

inLab

# Freedom of choice for the dental lab

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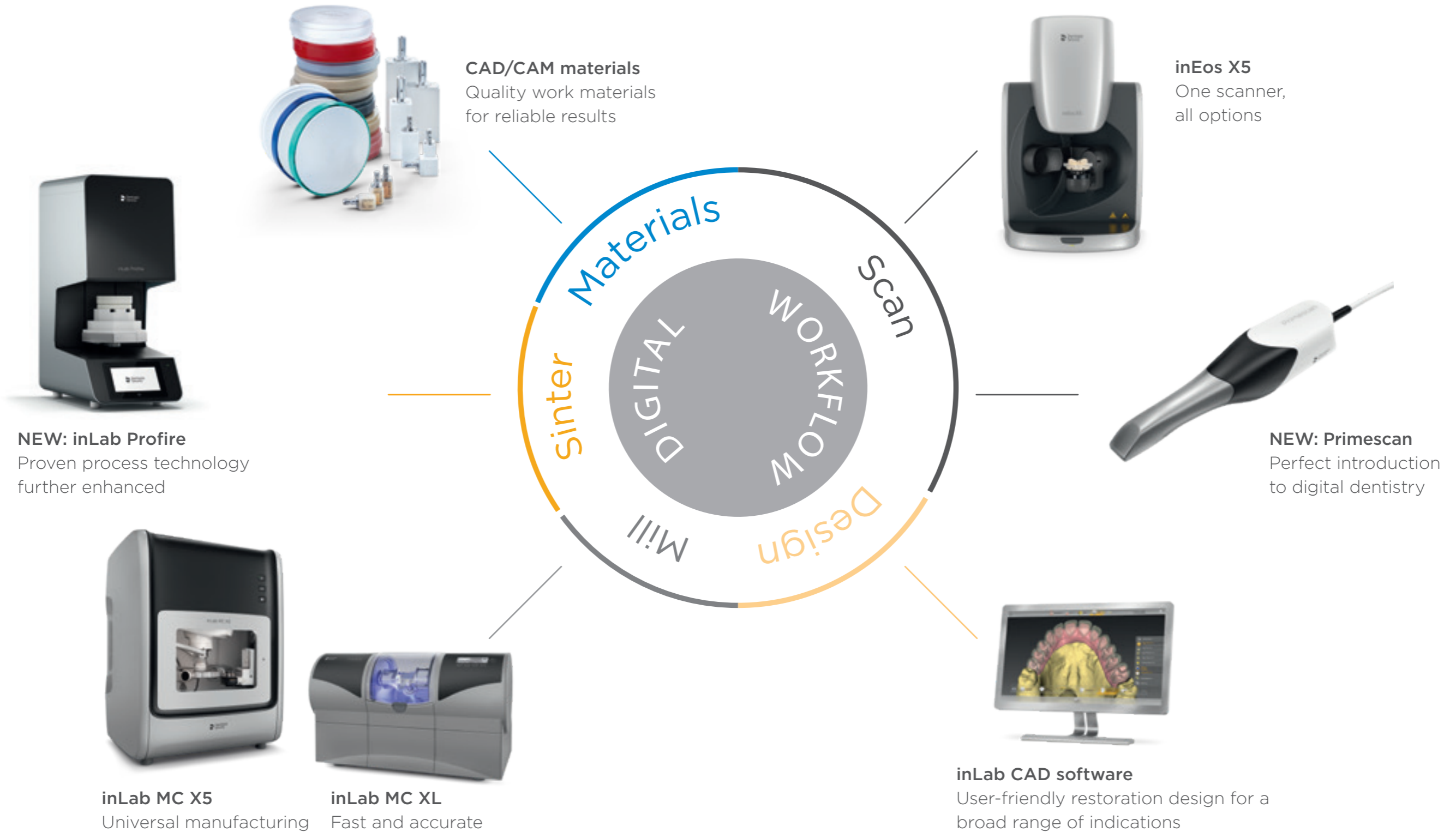
## inLab: freedom of choice for the dental lab

CAD/CAM with inLab - now you have freedom of choice for scanning, designing and fabricating. Your dental lab is all set for the future with new high-performance inLab components. Scanners, software and production units are now optimally coordinated and even more in tune with the dental technician's needs. Together they ensure the greatest variety of materials for a broad range of indications and user-friendly applications. In addition, Connect Case Center gives you access to the largest installed base of digital intraoral impression systems. inLab is open and STL interfaces permit flexibility when integrating existing CAD/CAM solutions for independent and cost-efficient production processes.

# The digital workflow in a coordinated system

An unbeatable combination of powerful CAD/CAM components: Dentsply Sirona is committed to developing innovative quality products and coordinated solutions within carefully validated processes in order to provide comprehensive, secure digital workflows for all prosthetic work carried out in dental labs.

inLab users benefit not only from the powerful CAD/CAM hardware and software components of the inLab system. They can also access and integrate the broad portfolio of Dentsply Sirona along the entire digital process chain, whether by connecting to outstanding intraoral scan technology or using quality work materials for processing with the inLab system.



## inEos X5: One scanner, all options

The inEos X5 allows you to make scans for all indications and is your lab specialist for every digitization task. The open scanner combines simple operation with object-specific scanning strategies — for complete freedom of application.



## Demonstrated accuracy

The inEos X5 was developed by Dentsply Sirona according to the highest quality standards for optical measuring systems. It has quickly become the gold standard in scanning technology. The inEos X5 ensures high accuracy for all digitization work of interest to the dental technician — from the palate to the tip of the scanbody.

### Precision

The accuracy of the results of the inEos X5 with inLab CAD SW 16 was verified according to DIN EN ISO 12836:2015. The demonstrated accuracy on standard “bridge” test specimens was at  $2.1 \pm 2.8 \mu\text{m}$ , and on standard “inlay” test specimens,  $1.3 \pm 0.4 \mu\text{m}$ .



### Implant level screw-retained implant suprastructures

With inLab CAD SW, the application range of the inEos X5 is extended to implant level screw-retained bridges and bars at implant level for implant systems by Dentsply Implants, Nobel Biocare, and Straumann. More implant systems will follow.

The scan data generated by the inEos X5 can be flexibly forwarded downstream to continue the process:

- Design with inLab CAD SW (Implantology Module) and direct transfer to INFINIDENT Solutions for central production
- Design with inLab CAD SW (Implantology Module) and export of the STL/SCI files (Interface Module) to a third-party supplier capable of processing these files,
- Transfer of the inEos X5 scan data to ATLANTIS™ for design and production

### Reliable implant-supported restoration



For screw retained bridges and bars, depending on the implant connection type, we distinguish between the scanbody inPost (for multi-unit abutments) and the ATLANTIS™ FLO-S (for implant level screw-retained restorations).



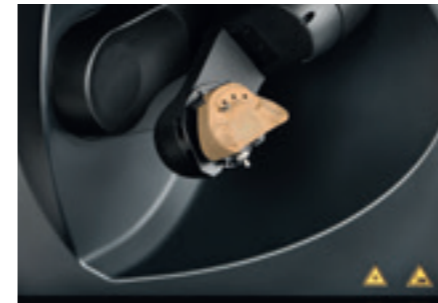
The special scanning strategy for long-span, implant level screw-retained suprastructures determines implant positions with high precision in terms of both position and angle.



The special inEos X5 high-precision calibration set ensures the highest level of scanning accuracy. Quality assurance documents and protocols can be exported in PDF format for archiving.

## Scanning quality “Made in Germany”

All inEos X5 components were specifically developed in Germany for dental application and produced according to strict quality standards. The scanner ensures precise digital acquisition for all preparation types with its robotic arm and unique 5-axis scanning technology, combined with a large working area.



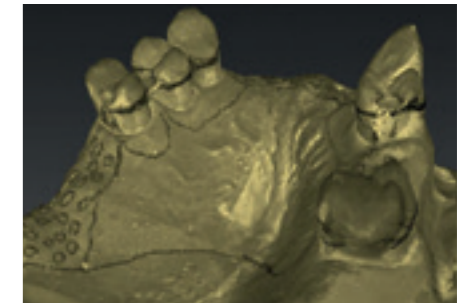
### Implants

Using the new one-piece scanbody (inPost or FLO-S) and the implant scanning strategy, implant positions can be determined with high precision even in extended screw-retained restorations.



### Triple-tray scan

The lower and upper jaw together with the bite registration can be scanned from a triple-tray impression tray for smaller jobs.



### Texture scan

Marks on the model are detected for visual support, for example in partial-denture design using the inLab CAD software.



### Impression scan

The inEos X5 easily scans many different shapes and sizes of impression trays.



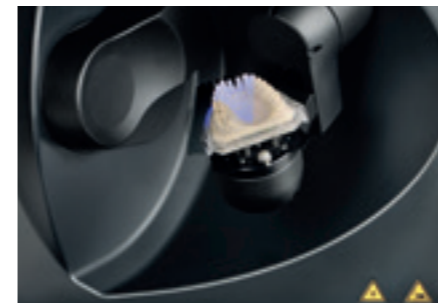
### Multi-die scanning

Up to four prepared dies are scanned automatically and inserted into the digital model with no manual interaction.



### Wide operating range

Allows the positioning of most common articulators and gives fast, unobstructed access to the scan object.



### Rapid scanning

Full-arch models are digitized in less than 60 seconds thanks to the large scanning field.



### Manual scanning

Smaller jobs with only a few prepared teeth can be scanned quickly and efficiently in manual mode.



### Workflows

Seamless inLab system integration. Open for STL export. **New** validated workflow with exocad®.

## Digital impressions with Dentsply Sirona – Accurate, fast and secure

Accurately capturing the clinical situation paves the way to first-rate prosthetic results. As a complete digital reflection of the intraoral situation, the virtual model opens up a world of possibilities for indications and workflows in practices and labs. With Primescan – the latest generation of intraoral scanners by Dentsply Sirona – digital impressions are more accurate, faster and simpler than ever before.



## Primescan – the perfect starting point into digital dentistry

The new intraoral camera is easy to use, has extremely accurate sensors, and creates 3D models in true color and with unsurpassed resolution. Primescan also enables digital workflows for all types of work done between the practice and the lab.



### Accurate

The innovative Smart Pixel sensor processes more than 1 million 3D points per second to generate photo-realistic, ultra-precise data. The Dynamic Depth Scan technology enables perfect image definition and outstanding precision, even at a depth of up to 20 mm – a special advantage for deeper-lying indications. Thanks to Primescan's ability to scan with an incredible data density, the system generates complete 3D structures of all areas in the field of view, right from the first scan.

### Fast

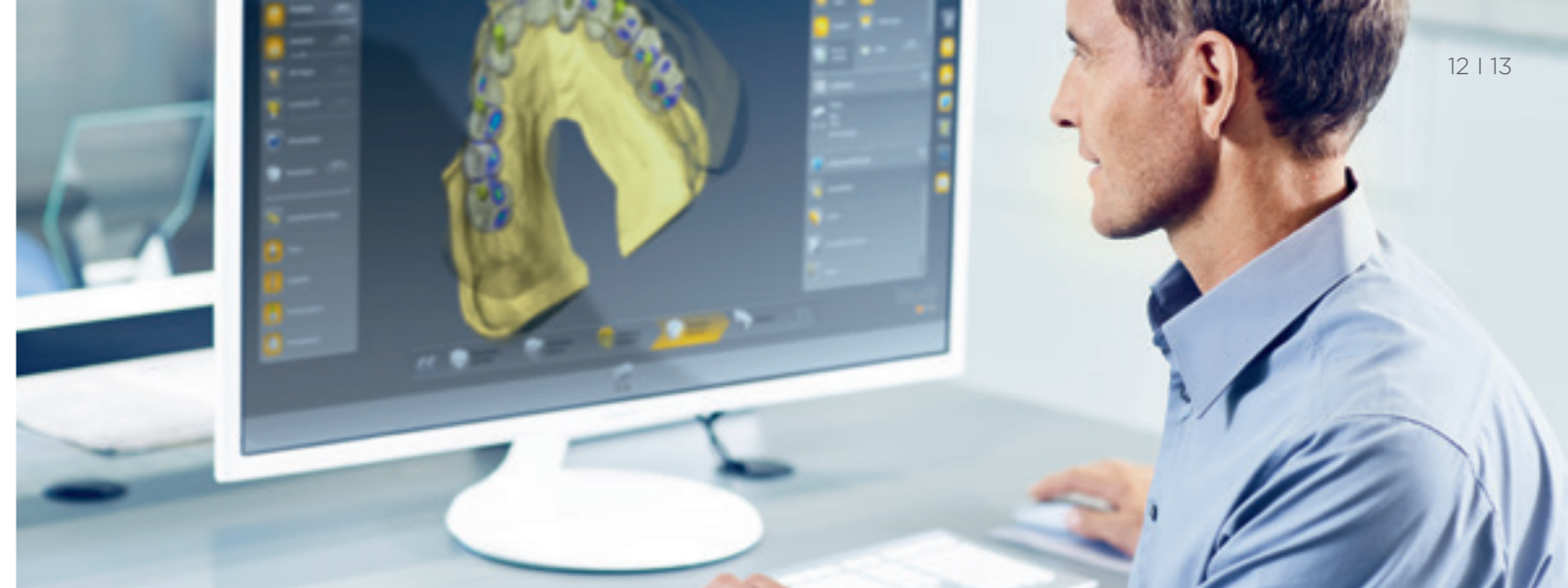
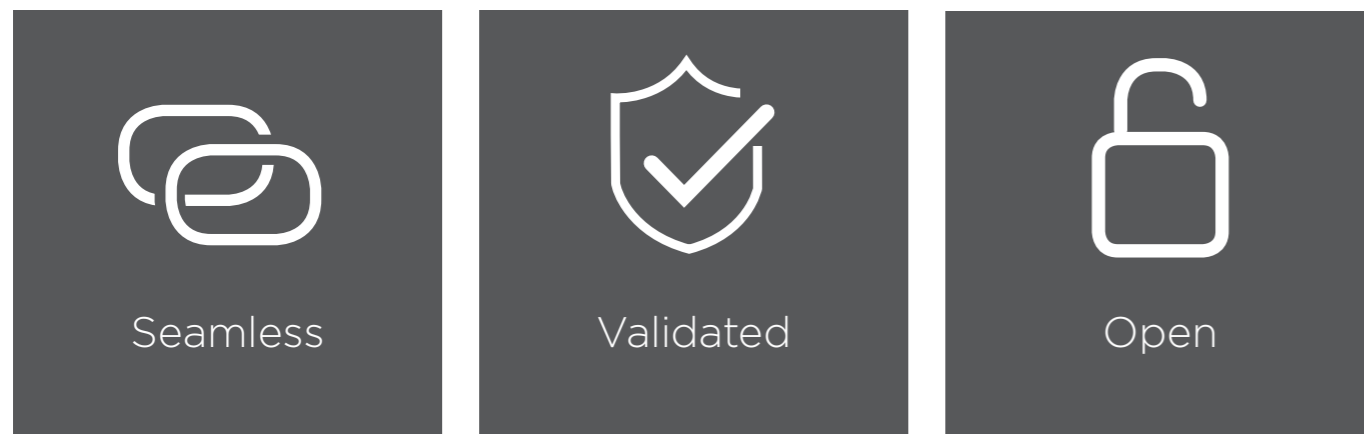
The unique Primescan technology allows for easy capture and faster processing of more data and with a higher resolution. The intelligent data processing of Primescan ensures optimal interaction with the software by giving it exactly the data it needs to proceed. The result: Complete 3D models are displayed immediately, whatever the scanning speed.

### User friendly

Thanks to its continuous self-heating feature, Primescan is ready for use at any time. Steep angles? Hard-to-reach areas? Shiny materials? A snap with Primescan. Thanks to the expanded field of view, larger areas are visualized with fewer sweeps. The excellent scan results are displayed promptly on the touch-screen of the new acquisition unit.



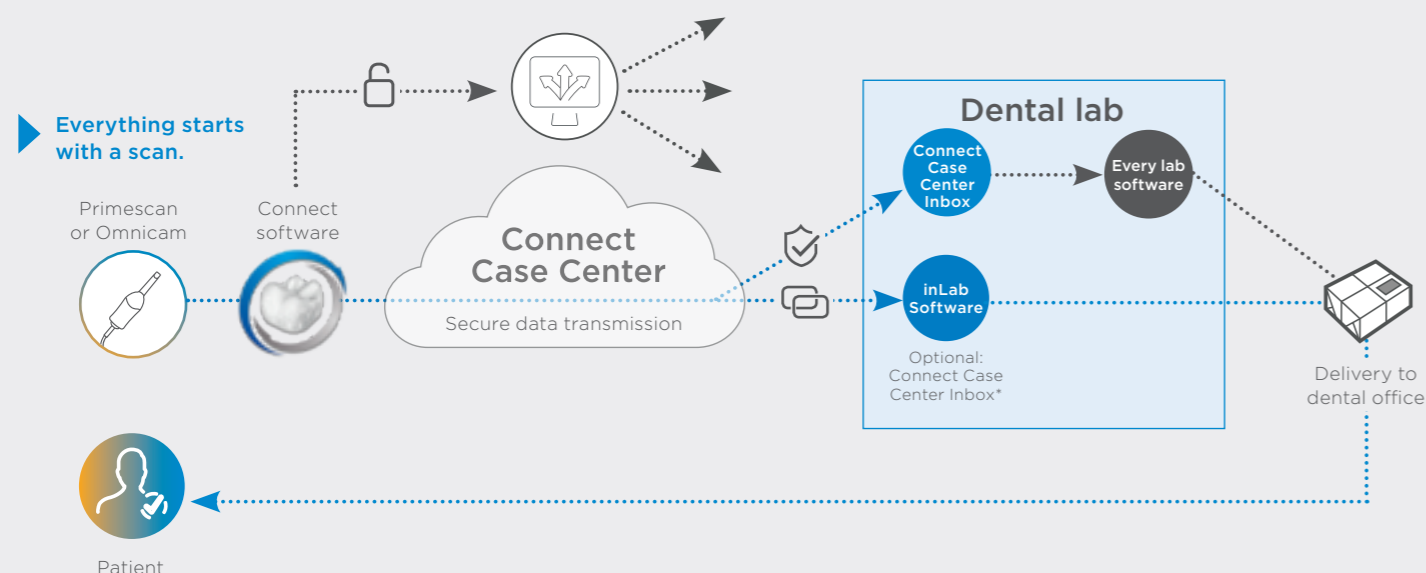
**Primescan acquisition unit:**  
The battery capacity makes it also suitable for mobile use.



## Digital impression: From clinician to lab

Dentsply Sirona offers clinicians and labs a sophisticated workflow tailored to meet their needs in a digital collaboration. With the new Connect Case Center, dental labs can quickly and securely receive scan and order data. Every lab that performs the one-time registration with Connect can be selected from the portal by dental offices and receive Connect case assignments.

The Connect Case Center transfers digital orders to the dental lab simply and securely within seconds. inLab users benefit especially from the seamless integration with inLab CAD software. Through a validated process labs can also continue to work with their current software to securely receive complete digital patient cases via the new Connect Case Center Inbox. Alternatively, they can also receive 3D data models as open STL files.



\* Connect Case Center Inbox can be used optionally and will be included in inLab SW 19.0 Basic module (expected to be launched in May 2019).

## For maximum security: Coordinated processes with inLab

Even with the basic module of the inLab CAD software, dental labs that have completed the one-time registration have direct access to the Connect Case Center Portal – the digital transfer platform for digital impressions generated by Dentsply Sirona intraoral scanners.

### Connect Case Center:

#### From dental office to inLab lab

- Direct access to the Connect Portal from the inLab CAD software
- Conveniently send additional data, such as patient images
- Stay informed with the Connect App: Receive, review and track orders online with your tablet or smart phone
- Chat function and integrated Skype connection for in-person information sharing
- Optional access via new Connect Case Center Inbox\*

#### From one inLab lab to another

- Convenient and secure receipt of scan, restoration and order data
- Secure transmission of inLab scan data or finished restoration data from one lab to another, directly from the inLab software
- Expanded production capacities and use of outside expertise
- Use and/or offer design services for labs Order-specific chat via Connect Portal
- No additional costs for separate cloud services or similar
- Access to Atlantis customized patient solutions directly from the inLab software -for the design and manufacturing of abutments and supra-structures at Dentsply Sirona.

### Design service by inLab labs for CEREC practices

The majority of digital impressions sent via the Connect Case Center are transmitted to dental labs by CEREC users. This provides additional dental expertise for complex or esthetically demanding orders. However, the products leaving the laboratory don't always have to be finished restorations. For example, with the digital Design Service, labs can receive an intraoral data set via the Connect Case Center Portal, design the required work with their inLab software, and return the restoration data to the CEREC practice for final processing. A digital service by labs that saves valuable treatment time in practices while leveraging dental expertise.

\* available from inLab CAD SW 19.0 basic module

## inLab CAD Software: Dental design requires good software

The inLab CAD Software is closely aligned with the requirements of CAD/CAM systems in the dental laboratory. As a separate CAD component, the software is independent of the scanning and production unit. inLab CAD SW accommodates need-based indications with its optimized design processes and user-friendly interface.

You have a broad range of indications beyond basic applications you can select with inLab CAD SW. Four software modules cover the most important indications. You remain entirely free to decide if and when you would like to add an available update – no dongle counters, no mandatory updates, no expiration date, and no annual license fee.



Learn more in the brochure "inLab Software - New digital options".

### Need-based design

#### inLab CAD SW Basic Module\*

- Inlays, onlays, veneers, full crown, bridges, copings, bridge frameworks, multilayer, models
- All design tools
- 1:1 copy mode
- Multilayer Gingiva
- Jaw-Oriented Biogeneric Settings (J.O.B.S.)
- Tooth databases
- Virtual insertion
- Virtual articulator
- Smile design
- Gingiva elements
- Access to Connect Case Center
- inLab check of the design data for stress sensitivity

#### inLab CAD SW Implantology Module\*\*

- Screw-retained bridges and bars on multi-unit abutments
- Custom Abutments (zirconia or titanium)
- Implant level screw-retained bridges and bars
- Surgical guides (integrated implantology)

#### inLab CAD SW Removable Dental Prosthesis Module\*\*

- Removable partial denture
- Custom impression trays
- Splints
- Telescopes
- Bars
- Individual attachment prostheses with original elements

#### inLab CAD SW Interface Module\*\*

- One license for all available interfaces
- Flexible integration of the inLab CAD software into nearly all existing CAD/CAM equipment

\* Required for all other modules. \*\* Requires the inLab CAD SW Basic Module



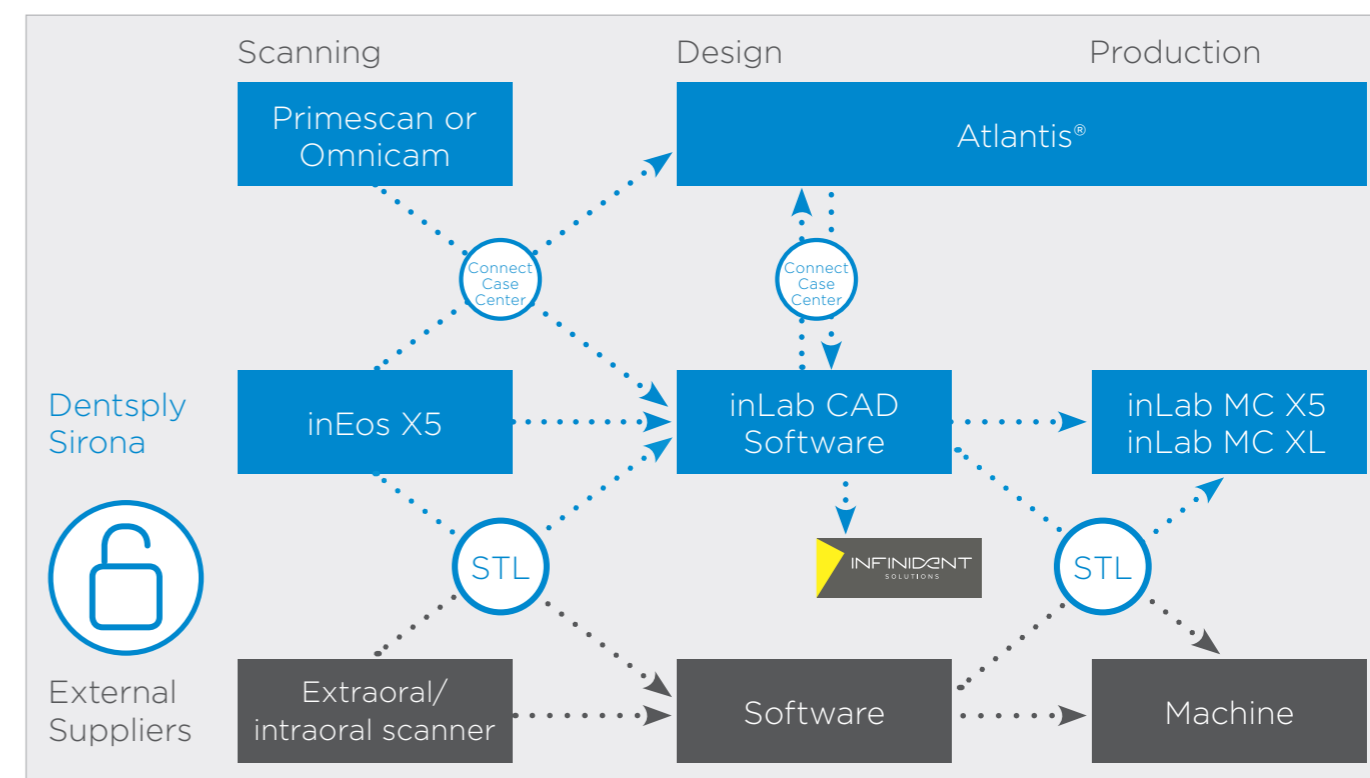
## inLab CAD Software Interface Module: Staying flexible

With inLab CAD software you can decide on a case-by-case basis whether to complete the entire CAD/CAM process with the inLab components from Dentsply Sirona or use individual solutions from other manufacturers.

### inLab is open

The optional Interface Module of inLab CAD SW gives you more versatility for your CAD/CAM infrastructure. Example:

- STL import of scan data (extraoral and intraoral scanner), e.g., for design with inLab CAD SW and production with the inLab MC X5 or inLab MC XL.
- STL export of inLab restoration data, e.g., for processing on other production units
- STL export of designed model data, e.g., to an external model production facility



INFINIDENT Solutions GmbH is an open, digital CAD/CAM service provider for in-practice labs and dental laboratories in Europe for all manufacturers and systems. As a preferred partner of Dentsply Sirona, INFINIDENT supports inLab users in the production of high-quality restorations, working models and removable dentures, including implant-based restorations. For more information, visit [infinidentsolutions.com](http://infinidentsolutions.com)

## Manufacturing with inLab

inLab MC X5 and inLab MC XL are designed to meet dental requirements in labs and focus on economic and effective production processes: inLab MC X5 as a universal 5-axis production unit for wet and dry production of blocks and disks; inLab MC XL as an effective milling and grinding unit for quick and accurate results.

Users of both machines benefit from a wide range of materials and can select from the high-quality materials of Dentsply Sirona and its CAD/CAM material partners for which the production processes of inLab MC X5 and inLab MC XL are optimized.



### Wide range of indications

The application range for inLab MC X5 is continuously growing, enabling dental labs to make productive use of their equipment. Processable disc height and setting angles offer flexibility for manufacturing implant restorations with heavily diverging screw channels or abnormally shaped stumps.

### Open

inLab MC X5 and inLab MC XL perfectly complement the inLab components inEos X5 and inLab software. For more flexibility when connecting to other CAD/CAM systems, the inLab CAM software can also accept STL data imports and XML-based STL files from restoration data generated in 3Shape (\*.3ox). Moreover, the newly coordinated interface with exocad® (\*.constructioninfo) enhances the reliability of production processes in the digital workflow.

### Accurate high-speed grinding with inLab MC XL

The simultaneous, dual 4-axis processing with inLab MC XL offers a wide range of production options and the outstanding accuracy of its wet processing. Glass and hybrid ceramic restorations can be produced with unprecedented speed (a Celtra Duo crown in less than 10 minutes), allowing for same day service for urgent cases.

The processing of glass ceramics involves grinders up to 0.6 mm Ø – for restorations with the highest regard to detailed occlusal surfaces, interdental areas and for the preparation margin.

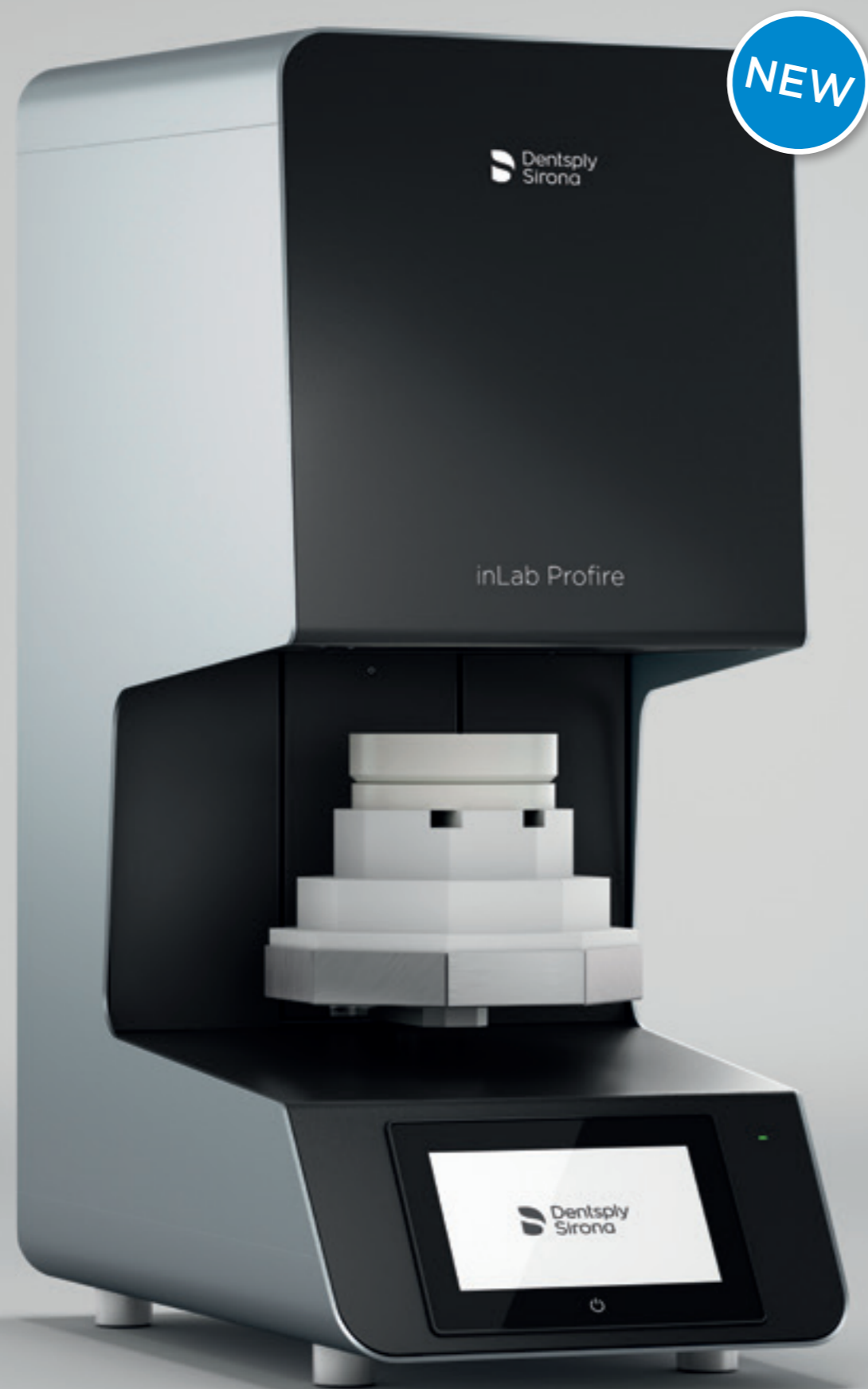
### inLab CAM software for efficient production control

Two machines – one perfect workflow: The inLab CAM software was specifically developed for use with the Dentsply Sirona production machines inLab MC X5 and inLab MC XL. Thanks to the user-friendly interface, all necessary work steps, system configurations and integrated service functions can be carried out quickly and easily. Additionally, the software offers a valuable documentation tool for the quality management, with all essential information on job history, finished elements, and materials.

Material partners:



Learn more in the brochure  
"Efficient, systematic manufacturing".



## inLab Profire sinter furnace - Enhanced process technology

The new inLab Profire furnace for zirconium oxide and base metal restorations integrates proven process technology with a new design; an enhancement that improves process safety and the consistency of sintering results.

High-grade heating elements that have been tested in long-term tests as well as homogeneous temperature distribution in the furnace chamber provide precise temperature control throughout the sintering process, for high quality sintering outcomes and reproducibility.

The new ordered touch screen offers optimum user comfort and allows for fast and simple execution of all furnace features. The redesigned user interface clearly displays program status and interaction options.

### Powerful

- Conventional long-term sintering of zirconium oxide
- Speed sintering for single restorations, frameworks and bridges
- "Dry & Sinter" - Sintering with pre-drying which can be easily activated before each process

### Flexible

- Sintering of zirconium oxide and sinter metal (inCoris CCB) with just one furnace
- Quick and easy transition between sintering zirconium oxide and sinter metal

### Reliable

- Preprogrammed for validated sinter materials from Dentsply Sirona
- Optional free programming for long-term and speed sintering of zirconium oxide
- Automatic argon monitoring for correct argon flow for sinter metals

### Time-saving

- Quick heating rate (up to 120 °C/min.)
- Programmable autostart feature
- Simultaneous sintering of up to 60 pieces\* when stacking two sintering bowls



Learn more in the brochure "inLab Profire sinter furnace".

\* for zirconium oxide; depends on the size of restorations and sinter supports

## CAD/CAM materials: Wide range of indications

The inLab MC X5 and inLab MC XL laboratory units cover a wide range of indications – now and in the future. They support a broad selection of materials available on the market. Whether blocks or disks – you are completely free in your choice of materials. The inLab milling and grinding strategies are optimized for the high-quality materials of Dentsply Sirona and its material partners continually – ensuring reliable, high-quality results.



Learn more in the brochure "CAD/CAM materials for the dental laboratory".

### CAD/CAM Materials from Dentsply Sirona:

#### Cercon® disks

Cercon with True Color Technology – unparalleled shade accuracy when it comes to reproducing the classic 16 VITA® shades (98 and 105 mm).

Cercon ht – high translucent zirconia for a wide range of indications in the anterior and posterior region (1200 MPa).

Cercon xt – extra high translucency with a lifelike esthetics especially for the anterior region (750 MPa).

**NEW!** Cercon xt ML, an extra translucent Cercon multilayer disk (750 MPa).

#### inCoris disks

Standard-size disks (98.5 mm) in classic zirconium oxide (inCoris ZI), as well as for the production of surgical guides (inCoris PMMA guide) and non-precious metal sintering production (inCoris CCB).

#### Celtra® Duo blocks

The new generation of high strength glass ceramics – Zirconia-reinforced lithium silicate (ZLS). A unique combination of excellent esthetics and high strength, excellent VITA® shade matching and simple and fast processing.

#### CEREC Blocs C and PC

Feldspar ceramic in VITA Classic shades for inlays, onlays, veneers, and full crowns. Polychromatic version (PC) for natural enamel-dentin-cervical layering.

#### PMMA disks

Provisional PMMA (Polymethyl-methacrylate) disks for complex restorations or when a long healing period is required. Available as a shaded and multilayer version in 16 VITA® shades and bleach. Efficient milling, easy polishing, natural fluorescence, biocompatible.

Burnout PMMA disks to create for precise casting or pressing of metal and all-ceramic frameworks. Can be tried-in in the patients mouth.

#### Waxes disks

High quality wax disks ideal for precise casting or pressing of metal and all-ceramic frameworks. Burns out clean without residue.

#### inCoris blocks

Zirconium oxide blocks (inCoris ZI, inCoris TZI and inCoris TZI C) in various sizes.

#### CEREC Blocs C In

Blocks for anterior tooth restorations with an inner high-chromatic dentin core covered by a translucent layer of enamel.

\* VITA is a trademark of VITA Zahnfabrik

**Dentsply Sirona**

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