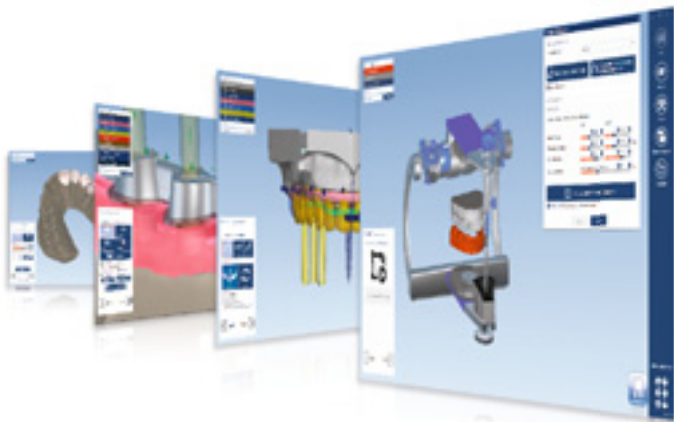# Planmeca PlanCAD® Premium

Flexible design software for prosthetic restorations

PLANMECA

Planmeca PlanCAD® Premium

Unmatched flexibility at every step

Planmeca PlanCAD® Premium is an outstanding software for the design of dental prosthetics. Its ease of use, comprehensive selection of indications, and adaptability to different user needs makes the software an ideal tool for creating high-end prosthodontic works.

Flexibility with unrivalled tools and add-on modules

Facilitate your design process considerably by utilising user-friendly tools with exceptional features for advanced applications. You can make changes to your designs without the need to redesign.

Planmeca PlanCAD® Premium's modular structure allows it to grow together with your business. Additional indication types and features can be activated directly in your software.

Keep it simple or go in-depth – the choice is yours

Planmeca PlanCAD Premium can be tailored to different professional needs. You can work through all the necessary steps with a guided Wizard and switch to the software's Expert Mode as more freedom and advanced tools are required.

The power of open STL

The potential of truly open STL data lies in the option to import, export, and edit STL meshes without constraints. Planmeca PlanCAD Premium is an open toolkit for creative minds – the software provides you with the freedom to utilise data from different sources without additional costs.

Keep your options open with a solid infrastructure

- Pave the way for more business with intraoral scan data imports from several scanner systems and import options for open laboratory scanners
- Keep your system agile and ready to cater to the individual needs of your patients with over 40 implant libraries from different implant and component manufacturers
- Flexibly manufacture in-house or outsource – optimised material configurations and libraries for milling units, milling centres, 3D printers, and print services are available

Modules

Standard	Crowns, copings, anatomical copings, monolithic restorations and frameworks Bridges Inlays, onlays, and veneers Wax-up designs Telescopic crowns Virtual articulators
Additional: Abutment and implant Bar/Bridge module	Custom abutments (screw-retained and cemented) Implant bar and bridge designs
Additional: Bite Splint module	Bite splints
Additional: Model Creator module	3D printed models
Additional: Provisional	Provisional crowns and bridges
Additional: ZRS Tooth Library	An extensive library of natural teeth by Manfred Wiedmann

Wide range of indications

Take advantage of a comprehensive selection of work types for prosthodontic design
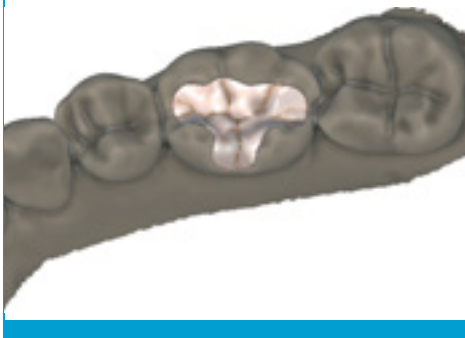
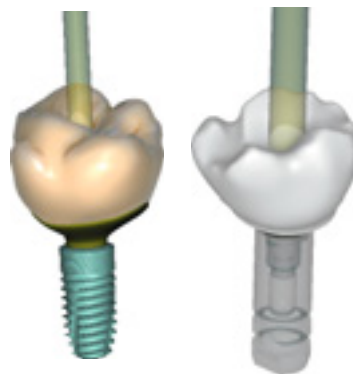## Full anatomical restorations

- Single units
- Bridges

Inlays, onlays, veneers, table tops, and Maryland bridges

Bite splints and impression trays

Copings

- Copings with cutback options
- Offset copings
- Bridge frameworks with a bridge splitting option

Implant abutments

Customised abutments
(screw-retained and cemented)

Telescopic crowns

Models based on intraoral scan data
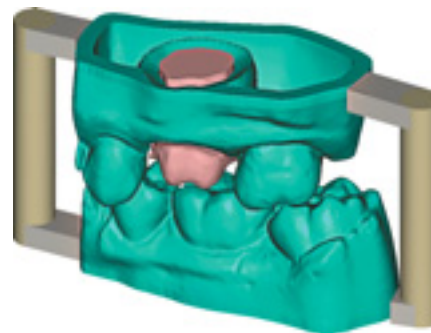
New! Implant models with library information for implant analog slots

Provisional crowns and bridges
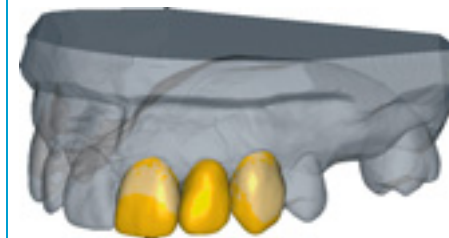
Positioning guides for crowns and implant abutments

Implant bridges and bars

Partial framework

Coming soon!

Full dentures

Coming soon!

Versatile design tools

## Free-forming tools for both restorations and scan data

- Benefit from unrivalled mesh editing options
- Create precise approximal and occlusal contacts with easy-to-use adjustment tools
- Optimise parametric crown margins
- Utilise an extensive library of attachments that can also be reduced from designs
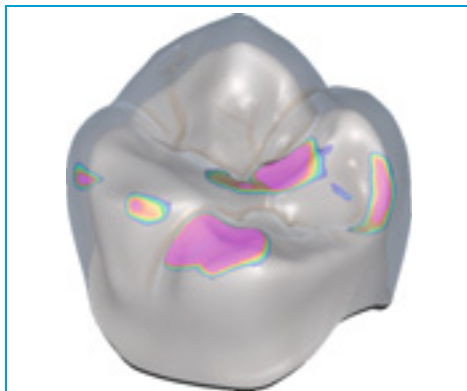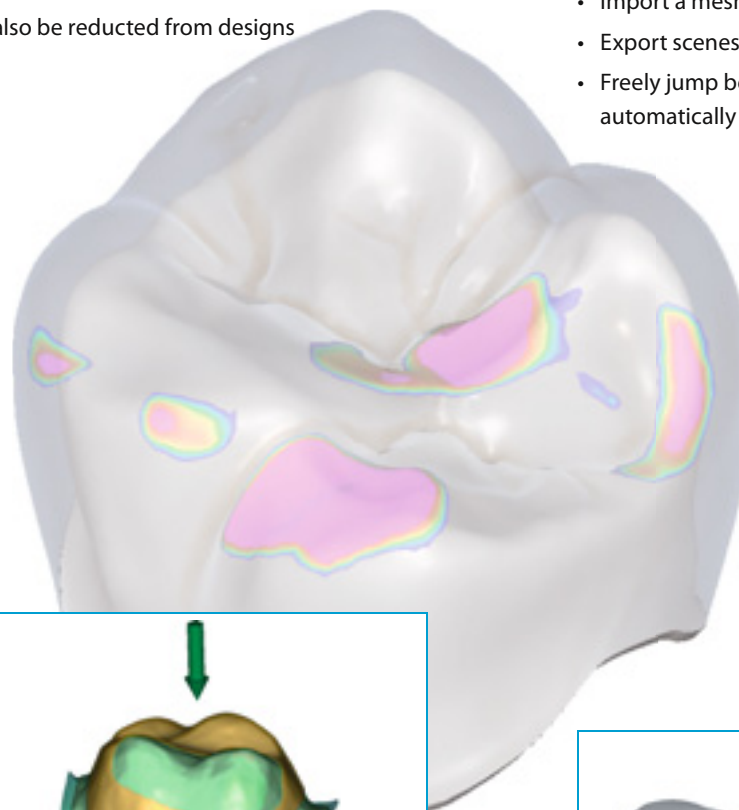

Visualise proximity and intersections throughout the design process
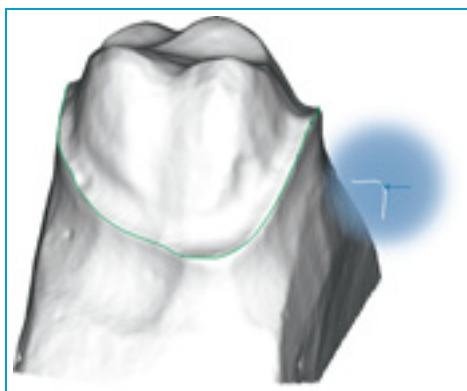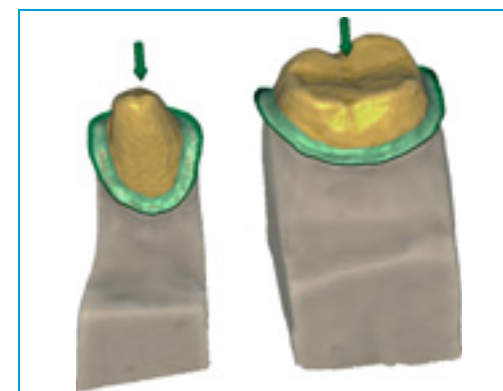

Utilise clever margin detection tools
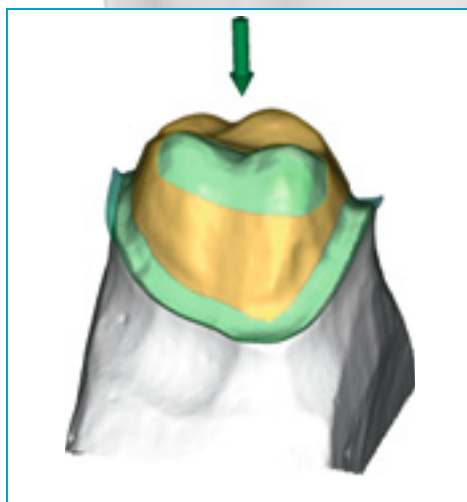
Customise the cement gap with a paint tool

Advanced features in Expert mode

Discover the freedom of computer-aided design

- Import a mesh during the design process
- Export scenes as STL files at any step
- Freely jump between design steps and make modifications – your design will automatically adapt to the changes

Set the insertion direction individually or use the same direction for all units – you can select undercut block-out options in accordance with different manufacturing methods
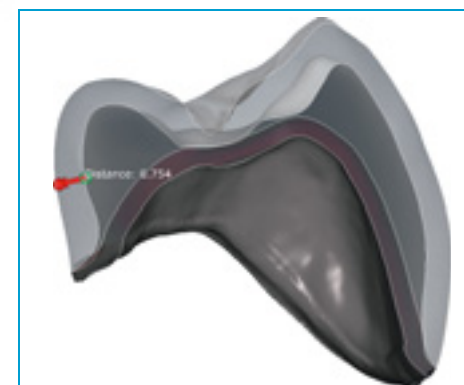
Use measurement tools and cross-section viewing options
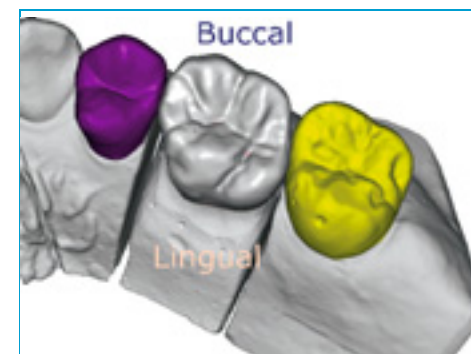
Make use of semi-automatic tooth placement

Virtual articulators

Easily adapt your designs to either static or dynamic occlusions in relation to jaw movements

- Adjust the Bennet angles, immediate side shifts, and condylar angles according to face-bow values
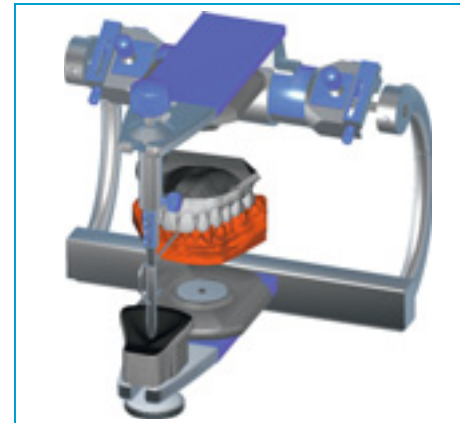- Raise or lower the scanned bite in an accurate and controlled way
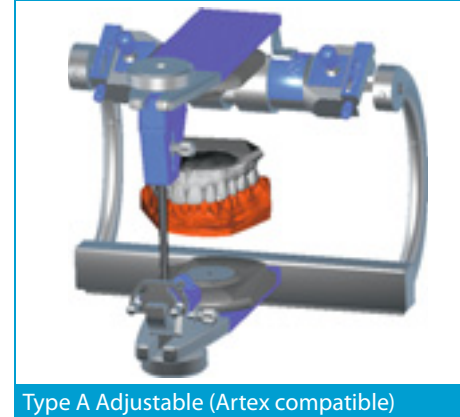

Type S (SAM compatible)

Type P (KaVo Protar 5 Evo Compatible)

Denar Mark 330

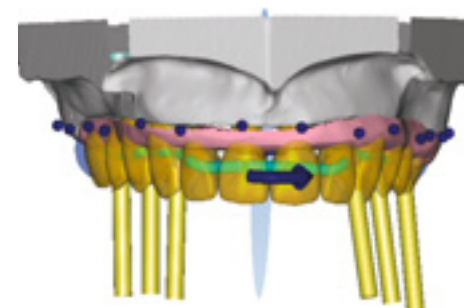Type A (Artex compatible)

Type A Adjustable (Artex compatible)

Bio-art A7 Plus

Bio-art A7 Plus Adjustable

Chain mode

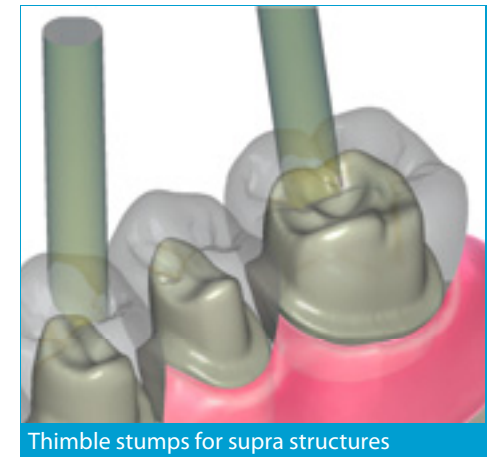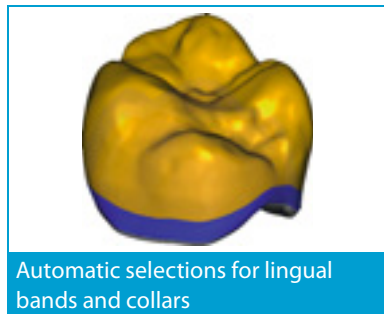New powerful tooth placement tool for large restorations

- Lock and unlock feature for single teeth and group of teeth to move or keep the elements in place
- Copy the geometry of teeth from left to right or right to left
- Utilise the option to keep teeth in contact while positioning
- Scale teeth and move them along the arch either individually or in groups

Top-down design

Use the full anatomy as a starting point for copings and cutbacks to support layering techniques

- Achieve the best aesthetic outcome and save time without having to risk material integrity with refined reduction options for copings
- Use automatic reduction libraries for incisal and facial ridges as well as Thimble stumps and retentive elements for suprastructures
- Apply reductions in several steps to create multi-level cutbacks

Thimble stumps for supra structures

Coping through parametric reduction

Automatic selections for lingual bands and collars

Incisal and facial ridges

Retention elements

Collar

Lingual band

Offset coping

Reductions for partial layering can be done by painting areas that you want to keep fully anatomical
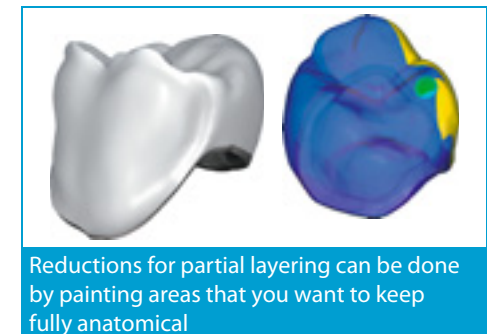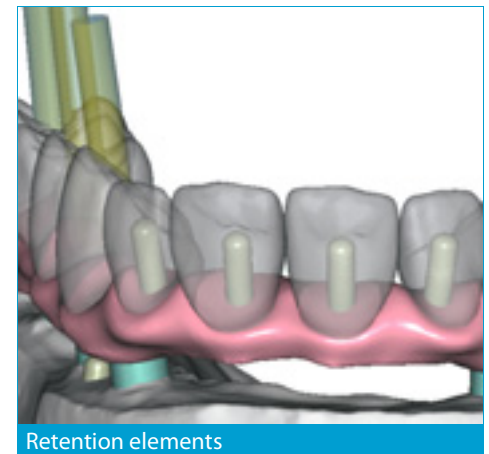
Tooth anatomy/morphology

Variety of tools to achieve the best aesthetic outcome for each case

- Copy or mirror tooth anatomy from the same jaw
- Use tooth libraries to compose the anatomy
- Copy the anatomy from scanned diagnostic wax-ups, dentures, or virtual wax-ups to a design directly
- Use a preoperative scan to either fully or partially reconstruct the prepared teeth or transfer the anatomy from a temporary structure to the final design

Tooth libraries

Several tooth libraries are included in **Planmeca PlanCAD® Premium** – browsing through them is easy.
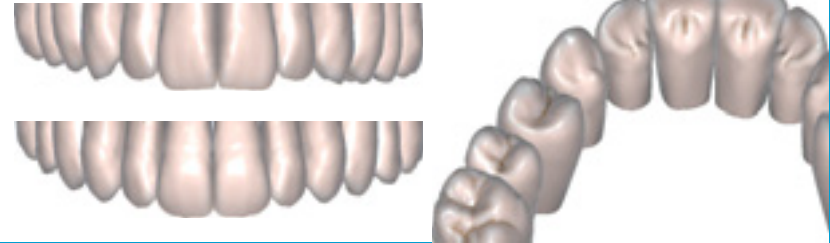
The Signature library by Manfred Wiedman is an add-on module – consisting of 61 sets of upper arch anterior teeth, 19 sets of lower jaw anterior and posterior teeth, and 19 sets of upper arch posterior teeth

Wax-up scans

Copy/mirror tool with quick and automatic tooth anatomy detection

Mirror function | Copy function
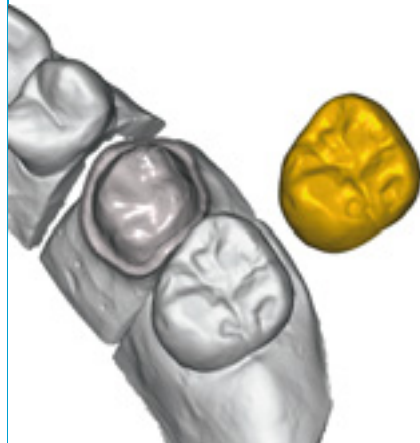
Pre-op scans
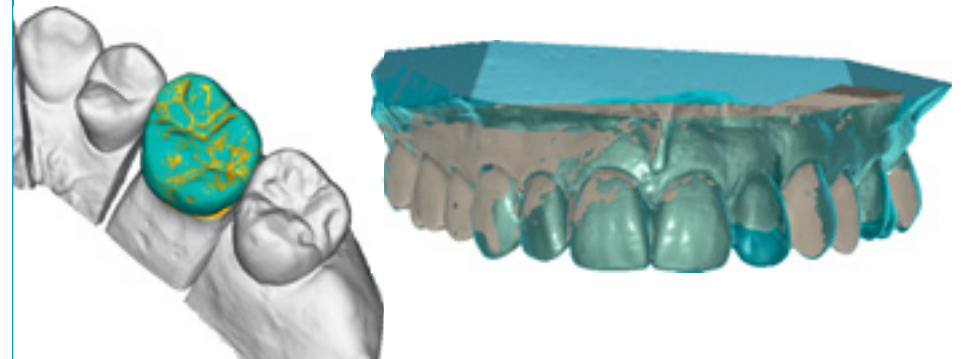
Implant abutments, bridges, and bars

Meet the requirements of modern implant based prosthetics

- Achieve the best possible contact between a restoration and soft tissue with sophisticated implant emergence planning and automatic adaptations
- Exploit multi-layer construction parameters optimised for an impeccable fit
- Take advantage of detailed screw channel adjustment options and angled screw channels
- Benefit from implant libraries that support customised abutment design, titanium inserts, and multi-unit structures*

*Work types that can be executed based on implant library information are always library-specific.

Full anatomic
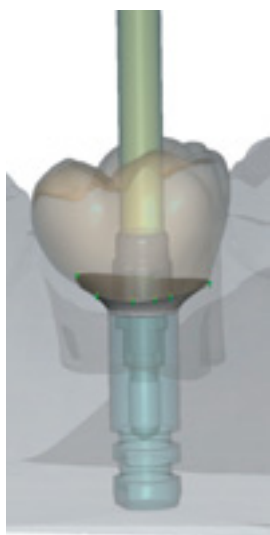
Screw-retained implant crown with a titanium base

Reduced for layering

Screw-retained implant crown with a titanium base

Cemented suprastructure with or without a screw channel

Custom abutment

Screw channel adjustment

Screw retained restorations

Implant bridges from 3 units up to full arch restorations

Implant bridges from abutment or fixture level
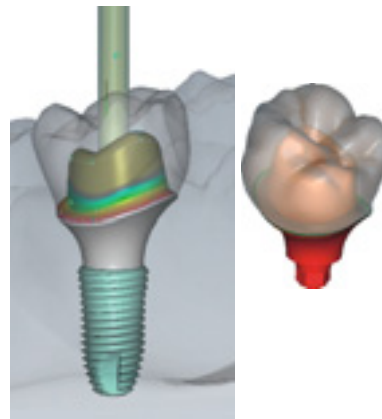
Reduced for direct layering
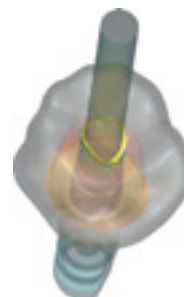
Custom abutment

Monolithic implant crown

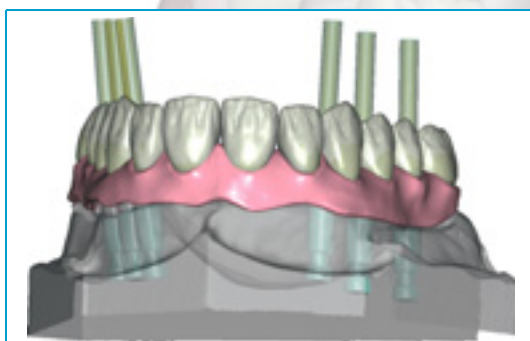Screw retained restorations

Complex structures made simple

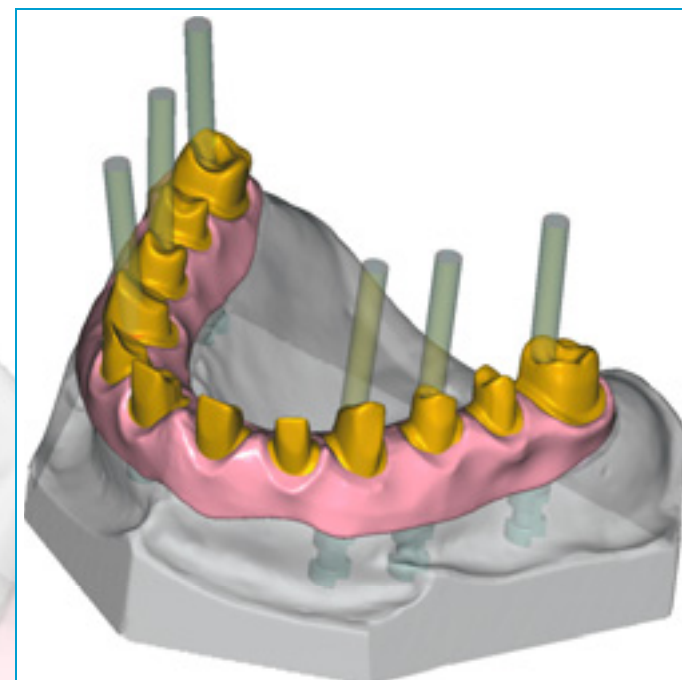## Achieve optimal aesthetics and compliance with clinical requirements

- Virtual gingiva design with a cutback feature
- Cutback options for both teeth and gingiva to support multi-layer constructions in large cases
- One order description – multiple options for results
- Effective and clever tools for modification of big constructions
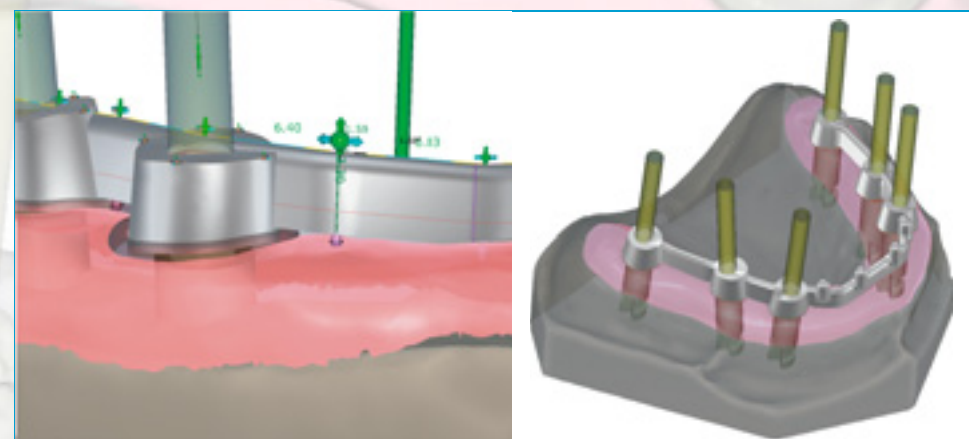- Various implant bar profiles with parametric design options and attachments that can also be reducted from the design
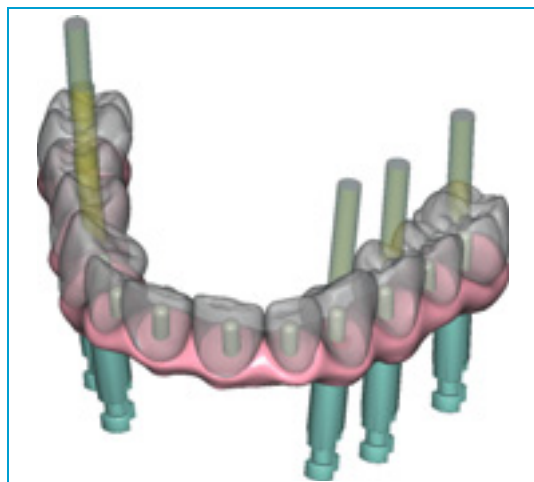
Screw-retained wrap-around structure with retention elements

Screw-retained structure with reductions for cemented crowns

Screw-retained structure with cutbacks for layering or veneering or for fully anatomical restorations

Implant bar design

Bite splint module

Create a variety of splints with different geometries, offsets, and thicknesses

The standard wizard guides you through a classic bite splint workflow, but the flexibility of the module allows you to utilise the tools and your imagination to also create customised impression trays, positioning guides for temporary structures, and implant abutments.
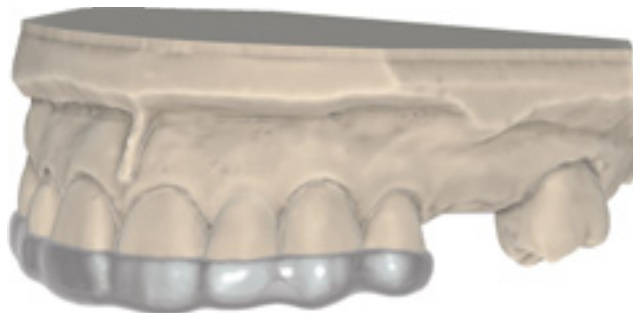

Model creator module

Software module for the creation of 3D printed models

- Design working models based on any open STL data or intraoral scan data by **Planmeca Emerald™**, **Planmeca PlanScan®**, 3M True Definition Scanner, 3Shape TRIOS, or Cadent iTero
- Take advantage of manufacturing options for both milling and 3D printing
- Benefit from support for sectioned models, models with stumps and articulator attachments, as well as 3D printed models with implant analogs* – removable gingiva feature coming soon!

*Only applicable to implant libraries that include a corresponding analog library
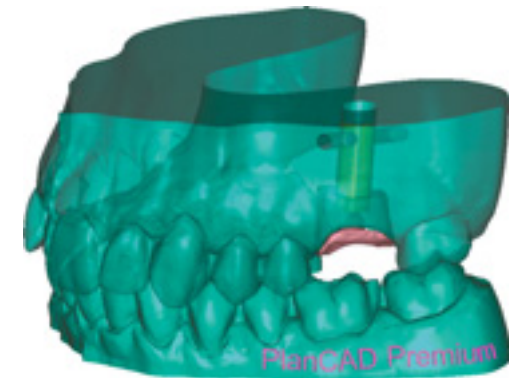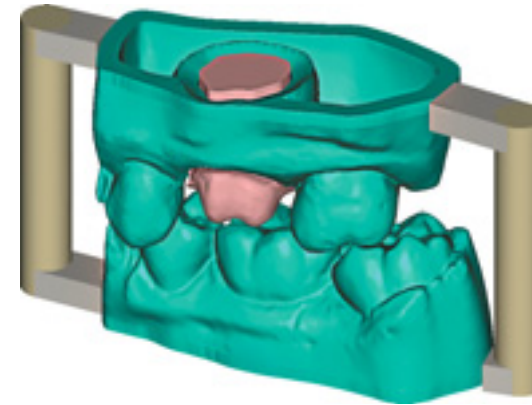
Advanced design and new features

With an open platform software like **Planmeca PlanCAD® Premium**, you have the option to combine information from other high quality open software to expand your business opportunities. Export and import STL files in the correct coordinates for advanced and creative use of your system.
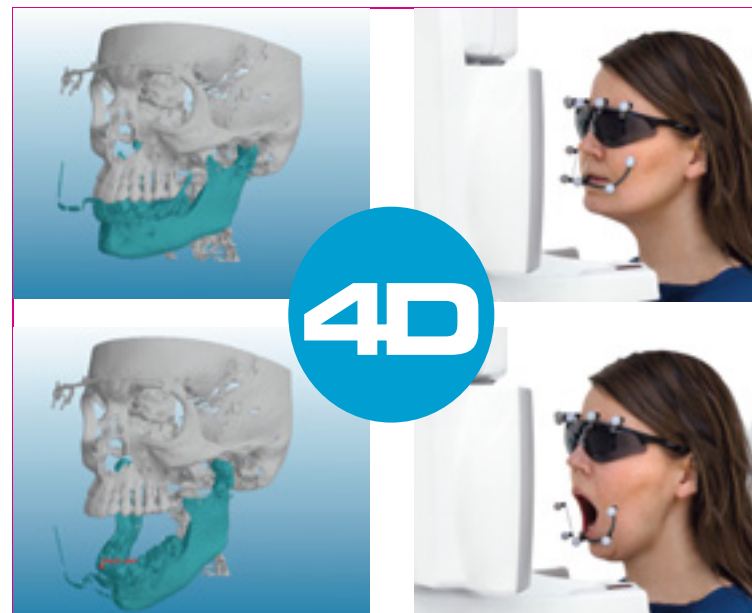

Temporary prosthetics immediately after fully guided surgery – the designs utilise combined scan body and implant library information
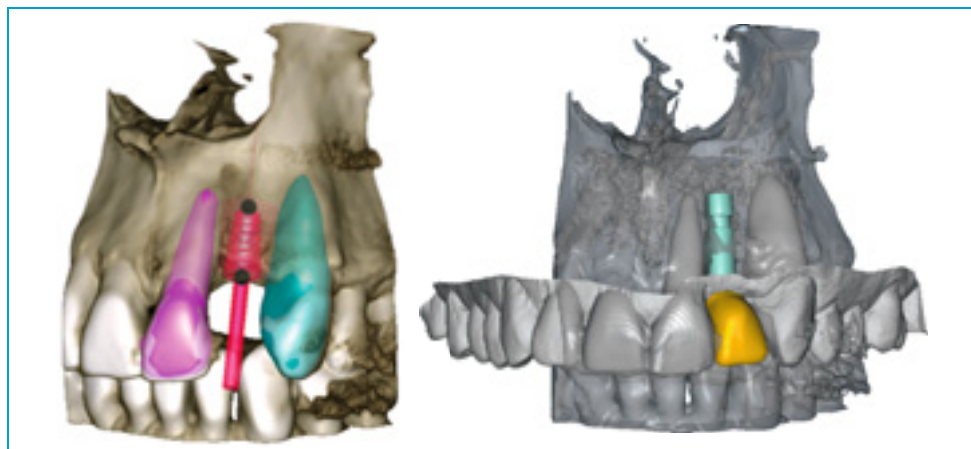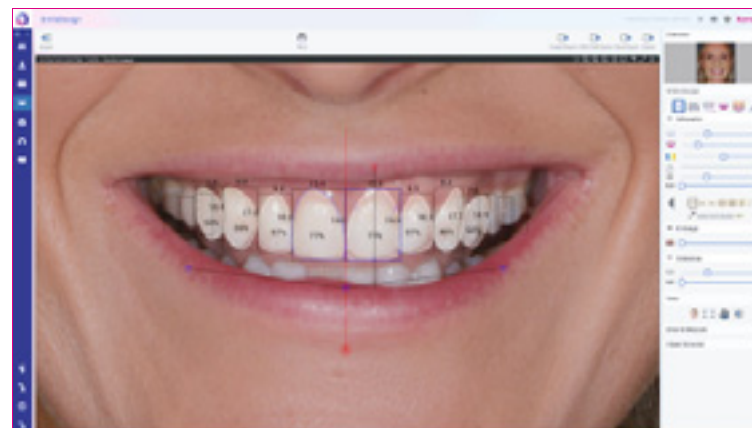

Segmented roots from the **Planmeca Romexis®** software can be imported and viewed in **Planmeca PlanCAD® Premium**

Coming soon!

Planmeca 4D® Jaw Motion data import into **Planmeca PlanCAD® Premium**'s Virtual Articulator

Advanced import of **Romexis® Smile Design** profiles and 2D images into **Planmeca PlanCAD® Premium**

The complete CAD/CAM solution for dental labs

The **Planmeca CADCAM™ Lab** workflow starts from **Planmeca PlanCAD® Premium**, which connects all workflow steps under one software. The system is an excellent choice for all dental laboratories – with open import options, a fast and precise desktop scanner, sophisticated design software for a full range of indications, and an accurate 5-axis milling machine.
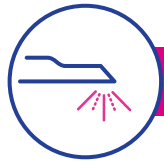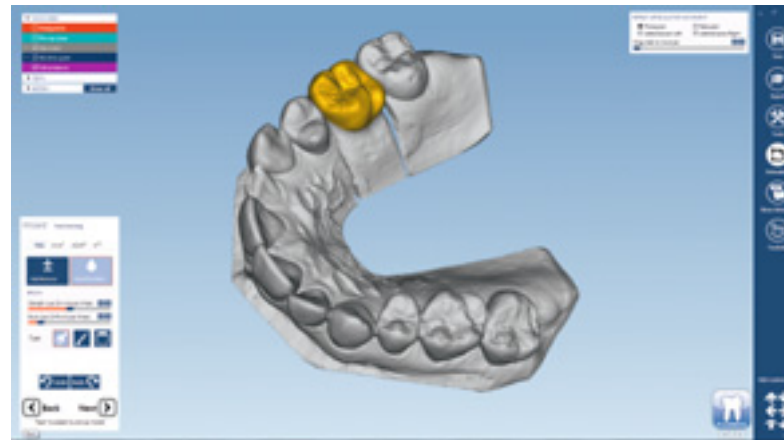
Capture digital impression
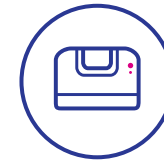
Intraoral scan

Planmeca Emerald™ S
Planmeca Emerald™
Planmeca PlanScan®

Gypsum model scan

Planmeca PlanScan® Lab

Import

STL file
PLY file

Design

Design

Planmeca PlanCAD® Premium

Create

Milling unit

Planmeca PlanMill® 50 S

3D printer

Planmeca Creo™ C5

Planmeca PlanCAD® Premium
workflow for flexible designing and manufacturing

Scan with **Planmeca PlanScan® Lab**
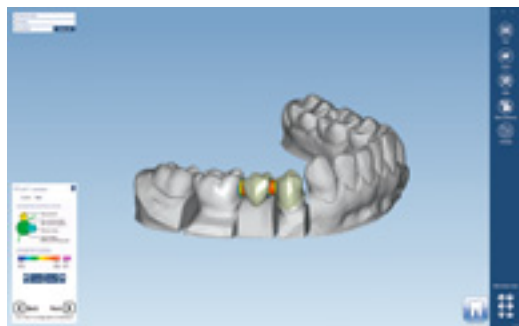
Design the restoration

Send to **Planmeca PlanCAM™** for tool path calculating for **Planmeca PlanMill® 50 S**