software as an open STL format for processing in other CAD/CAM systems
- **OPEN inLab (*.stl)**
  Export restoration data designed in the inLab software as an open STL format for processing in other CAD/CAM systems
- **OPEN 3Shape (*. 3se, *.3si)**
  – Import extraoral 3Shape scan data for processing in the inLab software
  – Export inEos Blue scan data and digital impression data (Sirona Connect) in a format coordinated with 3Shape for processing in the 3Shape system

- **OPEN Galileos Implant (*.ssi)**
  Export inLab restoration data to import it into the implant planning software GALILEOS Implant

EXTERNAL WATER TANK SUPPORT

The software supports the external water tank for inLab MC XL and reduces the frequency of water changes.

ADMINISTRATION PHASE

ORDER LIST

Orders or cases in the order list can be created, changed or deleted. Furthermore, you can access the Sirona Connect portal.

CREATE MULTIPLE RESTORATIONS

Up to 32 different restorations for each case can be created in administration.

TYPES OF RESTORATIONS AND DESIGN TECHNIQUES

The following restorations and design techniques can be selected in administration:

TYPES OF RESTORATIONS	DESIGN TECHNIQUES
Inlays, onlays, crowns, veneers	Biogeneric Individual, Biogeneric Copy, Biogeneric Reference (depending on the restoration)
Crown copings	Biogeneric Individual, Biogeneric Copy, framework, reduced
Bridge frameworks	Biogeneric Individual, Biogeneric Copy, framework
Abutments, mesostructures	Biogeneric Individual, Biogeneric Copy, Biogeneric Reference; Multilayer
Telescopes	Crowns
Attachments	Attachments
Bars	Cylindrical, quadratic, Dolder, Hader
Models	Model

MATERIALS

The following materials can be selected in this version for restorations:

SIRONA	VITA	IVOCLAR VIVADENT
CEREC blocs	Mark II	IPS Empress CAD
CEREC blocs PC	TriLuxe	IPS Empress Multi
inCoris ZI	Triluxe Forte	IPS e.max CAD
inCoris TZI	RealLife	IPS e.max ZirCAD
inCoris HTZI (infiniDent)	Enamic	IPS AcrylCAD
inCoris NP (infiniDent)	In-Ceram YZ	Telio CAD
inCoris NPM (infiniDent)	In-Ceram AL	
inCoris TI (infiniDent)	In-Ceram Zirconia	
inCoris TP (infiniDent)	In-Ceram Alumina	
inCoris FI (infiniDent)	In-Ceram Spinell	
inCoris WAX (infiniDent)	CAD-Waxx	
	CAD-Temp monoColor	
	CAD-Temp multiColor	

MERZ	3M ESPE	MISC
artBloc Temp	LAVA Ultimate	Non precious metal
		Precious metal
		Titane

TI BASES

The following implant systems can be supplied with the current software:

MANUFACTURER	TYPE	DIAMETER
Astra Tech	OsseoSpeed™	3.5 S / 4.0 S 4.5 / 5.0
Biomet 3i	Certain®	3.4 / 4.1 / 5.0
Biomet 3i	Ex. Hex®	3.4 / 4.1 / 5.0
Dentsply Implants (Friadent)	Frialit® / Xive®	3.4 / 3.8 / 4.5 / 5.5
Nobel Biocare	Nobel Active®	NP 3.5 / RP 4.3 / 5.0
Nobel Biocare	Brånemark®	NP 3.5 / RP 4.3 / 5.0
Nobel Biocare	Replace®NP	NP 3.5 / RP 4.3 / WP 5.0 / 6.0
Straumann	Bone Level®	3.3 / 4.1 / 4.8
Straumann	SynOcta®	NN 3.5 / RN 4.8 / WN 6.5
Zimmer	Tapered Screw-Vent®	3.5 / 4.5 / 5.7
Medentika® Implant	M-Implant Tapered	3.5 / 5.0
CAMLOG	CAMLOG®	3.3 / 3.8 / 4.3 / 5.0 / 6.0

SCAN PHASE
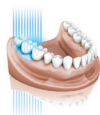
inEos Blue AND CEREC Bluecam ARE SUPPORTED
The software supports the acquisition systems inEos Blue and CEREC Bluecam.
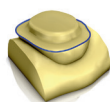
IMPRESSION SCAN
inEos Blue can scan models as well as impressions.

ADDITIONAL IMAGE CATALOGS
Additional image catalogs for UJ and LJ can be activated when scanning Biocopy, Bio-Reference and gingival masks.

MODEL PHASE

TRIMMING TOOL FOR EVERY SINGLE TOOTH
The trimming tool can be used on every single tooth.

ENTERING THE PREPARATION MARGIN FOR BRIDGES
After drawing in the margin, it can be edited immediately for bridges.

MODEL AXIS
A new step has been added so that via the model axis, the 3D model is aligned to the spatial directions so that the software knows where mesial, distal, buccal and lingual are for the specific case as well as the location of the occlusal plane.

UNDERCUT INDICATED IN COLOR
When setting the insertion axis, the undercuts are shown according to their thickness in the specified color scheme and at the location of the undercut.

MAKING THE MOST OF THE FOURTH AXIS
The insertion axis for each abutment in a bridge can be optimized further in a separate step in a buccolingual direction.

TOOLS FOR EDITING THE MODEL
The following tools are available in the model phase:
- Cut the model
- Form (apply/remove/smooth)
- Replace

DESIGN PHASE

SIMULTANEOUS DESIGNING OF RESTORATIONS
Up to 32 restorations in the UJ and LJ can be processed at the same time.

TOOL WHEEL
The design tools are available in a tool wheel that can be opened by right-clicking on the position of the cursor.
The tools can also be accessed via the side panel.

DESIGN TOOLS
The following tools are available in the design phase:
- Position/Rotate
- Scale
- Reduce
- Recalculate
- Form (apply/remove/smooth)
- Biogeneric variation

PARAMETERS
Parameters can be configured as so-called group parameters for each indication and show the default settings. The parameters can be changed for the current case in the design phase without the group parameters being changed.

The following parameters can be set for restorations: crowns, inlays, onlays, bridge frameworks:

PARAMETER	DESCRIPTION
Spacer	Option to set the space for the fastening material below the restoration. – Works up to the preparation margin.
Adhesive gap (preparation margin)	Set the width of the preparation margin gap. – The value of the adhesive gap can never be greater than the spacer value (only for inlays).
Veneer thickness	Set the minimum thickness. – The software tries to not go below this thickness when calculating the restoration proposals.
Occlusal milling offset	Apply material to or remove it from the entire occlusal surface in an occlusal direction. – This value only relates to the milling result.
Proximal contact strength	Set the strength of the proximal contacts. – The software tries to achieve this strength with the restoration proposals.
Occlusal contact strength	Set the strength of the occlusal contacts. – The software tries to achieve this strength with the restoration proposals.
Minimum thickness (radial)	Set the minimum wall thickness in a horizontal direction. – The software tries to not go below this thickness when calculating the restoration proposals in the posterior tooth region.
Minimum thickness (occlusal)	Set the minimum wall thickness in an occlusal direction. – The software tries to not go below this thickness when calculating the restoration proposals. – When setting the minimum thickness, observe the recommendations of the respective material manufacturer. – Can be switched on or off.

PARAMETER	DESCRIPTION
Margin thickness	Increase the thickness of the restoration margins with additional material. – Facilitates the restoration process. – Avoids splitting the material. – Can be switched on or off.
Milling radius correction	Considers the instrument geometry at the bottom of the restoration.
Remove undercuts	The undercuts within the preparation margins are blocked out at the bottom of the restoration.

ADDITIONAL PARAMETERS FOR PONTICS

PARAMETER	DESCRIPTION
Gingival spacing	Space between the pontic and the preparation geometry/gingiva.
Lingual opening angle	Increase of the pontic for the basal area in an oral direction.

ADDITIONAL PARAMETERS FOR ABUTMENTS

PARAMETER	DESCRIPTION
Pressure on the gingiva	Determines how strongly the initial abutment proposal penetrates the gingiva in order to build up pressure on the gingiva.
Gingival depth	Determines how far below or above the preparation margin the gingiva lies in reference to the gingival line.
Shoulder width	Width of the shoulder of an abutment or telescope.
Telescope angle	The telescope angle of an abutment can be set.

ADDITIONAL PARAMETERS FOR TELESCOPES

PARAMETER	DESCRIPTION
Telescope angle	The angle by which the outer wall of the telescope cone is inclined inward in relation to the restoration axis.
Telescope height	Initial height of the outer wall of the telescope cone from the cervical shoulder to the junction to the occlusal surface. – It influences the size of the friction surface.
Shoulder width	Width of the shoulder of an abutment or telescope.
Width of the occlusal shoulder	Width of the occlusal shoulder at the junction between the outer wall of the telescope cone and the occlusal surface. – The occlusal shoulder is inclined inward by 45° in relation to the telescope axis.

ADDITIONAL PARAMETERS FOR ATTACHMENTS

PARAMETER	DESCRIPTION
Attachment diameter	Diameter of the cylindrical anchor of the positive part.
Attachment height	Height of the entire positive part.
Bridge length of the attachment	Length of the male bridge. The male bridge is the connecting element between the anchor and the base.
Bridge width of the attachment	Width of the bridge.

PARAMETER	DESCRIPTION
Gingival spacer for the attachment	Distance from the male bottom to the gingival adjustment. Negative values result in penetration of the gingiva.
Gingival adjustment for the attachment	Gingival adjustment: Yes/No
Spacer value for the attachment	Divided attachment: Space between the positive part and the cut-out negative part in the adjacent positive part.
Shoulder width of the attachment	Size of plate located on the gingiva.

ADDITIONAL PARAMETERS FOR BARSE

PARAMETER	DESCRIPTION
Bar height	Describes the height of the bar segment
Bar width	Describes the width of the bar segment
Bar angle	Describes the angle of incidence of lateral and friction surfaces in degrees. — Applies only to primary bars (design mode squared).
Bar smoothing radius	Describes the radius of the junction between the anchor element and the bar in µ. This should guarantee a smooth junction between the anchor and the bar and prevent predetermined breaking points.
Bar interdental space	Space in µm required to ensure easy cleaning. This space is left in the anchor-bar transition zone between the bar and the gingiva.

ADDITIONAL PARAMETERS FOR MODELS

PARAMETER	DESCRIPTION
Cut width of segmentation	Set the width of the saw cut.
Base plate distance	Adjust the distance between the base plates.
Pin diameter	Set the diameter of the pins.
Pin spacing	Set the distance between the pins.

ABUTMENTDESIGN
You can find out which implant systems can be supplied under the section „Ti Bases".
- Several abutments can be designed and aligned simultaneously.
- When setting the restoration axis, a warning notice appears if the angle is greater than 20°.
- The mesostructure and the full anatomical crown can be designed at the same time and they can then be split into two files.

GROUP FUNCTION
This function enables the grouping or symmetrical grouping of several restorations in order to use a tool for example on all restorations simultaneously.

BAR STRUCTURE
The following standard shapes can be used to design bars: cylindrical, quadratic, Dolder and Hader.

MILLING PHASE

inLab Compact AND inLab MC XL ARE SUPPORTED
Milling machines can be controlled by inLab Compact and inLab MC XL, and can also work simultaneously.

ADJUST THE SPRUE LOCATION
This function allows the restoration's sprue location to be freely selected.

MOVE AND ROTATE THE BLOCK
The restoration can be moved in the block (e.g., for multicolor coated blocks) and also rotated.

OTHER PRODUCTION OPTIONS
- Export for inLab Stack software
- Export for infiniDent production (*i.Lab)
- Export for production with other machines (*.stl) (corresponding license must be available)

inLab STACK SOFTWARE

inLab MC XL can be selected in the inLab Stack software as a milling machine. The user interface and navigation of the phase and step menus is the same as with inLab software.

COLLECTION PHASE

COMPILING RESTORATIONS FOR A BLOCK
The restorations that are to be positioned and machined in a block can be selected from the list of completely designed data.

MATERIALS

SIRONA	VITA	IVOCLAR VIVADENT	MERZ
inCoris ZI inCoris Model	In-Ceram YZ In-Ceram AL In-Ceram Zirconia In-Ceram Alumina In-Ceram Spinell CAD-Waxx CAD-Temp monoColor	IPS e.max CAD IPS e.max ZirCAD IPS AcrylCAD Telio CAD	artBloc Temp

POSITIONING PHASE

POSITION THE RESTORATIONS
The selected restorations can be positioned automatically or manually in the block.
Restorations can also be removed from the block.

MILLING PHASE

inLab MC XL IS SUPPORTED
inLab MC XL can be selected in the inLab Stack software as the milling machine.

DOCUMENTATION
A legend can be printed for each block.

SIRONA CONNECT

CONNECTION TO SIRONA CONNECT PORTAL

Digital impression data generated with CEREC AC or CEREC AC Connect units is received directly in the inLab software via the Sirona Connect portal.

inLab SW 4.0.1

SERVICE PACK JUNE 2012

GENERAL

RUNTIME RELIABILITY FOR CONTROLLING INLAB MC XL
With larger restorations, there was the likelihood that after a certain time there was no longer access to the license stick, which resulted in the milling coming to a stop. This was corrected.

SCROLL BAR FOR STEP MENUS
If the step menus in window mode are too wide, a scroll bar appears.

SHORTENING OF COLUMN HEADINGS
Column headings are shortened if there is not enough space in the column (e.g., for French).

CORRECTIONS TO OPEN 3SHAPE INTERFACE
When importing *.3si files (3Shape data), the color scheme is shown again for occlusal contact points.
*.3se files can now be imported into 3Shape software again.

ADMINISTRATION PHASE

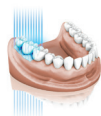**PREALLOCATE WITH DENTIST AND SCAN DATE**
When creating a new order, the name of the dentist indicated is taken for the new order.
The current date is preallocated as the scan date.

SORTING OF ORDER LIST RETAINED
The selected search criteria, e.g., „date", will be kept for new search queries.

SCAN PHASE

SIZE OF LIVE IMAGE SAVED
The size of the live image is saved and can be used again for new scans.

DESIGN PHASE

OPTIMIZATION FOR MULTILAYER
- The fit of the veneer structure was improved.
- Stabilization of the separation in the veneer and framework structure. In the overlapping of contact surface and split line, the restoration could previously not be separated in some cases.
- New symbol for multilayer bridges on the restoration selector to enable better differentiation of classic bridge frameworks.

„OK/CANCEL" ONLY APPEARS WHEN PARAMETERS ARE CHANGED
The confirmation „OK/Cancel" only appears when a change has been made in the restoration parameters step.

CORRECTION OF „BLOCK OUT UNDERCUT" PARAMETER
This parameter can now be deactivated.

DIMENSION TOOL ADDED TO „UNADAPTED RECALCULATION" OF INLAYS
For „unadapted recalculation," the dimension tool is now also available for inlays.

ALIGNMENT OF DIVIDED ATTACHMENTS
In the creation of an attachment, the axis of the male mold is aligned to the insertion axis of the bridge with the female mold.

DIVIDED ATTACHMENT WITH REDUCED PONTIC
With divided attachments, the pontic can now also be reduced with the female mold.

ROTATION OF ABUTMENTS IN „GROUP MODE" NO LONGER CHANGES THE EMERGENCE PROFILE
If abutments are rotated in „group mode", the emergence profile of the abutments added to the group no longer changes.

MILLING PHASE

ROTATION AROUND THE RESTORATION AXIS ACTIVATED FOR VITA REALLIFE
In the milling preview, the restoration in VITA RealLife can now be turned around the block axis.

„PRESHAPING" FOR BLOCKS WITH QUALITY LABEL
The „preshaping" for blocks with a Quality Label is no longer done in order to ensure scanning of the label during the milling process as well.

inLab STACK SW

GENERAL

FASTER LOADING OF FILES IN INLAB STACK SOFTWARE
Loading of files (*.cam, *.blc) has been accelerated.

PHASE SCHLEIFEN

„RAPID MILLING" OPTION IN inLab STACK SOFTWARE
This option is now available in inLab Stack software for materials suited for this process.

CORRECTION OF ASSEMBLY INSTRUCTIONS FOR MODELS
Representation of the model base plates in the assembly instructions for the models was rotated so that they correspond to the position in the model holder again.

SIRONA CONNECT

ADJUSTMENTS TO SIRONA CONNECT PORTAL
- Graphical user interface GUI optimization, selection of restoration elements, scroll bar for step menu
- Search function in the order list for the lab

inLab SW 4.0.2

SERVICE PACK AUGUST 2012

GENERAL

FILE SIZE *I.LAB FORMAT REDUCED
The file size for saving restorations in the *i.lab format has been reduced.

COMPATIBILITY WITH OMNICAM DATA
Omnicam data can be imported into inLab SW 4.0.2 with the color information:
- Data from CEREC SW 4.0.4 can be imported in *.dxd format.
- Data from CEREC Connect SW 4.1.1 can be downloaded via the Sirona Connect portal.

inLab SW 4.2.0

APRIL 2013

NEW FEATURES

VIRTUAL ARTICULATION
Restorations can be designed with the virtual articulator and taking the dynamic occlusion into account.
In Configuration/Options, you can set whether the articulator is displayed in the side panel on the right during the design phase and whether the initial proposal should consider the dynamics.

The virtual articulator uses Camper's plane as the reference plane and it is usually parallel to the occlusal plane (Ocp).

The following values are currently defined as average values, but they can also be adjusted individually:
- Arms, base = Bonwill's triangle
- Arms = Side length of Bonwill's triangle
- Base = Intercondylar distance
- Balkwill angle = Balkwill angle
- Sagittal = Sagittal condylar path inclination
- Bennett = Bennett angle

The occlusal compass display shows the dynamic contact points. These can then be virtually ground or individually designed with the tools.

SMILE DESIGN
You can use the Smile Design feature to design anterior teeth restorations taking the patient's mouth or face into account.
The software converts the 2D patient image into a 3D face model during the design phase. You can state in the administration phase whether you want to use Smile Design for the specific case.

Requirements for the patient image:
- Front view as with biometric passport picture
- Patient must smile so that the anterior teeth are visible
- File formats *.jpg, *.bmp and *.png can be loaded
- The picture should have at least 2 million pixels

ADMINISTRATION PHASE

INTEGRATION OF INTRAORAL SCAN BODY
When selecting the type of scan body, the intraoral scan body (scan post) can also be selected.

NEW MATERIALS
The following new materials and block sizes have been introduced in 4.2.0

SIRONA	VITA	IVOCLAR VIVADENT	DENTSPLY
CEREC C In	Enamic	IPS e.max CAD meso	Cyrpton
inCoris CC	Suprinity / Suprinity FC	IPS e.max CAD B 40L, B40	Celtra / Celtra Duo

SCAN PHASE

INTEGRATION OF OMNICAM AS AN ACQUISITION SYSTEM
The Omnicam can be configured as the acquisition system.

SCROLL BAR FOR IMAGE CATALOG
If lots of images are contained in an image catalog, a scroll bar appears at the bottom of the screen.

IMAGING OPTIONS IN THE PAGE PALETTE
The imaging options or the addition of new image fields can be selected in the scan phase via the page palette.

MODEL PHASE

NEW TOOL: BUCCAL BITE TOOLS
You can use these tools to make minor corrections to the occlusion of digital impressions or
scans with inEos Blue or inEos X5.
- Move the jaw: The position of the upper jaw can be changed to the lower jaw using the position and rotate tool.
- Settling: Areas can be marked that are not to be considered during settling.

DESIGN PHASE

NEW TOOL
- **INCISAL VARIATION**
  The slider can be used to add textures like mamelons to the anterior teeth.

NEW TOOL
- **POSITION, ROTATE AND SCALE**
  The tools have been combined and are always displayed together in the tool wheel and you can press the space bar
  to switch between them.

NEW TOOL
- **SCALE RADIALLY AND OCCLUSALLY FOR COPINGS AND BRIDGE FRAMEWORK ELEMENTS**
  As with abutments, the edge of crown copings and bridge frameworks can be processed in the design phase.
  This function allows festoons to be made on copings and bridge frameworks.

NEW CONNECTOR TOOLS
- **Position All**
  The position of the entire connector can be changed with this function.
  The bridge elements are shown transparently.
- **Edit lines**
  The adjacent elements are shown transparently when editing the lines. Changes made to the connector
  are shown in real time. The lines can be drawn or redrawn.
- **Scale All**
  The complete connector can be scaled using the Scale All option. Connector thickness is shown in the right-hand side
  of the main window.

NEW PARAMETER FOR MINIMUM GEOMETRY WITH ABUTMENTS
In the parameter dialog, the height for the minimum geometry can now be set at up to 10 mm.

FIX THE BASE OF THE PONTIC TO THE GINGIVA
This option can be used when reducing the pontics to „fix" the base line to the gingiva for full reduction.
The pontic is not reduced all-around.

SEPARATE STEPS FOR ABUTMENTS
When designing abutments, there are now two steps to select and edit the scan bodies or the gingival line.
After selecting the scan body, the step to edit the gingival line automatically appears. The action carried out can be undone in each
step.

inLab STACK SW

COLLECTION PHASE

NEW MATERIALS

The following new materials in inLab Stack SW have been added to 4.2.0:

SIRONA	VITA	DENTSPLY
inCoris TZI inCoris CC	Suprinity / Suprinity FC	Cyrpton Celtra / Celtra Duo

SIRONA CONNECT

SUPPORT FOR ABUTMENT CASES IN SIRONA CONNECT

Abutment impressions taken with CEREC Connect and sent via the Sirona Connect portal can be imported and processed from this version onwards.

inLab SW 4.2.1

SERVICE PACK JUNE 2013

GENERAL

REPAIRING POTENTIALLY DEACTIVATED INEOS BLUE DRIVERS
In some cases the driver settings for inEos Blue or Bluecam were changed after installing the software, so that images could no longer be made. The software generates a message that the scanner is being used elsewhere. This no longer happens after the service pack has been installed or it is automatically repaired.

COMPLICATIONS RESULTING FROM USER ACCOUNT CONTROL SETTINGS THAT DEVIATE FROM THE DEFAULT SETTINGS ARE PREVENTED
Changing the settings of the user account control in Windows no longer leads to complications such as unrecognized scanners or milling units, errors when exporting and importing files, etc. The level of user account control can be freely selected after installing service pack 4.2.1.

NOTIFICATION IF AT LEAST ONE LICENSE STICK IS CONNECTED WITHOUT UP-TO-DATE FIRMWARE
The version of firmware of all connected license sticks is automatically checked. You are prompted to update the license sticks if the firmware on at least one of sticks is not up-to-date.

MODEL PHASE

OPTIMIZATION OF THE PROCESS OF BLOCKING OUT UNDERCUTS FOR INLAY PREPARATIONS (OMNICAM)

MODEL ALIGNMENT ERROR FIXED
When aligning the model in the align model axis step, the program would occasionally crash, but this error has been eliminated with 4.2.1.

DESIGN PHASE

ERROR WITH INITIAL PROPOSALS FOR PONTICS FIXED
In rare cases when using the group tool, the proposals for the pontics were unfavorable.

CRASHES WHEN SETTING THE LANGUAGE TO ITALIAN AND DURING OPENING OF RESTORATION PARAMETERS FIXED

SIRONA CONNECT

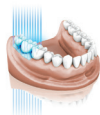**REMOVAL OF BLACK TEXTURES IN OMNICAM CONNECT CASES**
After downloading Omnicam Connect cases in inLab, black textures were appearing, however this error has been eliminated.

inLab SW 4.2.2

Only for inEos X5 users AUGUST 2013

This software version has only been supplied with inEos X5 scanners.

SCAN PHASE

INTEGRATION OF inEos X5

The inLab software now includes the use of inEos X5 hardware.

This software version allows the following images to be taken with inEos X5 in the stated modes:

- Jaw images (selection of the region, full or reduced)
- Free scans (manual or automatic scans)
- Rotational scans (60°, 75° or multi-die)

These can be selected below the live image.

Images of the impression can be taken.

inEos X5 can be calibrated.

The live image taken by inEos X5 contains info icons if the impression scan mode or the HDR mode has been activated.

For each image catalog, the user can choose whether he wants the palate to be shown in the model or whether the software should reject this automatically.

inLab SW 4.2.3

SERVICE PACK JANUARY 2014

NEW FEATURES

MILLING FOR ZIRCONIUM OXIDE AND POLYMERS
- From this version onwards, milling is also offered for zirconium oxide and polymers.
- Milling can be activated or deactivated in the settings. If it is activated, a note appears for the user stating that milling should only be used from a defined serial number or after replacing the motor(s).
- The restorations are „nested" in the blocks for milling.
- In special cases, the restorations can be milled from the block in the inLab SW also using the so-called single pin method.

GENERAL

REDUCTION IN FILE SIZE
The size for .lab and *.i.lab files has been reduced in comparison with 4.2.1 files. Depending on the situation, the files have been reduced by up to 25-30%.

RESTORATION QUALITY OF STL EXPORTS
The mesh quality for STL exports of restorations has been improved.

IMPROVED SAVE AS FUNCTION
If there are several patients with the same last name (dentists with several patients), the „Save as" function does not save the case in the first entry anymore.

ADMINISTRATION PHASE

SELECTION OF THE PRODUCTION METHOD
When creating the restoration, the subsequent production method is stated for all materials that can be milled and ground.

PATIENT/ORDER SEARCH
The patient/order search still only looks for the search term at the start of the word. The search no longer runs automatically, it now has to be started by the user. The preview of the specific case is immediately displayed.

USER INFO FOR MC X BLOCK SELECTION
If a block has been selected with a large holder in inLab/inLab Stack software and if an MC X machine is connected, the user is notified that this is not supported during block selection.

SCAN PHASE

inEos X5: ACCELERATION OF THE IMAGE FIELD REGISTRATION
The image field registration (BioCopy or gingival mask for preparation) has been accelerated.

inEos X5: SAW CUT RECOGNITION
Saw cuts are recognized while images are being taken with inEos X5, which results in fewer images being taken.
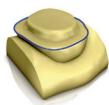
inEos X5: DOUBLE CLICK SCAN
If it is not possible to focus on the double click area, a message appears and the image is not created.

inEos X5: EMERGENCY STOP
If the inEos X5 emergency stop has been activated, a second notice appears before the arm moves again.

MODEL PHASE

ROTATION OF THE BUCCAL OCCLUSAL GEOMETRY IN 90° STAGES
The geometry of the buccal image can now be turned by 90° in the side panel during the buccal registration step so that buccal images taken with inEos can also be processed by 90°.

DESIGN PHASE

DISPLAYING CONTACTS AFTER SHOWING THE OCCLUSAL COMPASS
If the occlusal compass is shown with active contacts and this display is then deactivated, the normal contact can be seen again.

CONTACT TEXTURE WHEN USING MUSHBITE
The initial proposal for restorations with buccal registration shows the occlusal contact textures.

THE ACTIVE TOOL DOES NOT CLOSE WHEN SELECTING THE TOOL WHEEL
If the tool wheel is selected, the active tool does not close; this will only happen when another tool is selected.

ALIGNMENT OF ATTACHMENTS
If two attachments are sitting on different restorations, these will not be aligned according to the restoration but rather according to the model.

AUTOMATIC SWITCHING TO THE „EDIT RESTORATION" STEP
After confirming the restoration parameter, the software automatically switches to the Edit restoration step.

MILLING PHASE

QUALITY LABEL INDICATION
The blocks with quality labels are also indicated with their label in the software.

MILLING ALIGNMENT OF THE VENEER STRUCTURE WITH MULTILAYER
The alignment for the milling preview is now calculated for each veneer structure.

CORRECT PROCESSING OF IPS E.MAX CAD MESO BLOCKS
The blocks are now processed without error messages.

inLab STACK SW

NEW FEATURES

MILLING FOR ZIRCONIUM OXIDE AND POLYMERS
- From this version onwards, milling is also offered for zirconium oxide and polymers.
- Milling can be activated or deactivated in the settings. If it is activated, a note appears for the user stating that milling should only be used from a defined serial number or after replacing the motor(s).
- The restorations are „nested" in the blocks for milling.
- Restorations can be positioned freely in the block and a collision check prevents them from being positioned too close together.
- Pinned connections are automatically calculated and can be changed manually.

COLLECTION PHASE

SELECTION OF THE PRODUCTION METHOD
When creating the restoration, the subsequent production method is stated for all materials that can be milled and ground.

OPTION TO FILTER RESTORATIONS ACCORDING TO DATE
The restorations shown in the Stack software for processing can be filtered according to export date.
Users have the option of selecting and viewing jobs from the last two or eight weeks or all jobs.

DELETING RESTORATIONS FROM THE JOB LIST
Restorations can be deleted from the selection list of the Stack software. This also applies to inactive restorations that do not come under the selected material.

POSITIONING PHASE

POSITIONING RESTORATIONS DURING MILLING
The restorations can be positioned and repositioned freely in the block.

PRODUCTION PHASE

FORMER MILLING PHASE NOW RENAMED „PRODUCTION"
With the addition of grinding, the „Milling" phase is now called „Production".

SIRONA CONNECT

REMOVAL OF BLACK TEXTURES IN CONNECT CASES OR DXD CASES
After downloading Connect cases in inLab software, black textures were appearing. This error has been eliminated.

MATERIAL SELECTION TO MATCH THE MATERIAL CLASS FOR CONNECT CASES
The default material for a Connect case is always selected for the material class chosen in Sirona Connect.

inLab SW 4.2.5

SERVICE PACK MAY 2014

GENERAL

FIRMWARE UPDATE INEOS X5
The firmware of the inEos X5 can be updated on this version. Please additionally read the following detailed information: in the download area of the Sirona website under www.sirona.com/en/inLabdownloads you will find the document "Description firmware update inEos X5" for download with further information on the firmware update. Please read the document carefully before installing the firmware update.

IMPROVED STL-MESH FOR SURFACES AND MARGINS

CEREC BLUECAM AND CEREC OMNICAM COMPATIBLE
This version supports both CEREC Bluecam and CEREC Omnicam once again.

SCAN PHASE

JAW LINE EDITOR INEOS X5
If the Jaw Line following the overview scan is found to be incorrect, it can be corrected manually using the Jaw Line Editor.

**SLIDER FOR ROTATION SCAN SETTINGS**
The angulation for rotation scans can now be adjusted with a slider.

MANUAL CORRELATION
If the software is not able to automatically stitch the images for BioCopy or Gingiva Mask on the preparation, the software changes to manual correlation of the image catalogs.

ICON FOR CAPTURE COMPLETE IS NO LONGER DISPLAYED FOR inEos X5

MODEL PHASE
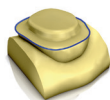
PROGRESS BAR DURING MODEL CALCULATION
During model calculation a progress bar displays the status. If required the process can be canceled.

MODEL CALCULATION OPTIONS IN CONFIGURATION
The default setting for model calculation (complete and reduced) can now be set under configurations.

COLLISION CONTROL WITH INSERTION AXIS
When adjusting the insertion axis a cylinder can be displayed to simulate the crown in order to check if the crown can be seated.

ENTERING BASELINE FOR PONTICS IS NOW POSSIBLE ON GINGIVA MASK

DESIGN PHASE

FORM TOOL STRENGTH ADJUSTMENT
Not only the size but now also the strength of the Form Tool can be adjusted.

INCISAL VARIATION TOOL FOR ABUTMENT CROWN
The Incisal Variation Tool can be used now for abutment crowns.

FORM TOOL AND RECALCULATE FOR THE ENTIRE BRIDGE
The Form Tool and Recalculate can now be used for the entire bridge.

IMPROVED REDUCTION FOR ANTERIOR TEETH
When reducing anterior teeth the incisal edge gets more rounded and can be adapted much better with the design tools afterwards.

VIRTUAL ARTICULATOR IMPROVEMENTS
- Adjustment of incisal pin
- Manual movement of lower jaw
- Right-left-parameter for sagittal inclination and Bennet angle
- New parameter Immediate Sideshift right and left
- Movements of the occlusal compass can be displayed separately

MILLING PHASE

MILLING OF INCORIS CC AND DENTSPLY CRYPTON

inLab STACK SW

NEW FEATURES

MILLING OF inCoris CC AND Dentsply Crypton

SIRONA CONNECT

IMPORTING OF CEREC CONNECT DATA IMPROVED
The order information will be imported to the right positions in the inLab software.