



inLab Software 18.0

# New digital options

[dentsplysirona.com/inlab](https://dentsplysirona.com/inlab)





# inLab CAD Software 18.0

## Dental design requires good software

The new inLab CAD Software 18.0 focuses even more closely on the requirements of dental laboratories. As a stand-alone CAD component, the application can be used independently from scanners and production units. Furthermore, inLab Software is better integrated into the digital workflow between practice and laboratory than ever before. For the first time, it also links CAD/CAM processes between different inLab laboratories, using Sirona Connect.

The inLab design software stands out for its needs-based indications, optimized design processes, and user-friendly interface. Its four software modules offer a wide range of indications and functionalities. inLab users can freely decide when to perform available updates – without counting dongles, mandatory updates, expiration dates or annual license fees.

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## inLab CAD Software Modules

Implantology module

Removables module

Interface module

Basic module\*

\* Minimum requirement for Implantology, Removables, and Interface modules

# inLab Software

## Easy to use – professional results

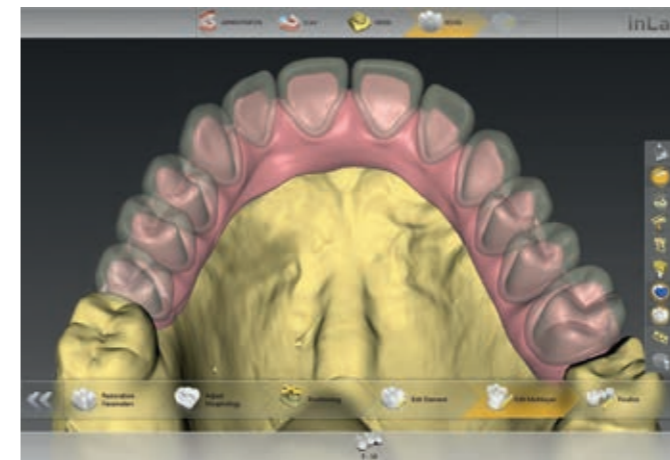
Intuitive, simple, process-oriented – inLab CAD Software is one of the most user-friendly applications in dental CAD/CAM. The user interface clearly displays all relevant information and selection menus on a case-specific basis. The inLab Software workflow with focus on dental technology professionally and reliably guides the user through all steps to the desired restoration result without needing to forgo individual design and functional options. The design process is supported by short menu paths, quick tool access and a variety of view options.



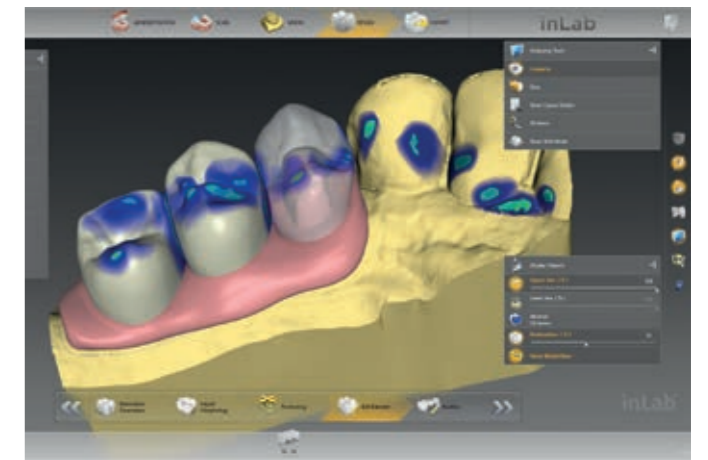
### Everything at a glance

The intelligent administration phase does more than display the entire restoration case with all desired design details on a clearly structured screen. The flexible case administration feature also saves valuable user time if adjustments are necessary during the design process.

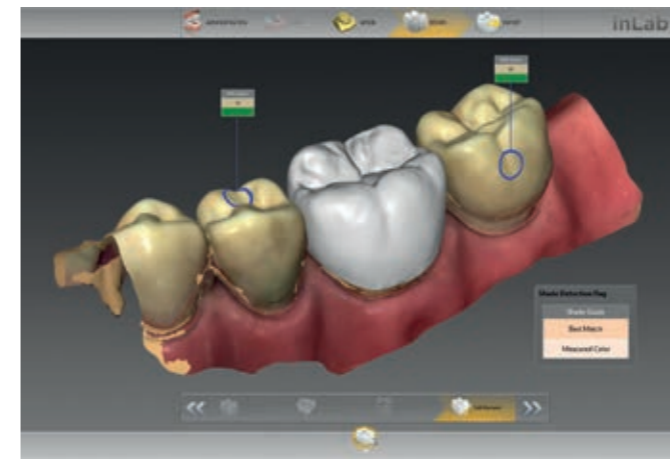
## Efficient support for design and function



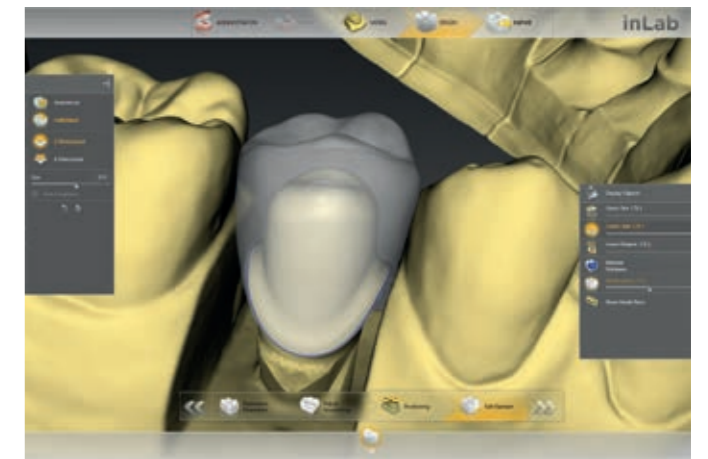
**NEW from inLab CAD SW 18.0:** Multi-layer gingiva for separating the framework structure with gingival element and veneer structure for bridge design projects involving the gingiva.



**NEW from inLab CAD SW 18.0:** Gingiva element design for all restoration types.



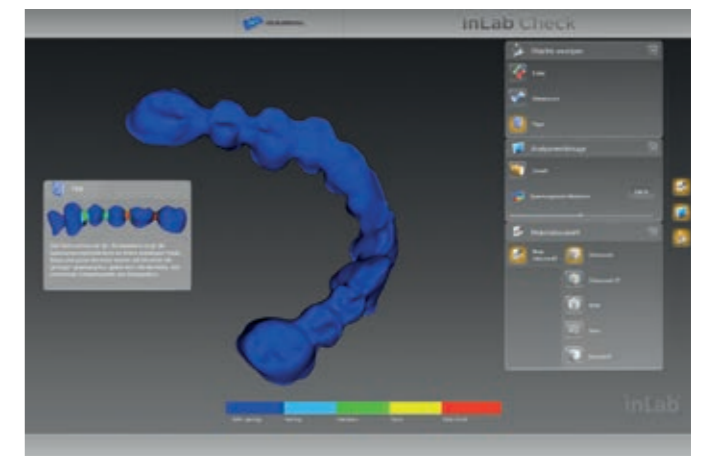
**NEW from inLab CAD SW 18.0:** Tooth color display in inLab Software for digital impressions with CEREC Omnicam that were sent via Sirona Connect.



**Virtual insertion** for designing several restoration layers in complex cases.



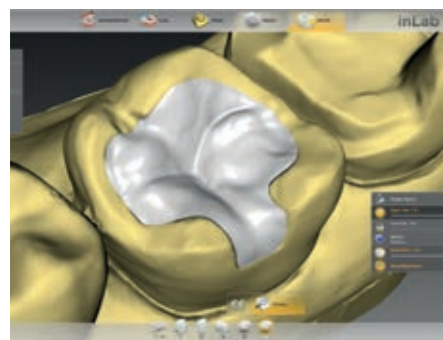
**Virtual articulator** for visualizing entire motion ranges and determining static and dynamic contact surfaces for proper functional occlusion.



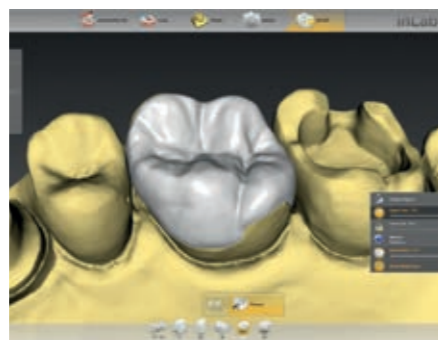
**inLab Check** for reviewing the fully designed restoration for possible critical areas, using a FEM load calculation on the basis of the material selected for the restoration.

# inLab CAD SW 18.0: Basic module

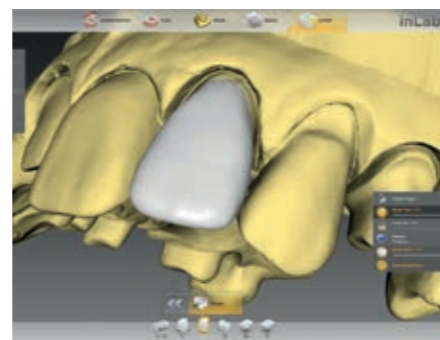
The Basic module of the inLab CAD Software covers basic indications and provides all necessary design tools along with access to digital impression with Sirona Connect.



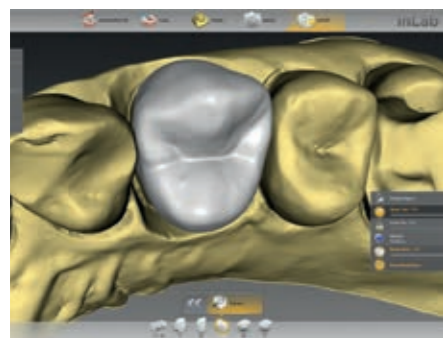
Inlay



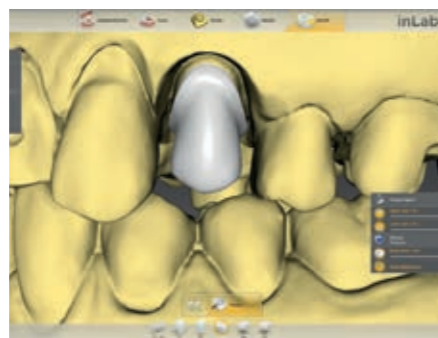
Onlay



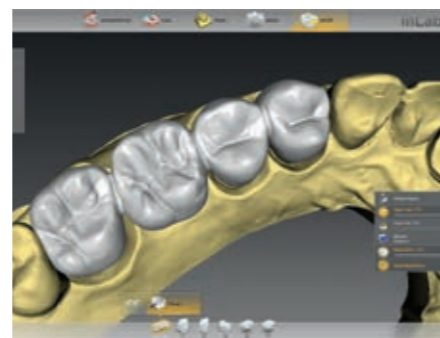
Veneer



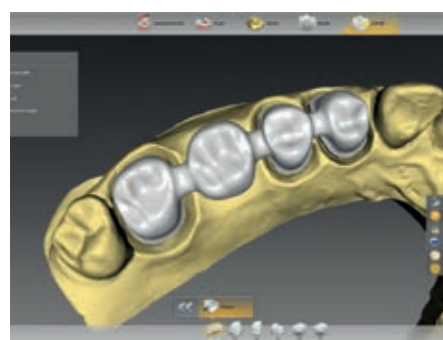
Full crown



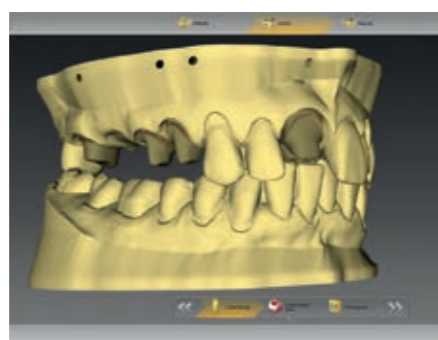
Coping



Fully anatomical bridge



Anatomically reduced bridge

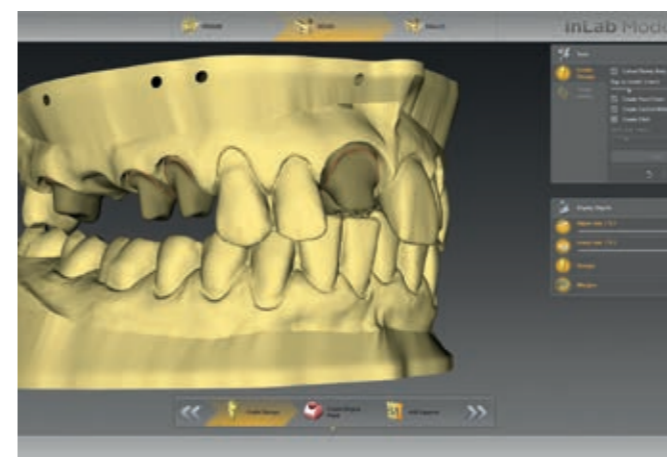


**NEW from inLab CAD SW 18.0:** Models

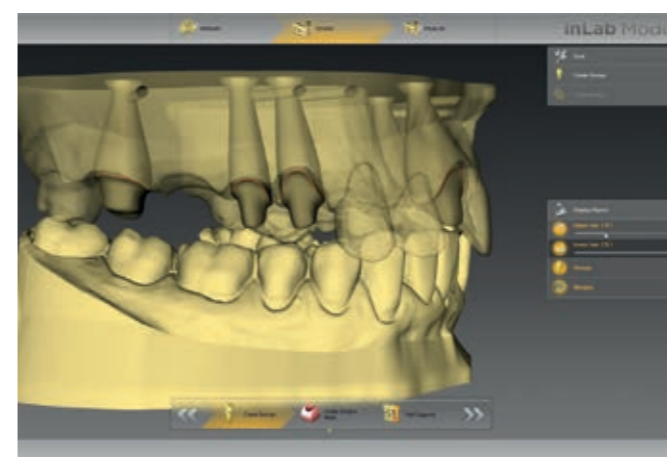
## Overview of inLab CAD Software Basic module:

- Inlay, onlay, veneer, full crown, bridges, coping, bridge frameworks, multi-layer, models
- All design tools
- J.O.B.S. Jaw Orientated Biogeneric Settings
- 1:1 copy function
- Tooth databases
- Virtual insertion
- Virtual articulator
- Smile design
- Gingiva element
- Sirona Connect access
- inLab Check to review design data for stress sensitivity

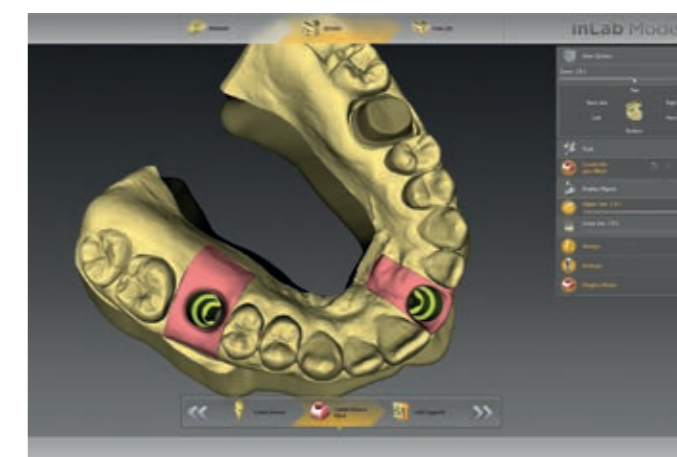
# NEW from inLab CAD SW 18.0: Models



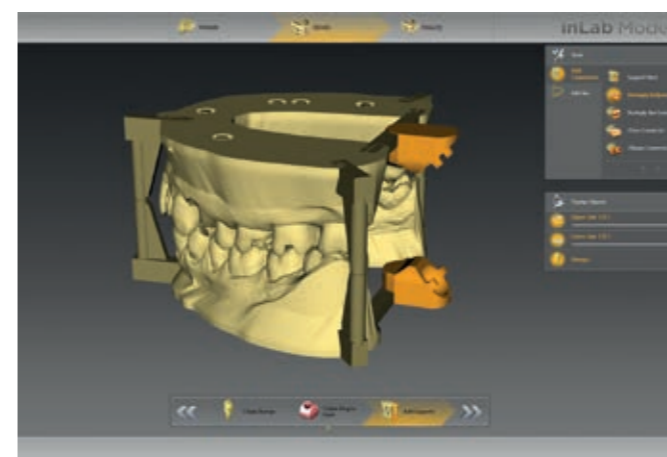
As of inLab CAD Software 18.0, digital impression data models can be designed with removable or non-removable dies - for conventional full arch models and for models with implant analogues.\* The design tools can be used to create a separate gingival mask for any model type.



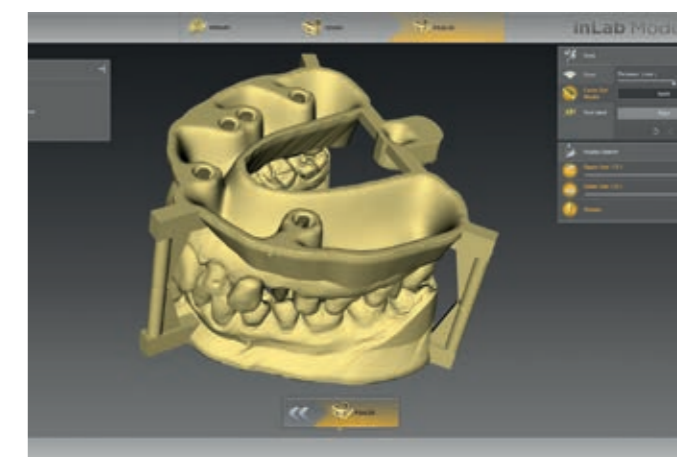
For dies, users can either transfer existing preparation margins from the inLab Software or enter them manually (e.g. for removable adjacent teeth). Die fitting and undercuts for removable and non-removable die elements can be individually adjusted.



In the case of implant models, the selected digital implant analog is automatically included in the calculation and visualized in the software.



Support structures for various articulator attachments can be added to the model and edited.\*\*

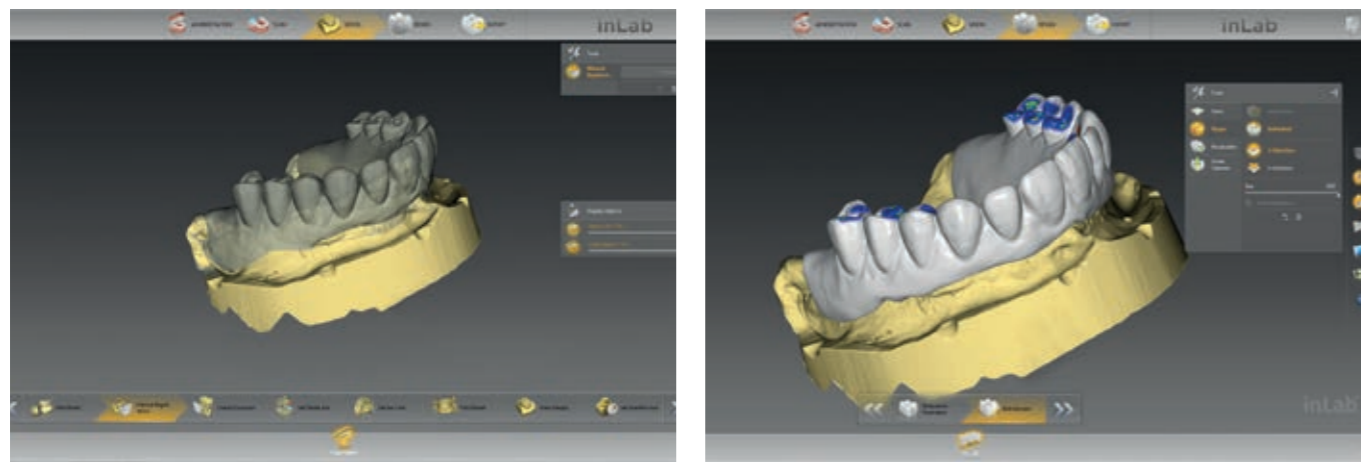


Additional model labels can be inserted in the finalizing phase of the model. The finished model data can be sent to production via, for instance, an in-house 3D printer or a central production unit.

\* Implantology module required for implant models  
\*\* Vertex/Ceramco articulator and others

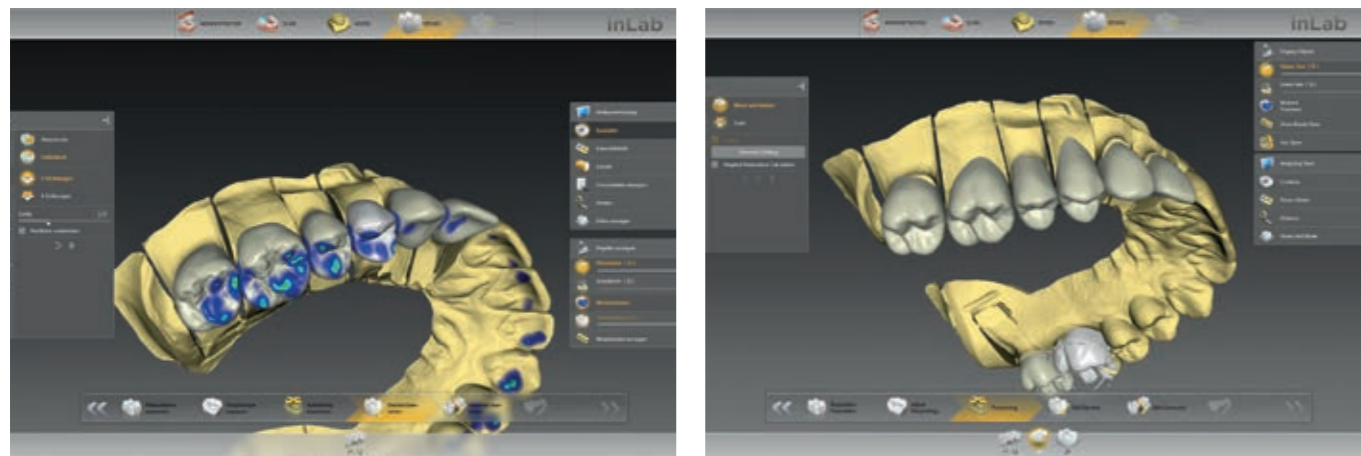
## Quick and reliable results

NEW from inLab CAD SW 18.0: 1:1 copy function

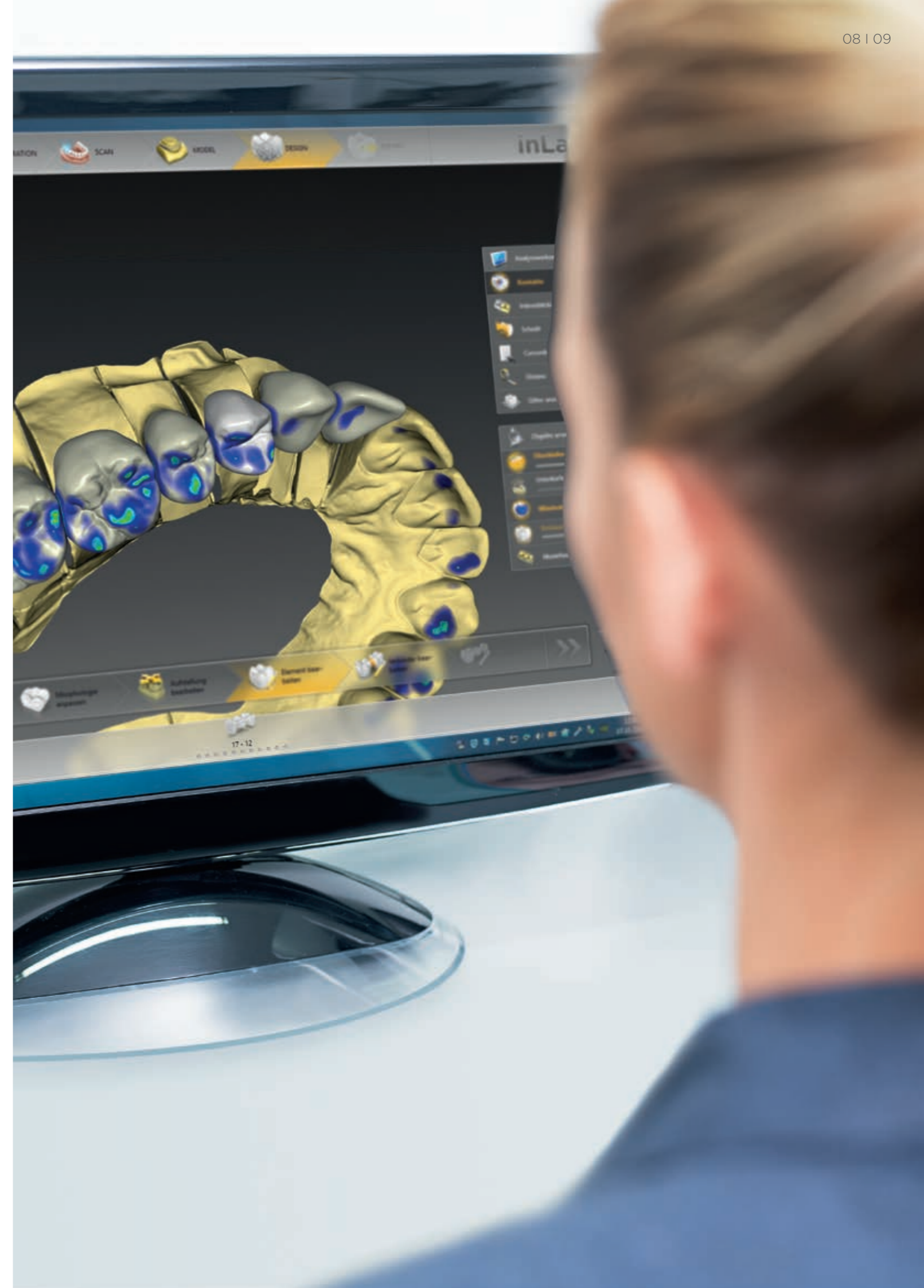


With the 1:1 copy function, all geometric dimensions of a restoration can be faithfully copied and transferred to the final restoration. That saves an enormous amount of work time. The feature is particularly well-suited for large bridge and implant cases with a gingival component, in which existing long-term temporary solutions are to be precisely converted to final restorations. Attachment geometries of any size can also be copied 1:1.

## J.O.B.S. – Jaw Orientated Biogeneric Settings



This unique jaw-orientated biogeneric procedure reconstructs teeth true to nature. The inLab CAD Software includes the positioning and morphology of the existing teeth in its analysis and uses this data to generate patient-specific fully anatomical first proposals – both for individual teeth in the anterior and posterior regions as well as for large bridges and multiple unit restorations. That eliminates the need to perform time-consuming design rework.





## Sirona Connect links digital processes – practice-to-lab and lab-to-lab

The Basic module of the inLab CAD Software offers dental laboratories access to the digital transmission platform Sirona Connect. It offers safe and convenient sharing options for scan, restoration and order data, both between practice and laboratory and between different dental laboratories.

With the optional Interface module, the inLab CAD Software can be also used to process intraoral and extraoral scan data that are transmitted in STL format. This enables the integration of scan data from intraoral scanners by other manufacturers in the inLab CAD Software restoration design.

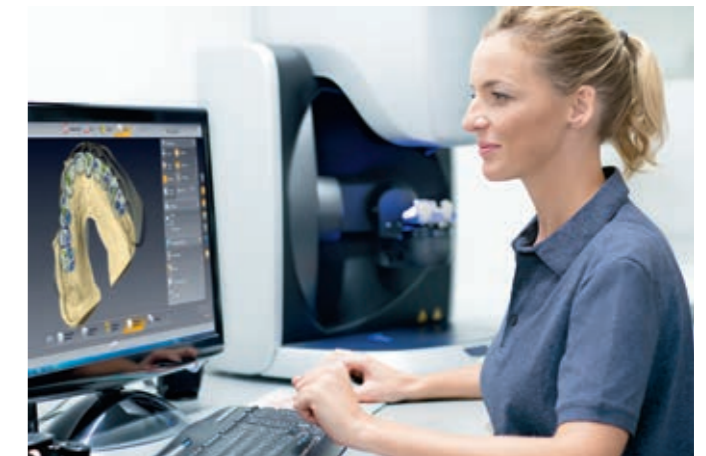
### Sirona Connect: From practice-to-lab



Full transfer of digital intraoral impressions with CEREC Omnicam, including order form as well as image and additional data from the practice to the laboratory, in a matter of seconds:

- Flexible production of restorations with inLab or transfer of scan data to another CAD/CAM system
- inLab design service for CEREC users: Dental expertise for complex or aesthetically demanding orders, which can be designed in the laboratory and finalized in the dental practice.

### Sirona Connect: From lab-to-lab

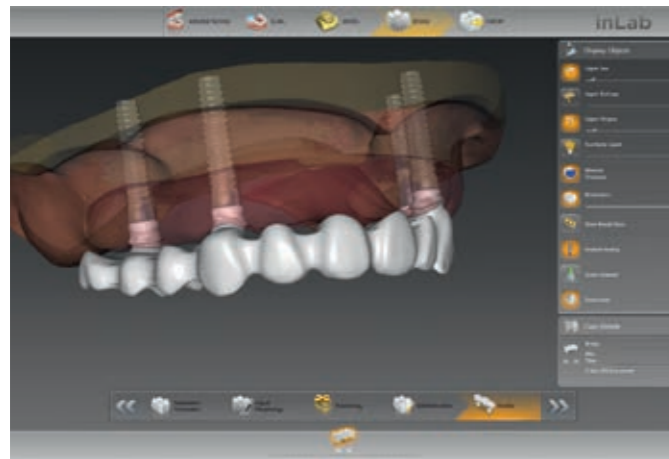


**NEW from inLab CAD SW 18.0:** Transmission of inLab scan or restoration data from one laboratory to another, directly from the inLab Software via Sirona Connect:

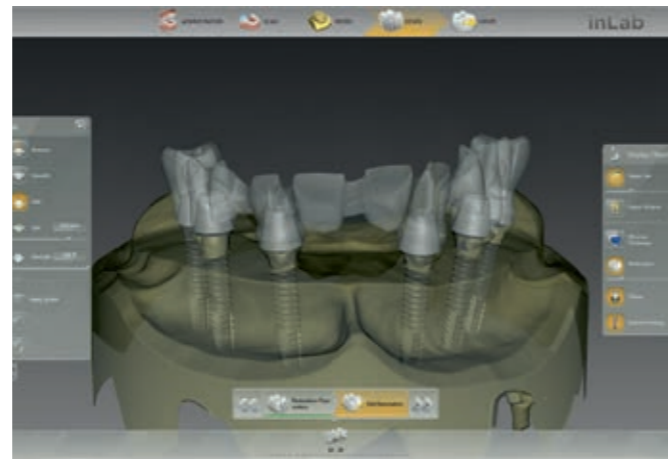
- Expansion of production capacities and use of external know-how
- Receiving and/or offering design service for laboratories
- Order-based chat via Sirona Connect possible
- No additional costs for separate cloud services or the like
- The inLab Software provides direct access to the patient-specific solutions from Atlantis for the design and manufacture of abutments and superstructures from Dentsply Sirona

## inLab CAD SW 18.0: Implantology module

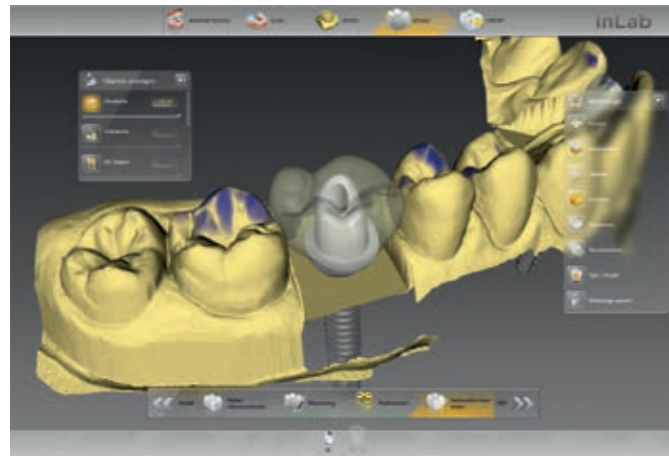
The Implantology module of the inLab CAD Software comprises all required CAD tools and functions for the customized treatment of single and multiple implants as well as for surgical guide design – for seamless transfer to the inLab production units, inLab MC X5 and inLab MC XL. Or alternatively, for export to other production units.



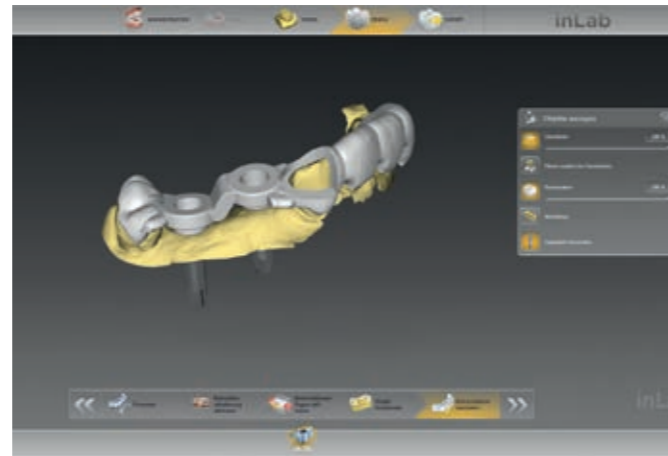
Screw-retained bridges and bars at implant level



Screw-retained bridges and bars on multi-unit abutments and adhesive caps



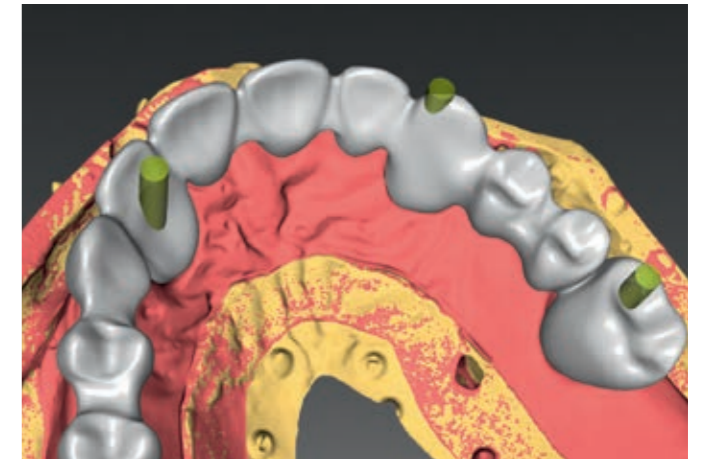
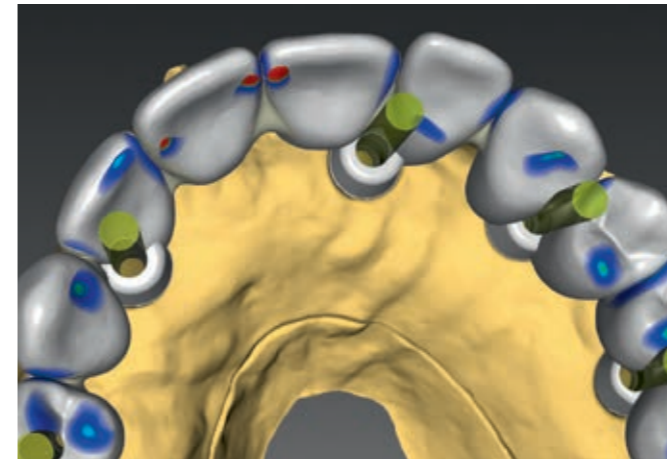
Individual abutments on TiBase adhesive base and from titanium preforms



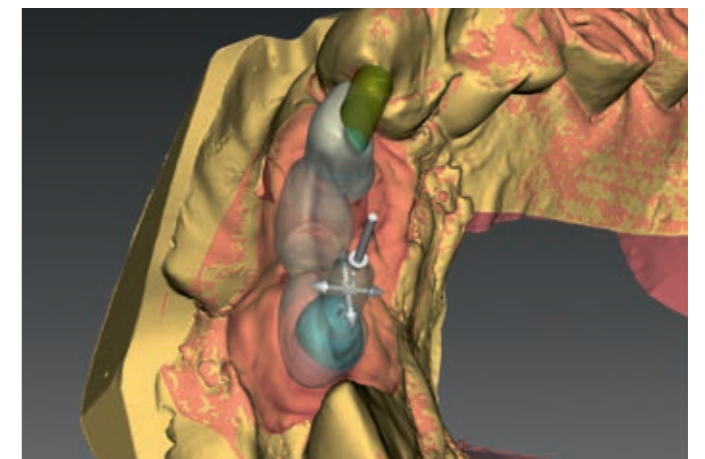
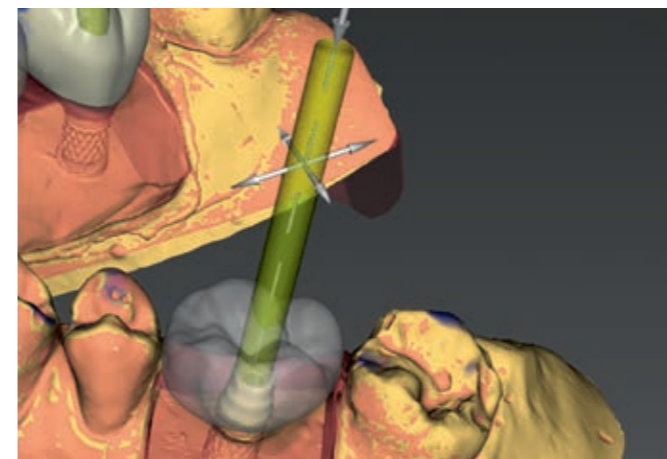
Surgical guide

### Overview of inLab CAD Software Implantology module:

- Screw-retained bridges and bars at implant level
- Screw-retained bridges and bars on multi-unit abutments
- Individual abutments (zirconium oxide and titanium)
- Surgical guide (integrated implantology)



For greater flexibility, the tooth setup and implant superstructure can be designed separately. Teeth can be set up according to function and with consideration for esthetics, independent of the implant position.

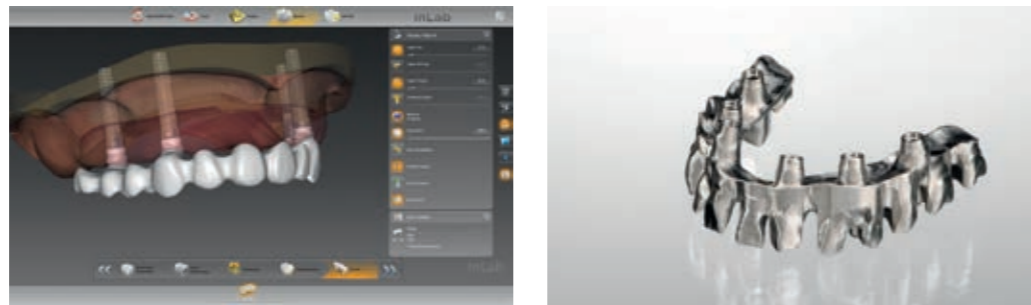
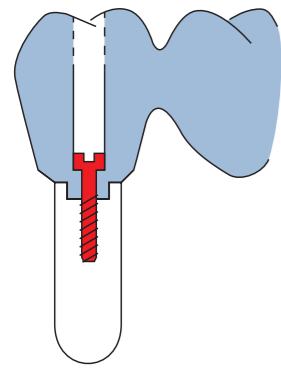


The screw channel tool allows for setting of individual screw channels with the corresponding settings for position, angle and diameter. This is a convenient tool, for example to generate screw-retained restorations on scanned standard abutments.

#### Individual production methods for inLab users

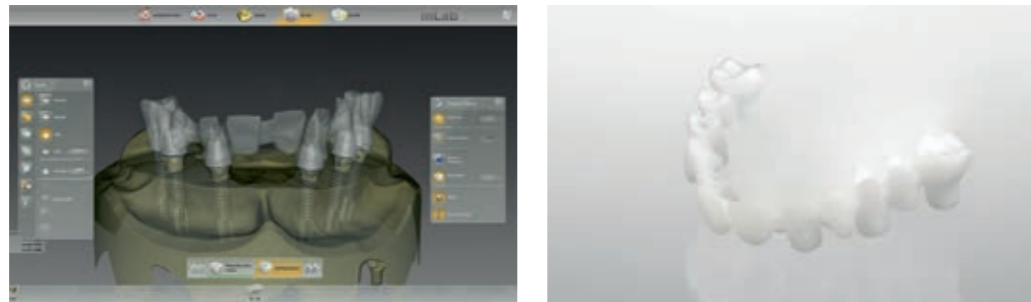
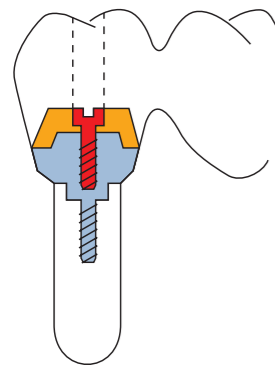
As of inLab SW 18.0, inLab users can access the extensive service portfolio of Dentsply Sirona with even greater ease and flexibility for implant cases. You can decide at any time on a case-by-case basis whether the design is to be done directly in-house with the inLab Software or alternatively, whether **Atlantis®** patient-specific solutions are to be used for the design and production of abutments and superstructures – now with direct access to the **Atlantis®** WebOrder system from within the inLab Software.

Screw-retained bridges and bars at implant level



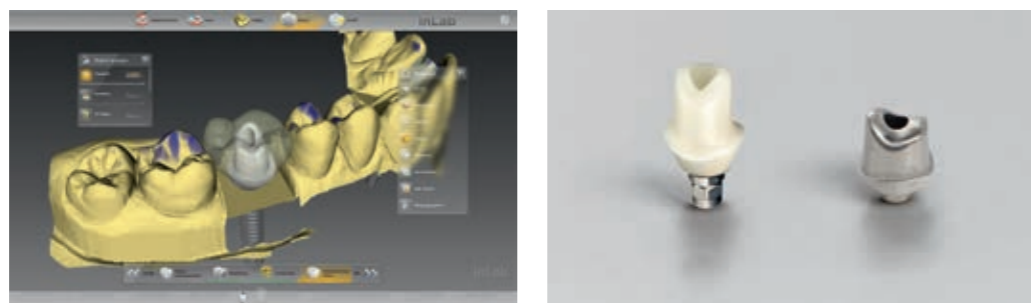
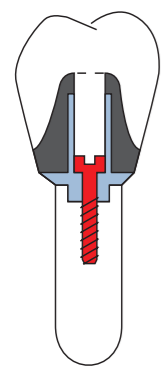
Design professional implant-supported bridges and bars with the inLab CAD SW at implant level, based on high-precision inEos X5 scan data and in combination with the FLO-S scanbody by Atlantis®. The restoration data can then be made available for production in a suitable CAD/CAM production system.

Screw-retained bridges and bars on multi-unit abutments and adhesive caps



For in-house production, for example with inLab MC X5 (zirconium oxide or PMMA), screw-retained bridges and bars are designed on multi-unit abutments by nt-trading and Medentika, using inLab CAD SW. The inEos X5 model scanner relies on the special inPost scanbody by Dentsply Sirona to acquire the exact implant position.

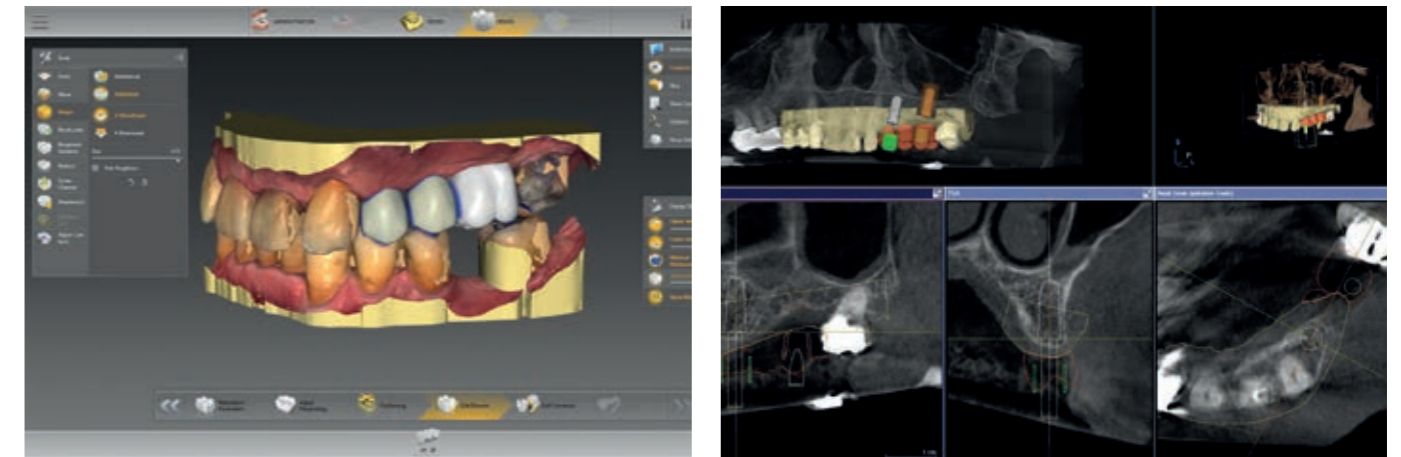
Custom abutments on TiBase adhesive base and from titanium preforms



The inLab CAD Software enables the in-house production of individual abutments: as a milled zirconium oxide abutment for bonding with TiBase by Dentsply Sirona or made from one-piece titanium preforms\* (e.g. milled with inLab MC X5). The design is done directly or top-down, i.e. the fully contoured design is split into crown or crown coping and abutment.

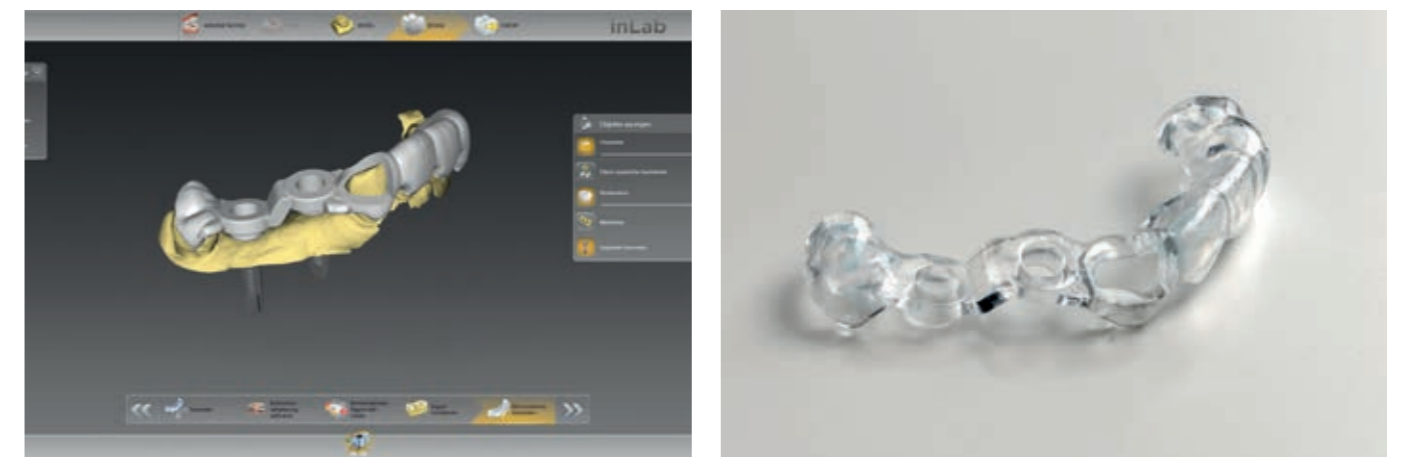
Surgical guide for integrated implantology

With inLab CAD Software, individual surgical guides can be quickly designed and produced in the lab at low cost. The surgical guide created with CAD/CAM is the ideal planning basis for surgical implementation as part of the integrated implant planning with 3D X-ray systems from Dentsply Sirona.



The prerequisite is the intraoral scan of the situation from the model, for example by using inEos X5 or by way of a digital intraoral impression. In addition, a restoration is designed for implant planning based on prosthetic aspects. These optical data are then exported.\*

The optical data is combined with the 3D X-ray data (Orthophos SL 3D, Orthophos XG 3D or Galileos), for subsequent implant planning and output as a \*.cmg.dxd planning file.



The \*.cmg.dxd planning file is imported into the inLab CAD Software to design the surgical guide.\* The design of the surgical guide can be customized for any span size with one or more drill holes.

This surgical guide is then milled (e.g. with the inLab MC X5 or inLab MC XL\*\*) or exported as STL for production with a 3D printer.\*\*\*

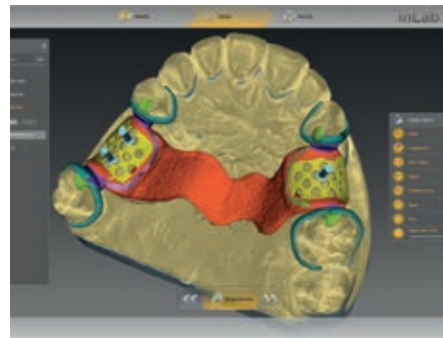
\* Medentika PreFaces®

\* Required interface included in the Implantology module of the inLab CAD SW  
 \*\* inLab MC XL is limited to surgical guides with a maximum of one drilling hole  
 \*\*\* inLab CAD SW Interface module required

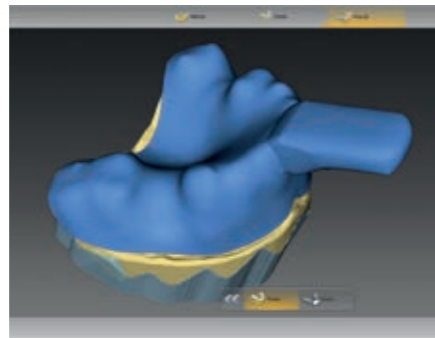


# inLab CAD SW 18.0: Removables module

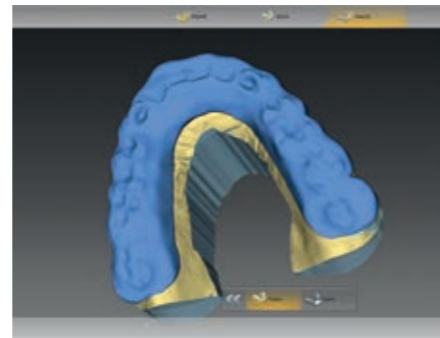
With inLab CAD Software, you can quickly and professionally design model casting prostheses for removable dentures as well as bite splints and impression trays. Furthermore, the software enables the production of standard bar shapes for implementation in metal and other materials as well as telescopes. For individual attachment prostheses, you can select from a database of original design elements by well-known manufacturers.



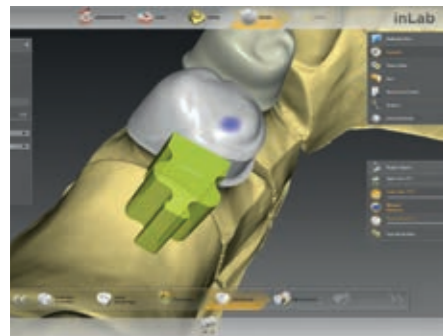
Removable partial dentures



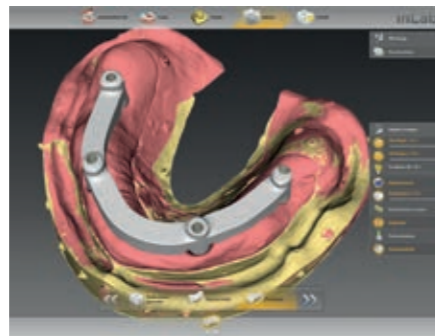
Individual impression trays



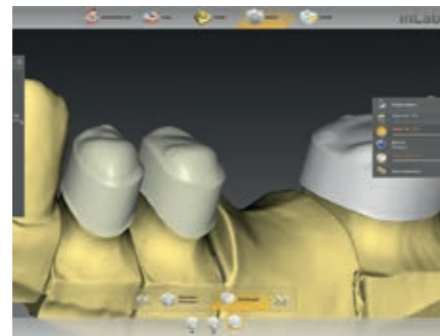
Bite splints



**NEW from inLab CAD SW 18.0:**  
Individual attachment prostheses with original elements for CAD design



Standard bar shapes



Individual primary telescopic and cone crowns

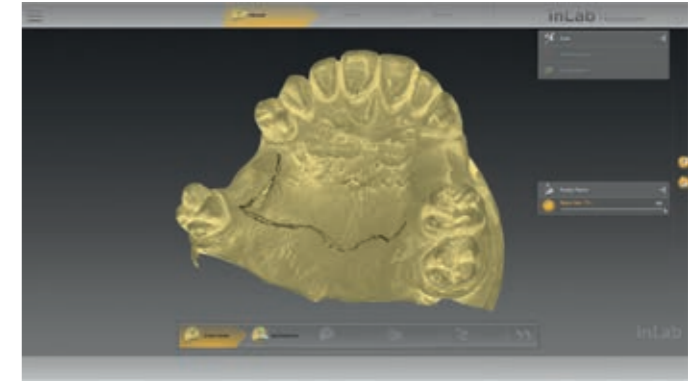
## Overview of inLab CAD SW Removables module:

- Removable partial dentures
- Individual impression trays
- Bite splints
- Attachment prostheses
- Bars
- Telescopes

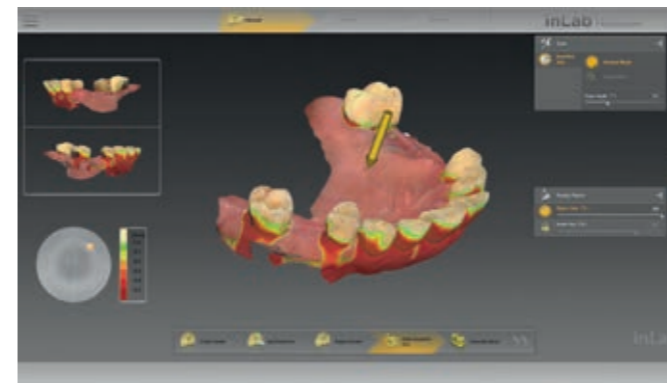
## Removable Partial Denture



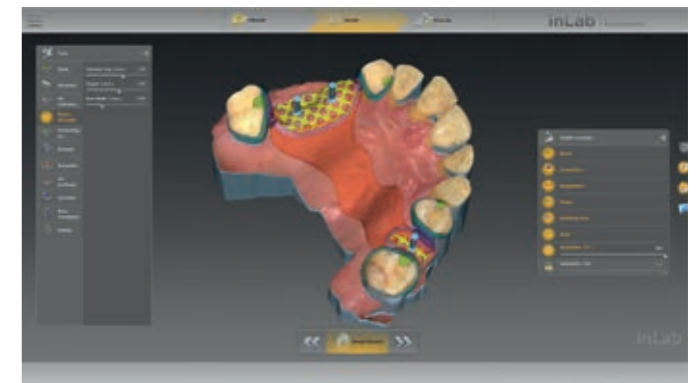
The removable partial denture planning is drawn in the work model with clips.



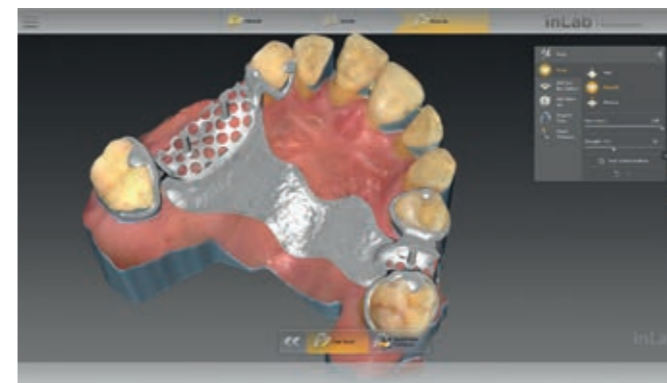
You can enter line textures for subsequent display in the inLab Software during the inEos X5 scan process.



Undercuts on the cast are visualized by undercut displays.



The user interface offers access to all necessary elements (different clip shapes, various retention shapes, etc.) for the individual design of the removable partial denture.



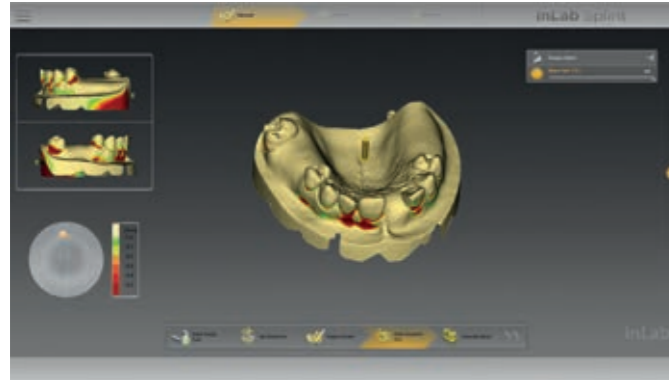
The removable partial denture prosthesis can be individually adjusted.



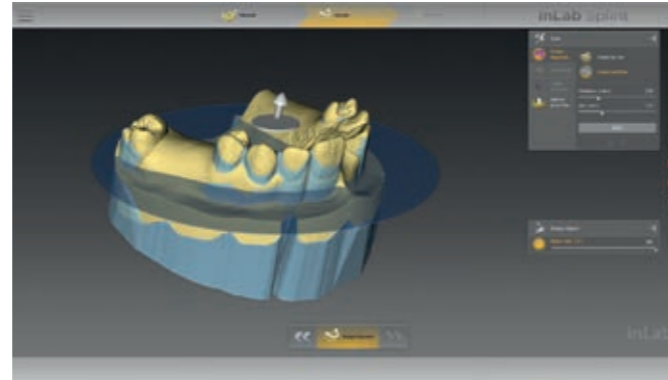
STL export of the restoration data\*, wax modeling for subsequent casting or direct production using the laser sintering process.

\* inLab CAD SW Interface module required

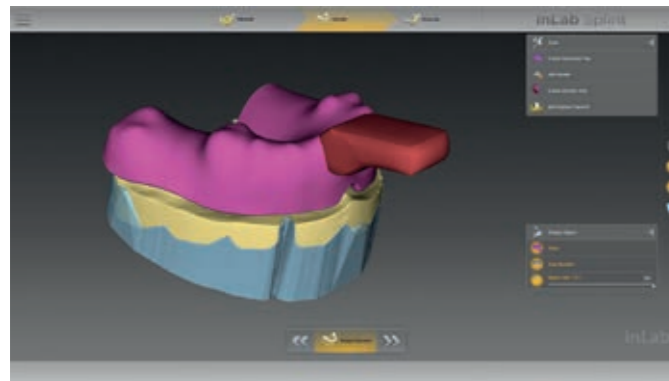
Individual impression tray



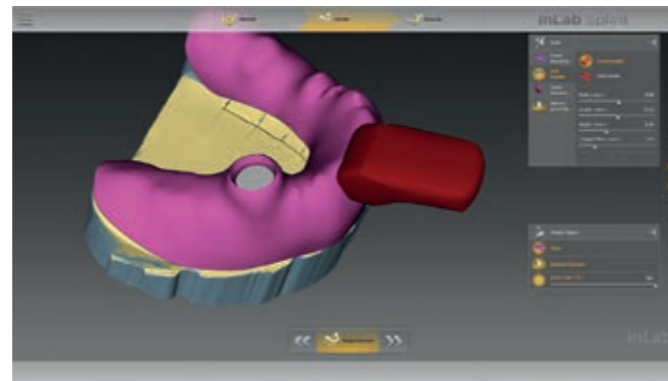
The undercuts of the model are visualized in color.



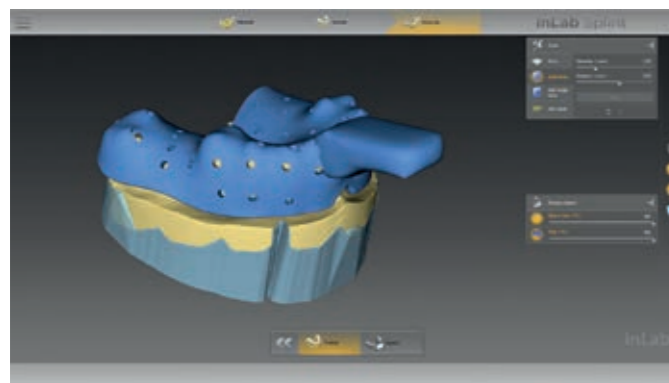
With the help of the intelligent tools, the contour of the impression tray can be quickly established.



After drafting the tray design, you can plan a variety of handle options.



You can also set the corresponding holes for the impression posts at the implant positions for individual implant impressions.



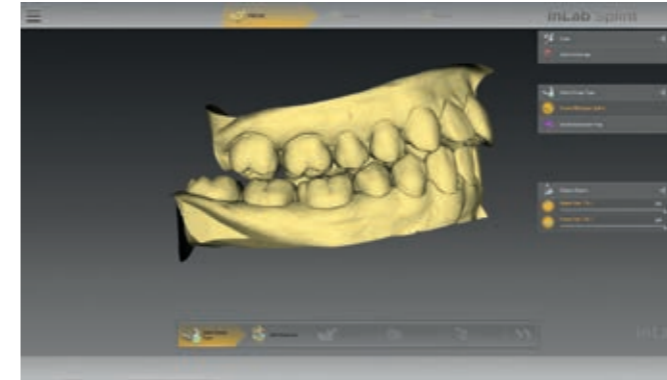
All elements are merged in the final step. In addition, you can insert a hole pattern for the flow of the impression material.



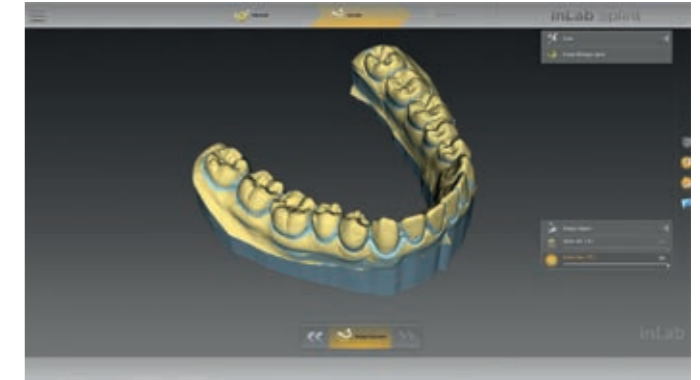
The tray design can be exported as an STL file\* and then produced with milling or additive methods.

\* inLab CAD SW Interface module required

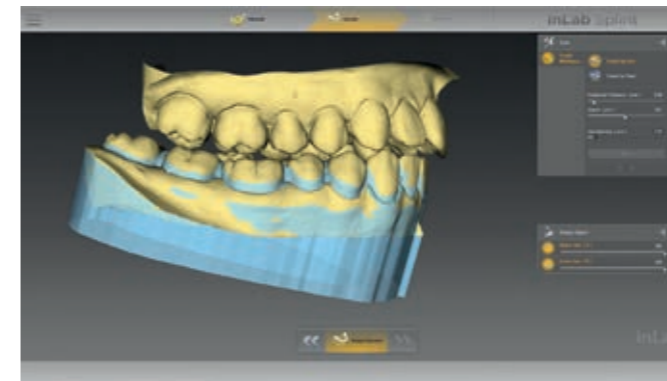
Splint



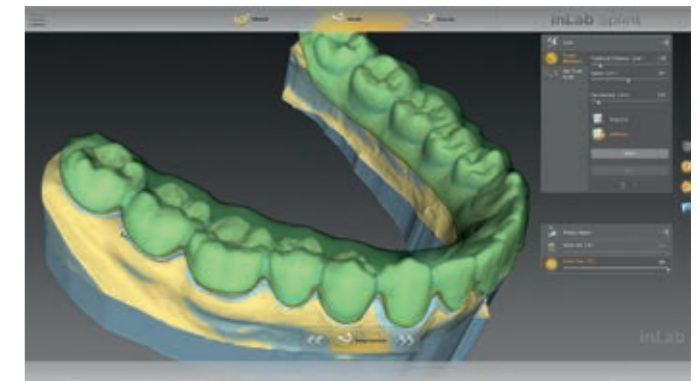
The inLab Software and inEos X5 are used to scan the situation, including the bite block, with subsequent transfer to the inLab Splint App. Alternatively, you can also use STL scan data.\*



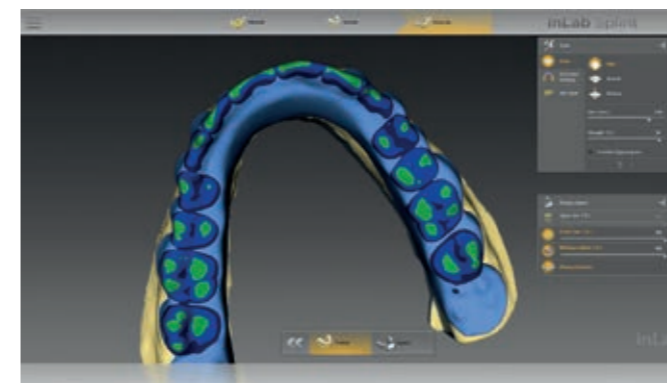
Undercuts on the cast are visualized by colored undercut alerts.



The undercuts are automatically blocked with wax. The wax can also be applied individually.



The splint can be designed individually.



A number of different tools allow for considering the opposing teeth relationship.



The splint design can be exported as an STL file\* and then produced with milling or additive methods.

\* inLab CAD SW Interface module required



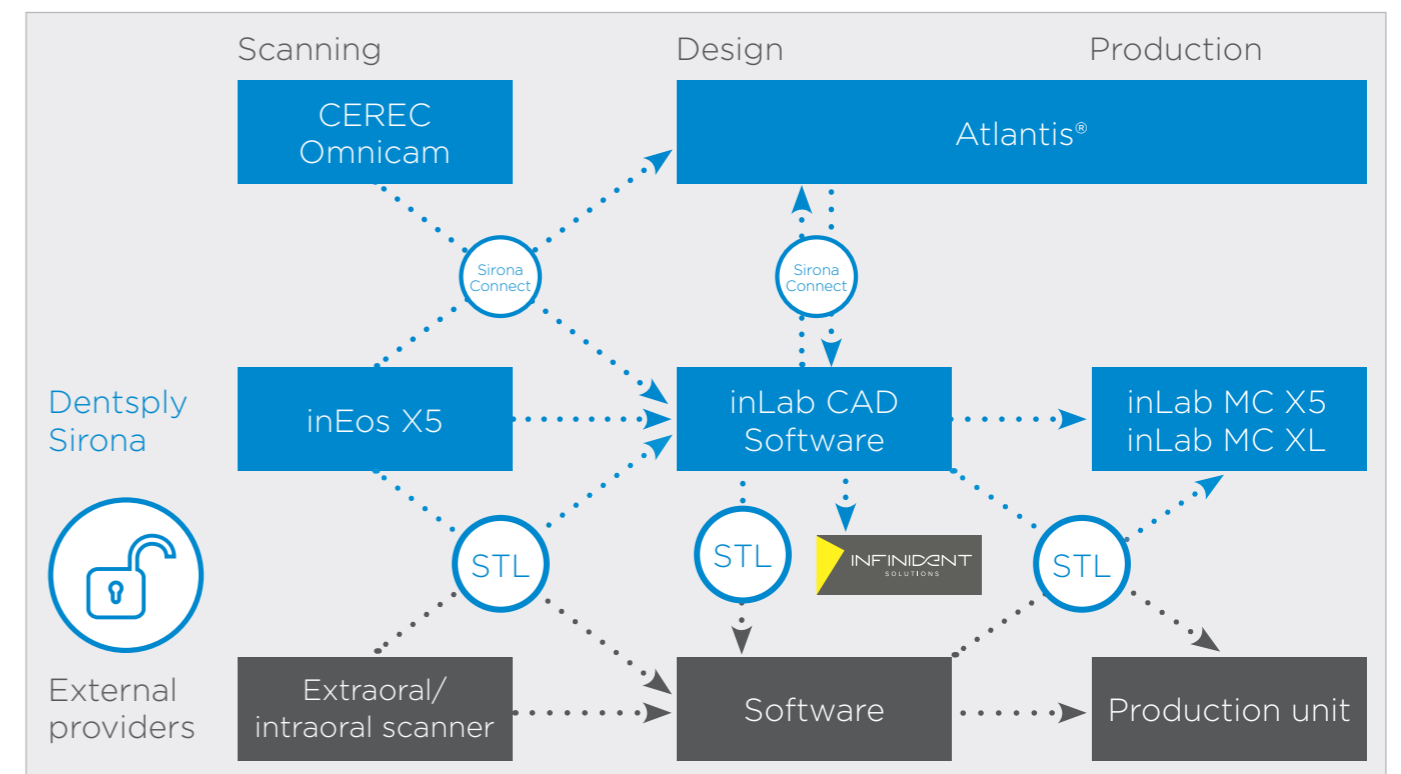
## inLab CAD SW 18.0: Interface module

inLab is open. With the inLab CAD Software, dental labs can choose whether to perform the entire CAD/CAM process with the matching inLab components of Dentsply Sirona or whether to include individual solutions by other manufacturers.

The optional Interface module of the inLab CAD Software with a single license for all available inLab interfaces offers a flexible connection of the inLab CAD Software to virtually all existing CAD/CAM systems.

### For example:

- STL import of scan data (extraoral and intraoral scanner), e.g., for design with inLab CAD Software and production with inLab MC X5 or inLab MC XL
- STL export of inLab restoration data, e.g., for finalizing with other production systems
- STL export of Sirona Connect intraoral scan data, e.g., for design in another CAD software
- STL export from designed model data, e.g., for external model production

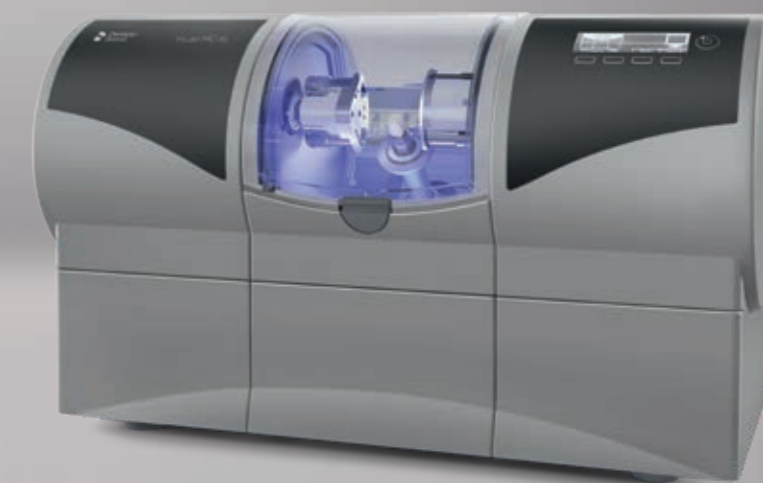


## inLab CAM Software 18.0

### For a perfect workflow

The two applications, inLab CAD Software for restoration design and inLab CAM Software for production with inLab MC X5 or inLab MC XL, are optimally connected to each other and ensure the seamless transfer of design data to automated production.

The inLab CAM Software was specifically developed for the production units inLab MC X5 and inLab MC XL and is also open for STL data imports from other CAD applications. Thanks to the user-friendly interface, all necessary work steps, system configurations and integrated service functions can be carried out quickly and easily. Moreover, the software offers a valuable documentation tool for the quality management of dental laboratories with all essential information on job history, produced workpieces, and materials used.



#### Exemplary efficiency and safety

- Start of production immediately after order preparation: no waiting for milling path calculation
- Graphic tool and process start management with perfect overview of workpieces, tools, service life, necessary tool magazines etc.

#### **NEW from inLab CAM SW 18.0:**

- Extensive archiving functions

#### Optimal material utilization

- Comprehensive positioning functions and automatic collision control
- Automatic tilting of restorations to available blank sizes
- Automatic undercut detection and individual adjustment function
- Multi-block management for up to seven blocks of different materials in a single order

#### **NEW from inLab CAM SW 18.0:**

- Option to restore milled areas in a material blank

#### Device and tool management

- Material-specific milling and grinding strategies for occlusal and interdental design details, surface quality or reducing the size of support pins
- Individual determination of detail levels for various production modes (number of process steps, path spacing and processing speeds)
- Touch-optimized operating functions for control via tablet PC

#### **NEW from inLab CAM SW 18.0:**

- New tool status display for information about tool wear with use of validated materials
- Additional validated materials from Dentsply Sirona available for selection: Cercon ht, Cercon xt, Wax Disc, Multilayer PMMA, Shaded PMMA, Burnout PMMA Disc, Celtra Duo and Lucitone 199 (prosthesis material)

#### Compatible for STL import

- XML-based STL import of restoration data from e.g. 3Shape (\*.3ox) and Exocad (\*.constructioninfo) with essential element information such as type of restoration, preparation margins, insertion axes, screw channels, tooth numbers, etc.
- Import of complex implant cases, including screw channel input and prep line setting
- Clear preview and easy data input

## Dentsply Sirona

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## Procedural Solutions

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Orthodontics  
Endodontics  
Implants  
Prosthetics

## Enabling Technology

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Imaging  
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Instruments

