All in one software

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Planmeca
Romexis

Better care through innovation

An introduction from our President

"It's my pleasure to introduce you to our revolutionary all-in-one concept. We offer dental clinics a completely digital solution, based on the capability to network all digital dental equipment with one software platform. **Planmeca Romexis®** integrates all our digital dental units, 2D and 3D imaging devices and CAD/CAM solutions. This brings unforeseen possibilities for diagnostics, patient treatment and clinic management.

Dentistry will be completely digital in the future, and the possibilities introduced by 3D technology will transform the entire field. Our new CAD/CAM solutions together with our advanced 3D combinations offer a new and innovative way to take your clinic to a high-tech level.

I'm extremely proud of our product innovations, and for over 40 years we've worked closely with dental professionals to set new standards in our field. What makes us a bit different is that all core product development and manufacturing takes place in Finland – ensuring exceptional quality and unmatched attention to detail at every stage of the process.

As a privately owned company, we are in control of our own destiny and able to make the long term R&D commitments that are the driving force behind our innovations. I firmly believe that this dedication to continuous development enables us to offer the most inspiring working environment for dental professionals worldwide."

Heikki Kyöstilä

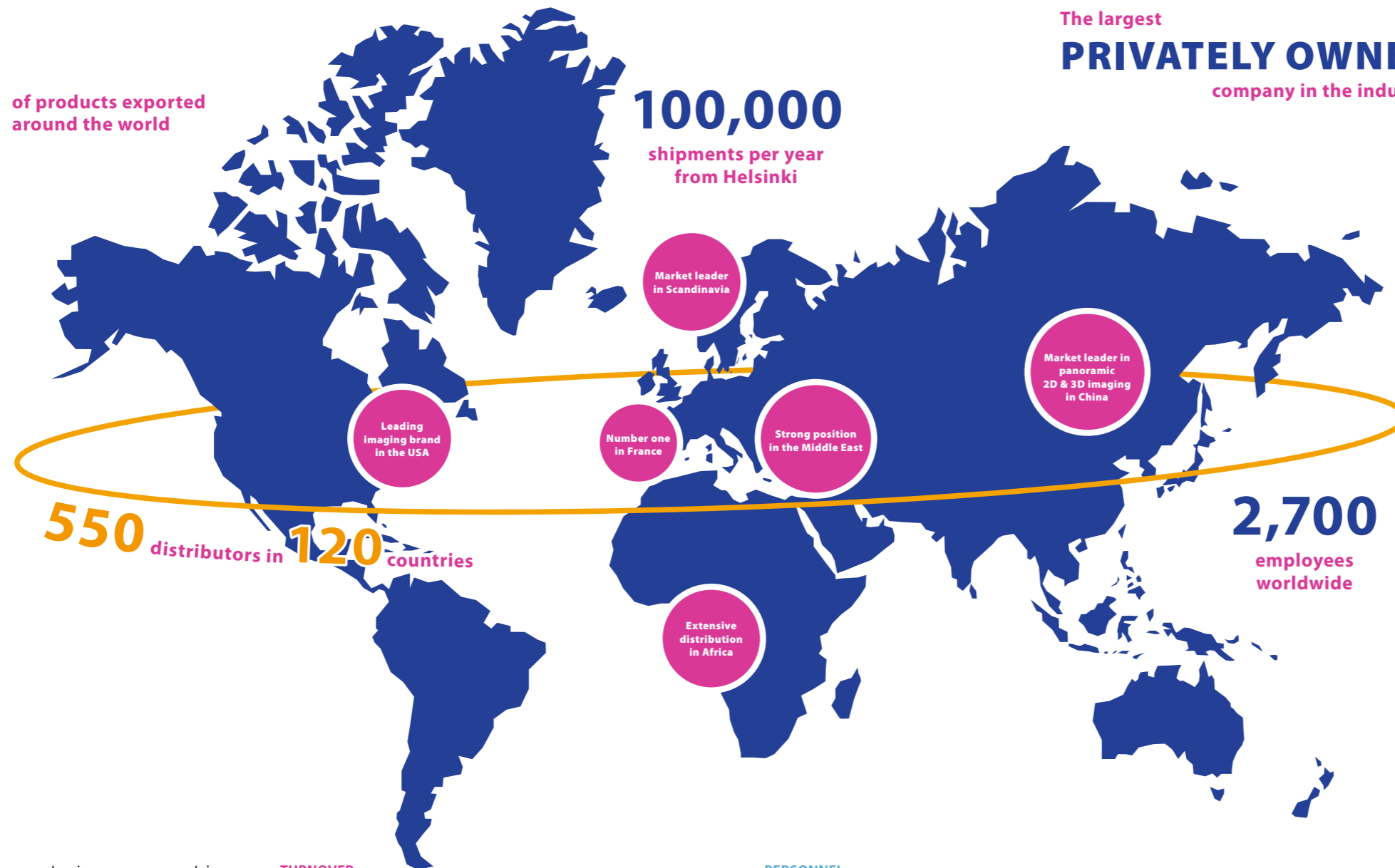*President and founder*
Planmeca Group

A truly global player

Planmeca Group is one of the leaders in health care technology. We are dedicated to providing better patient care through groundbreaking health care solutions that improve the daily workflow of dental and medical professionals around the world.
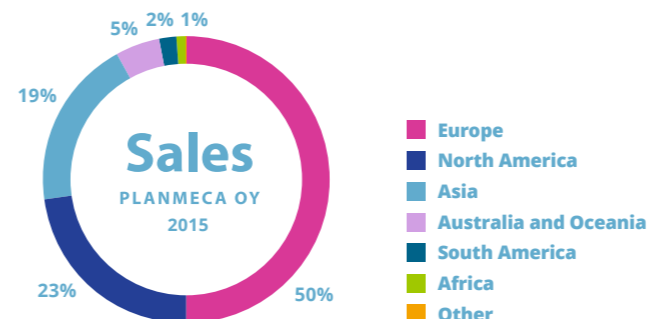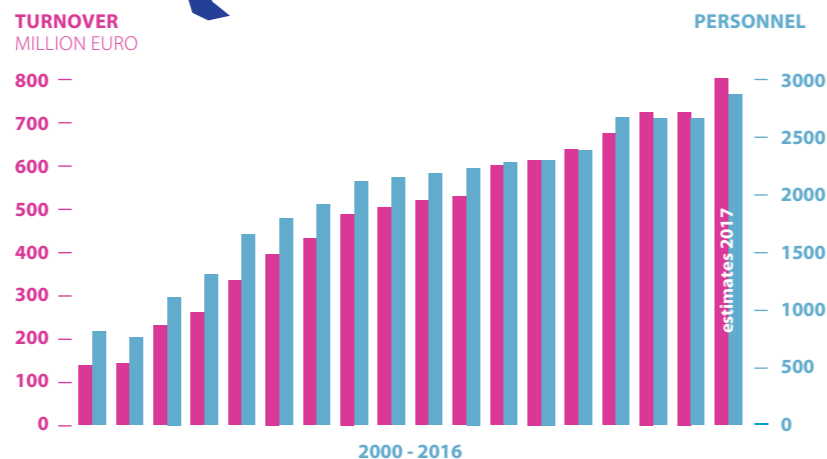
98% of products exported around the world

100,000 shipments per year from Helsinki

The largest **PRIVATELY OWNED** company in the industry

Market leader in Scandinavia

Market leader in panoramic 2D & 3D imaging in China

Leading imaging brand in the USA

Number one in France

Strong position in the Middle East

550 distributors in **120** countries

2,700 employees worldwide

Extensive distribution in Africa

Planmeca Group operates in over 120 countries, employing 2,700 people worldwide.
Our headquarters and production facilities are located in Helsinki, Finland, where we design and manufacture our world-leading solutions, all under one roof. Over 98% of our products are exported around the world.

Founded in 1971, our parent company Planmeca Oy is one of the largest dental equipment manufacturers in the world – and the largest privately owned one.

TURNOVER
MILLION EURO

800 —
700 —
600 —
500 —
400 —
300 —
200 —
100 —
0 —

2000 – 2016

PERSONNEL

estimates 2017

3000
2500
2000
1500
1000
500
0

Sales
PLANMECA OY
2015

5% 2% 1%
19%
23%
50%

- Europe
- North America
- Asia
- Australia and Oceania
- South America
- Africa
- Other

One software for all your needs

Imaging and CAD/CAM in one software – an industry first

*Planmeca offers a revolutionary all-in-one software solution for clinics of all sizes. Our world-leading **Planmeca Romexis**® software is the brains behind all our products, bringing together all the equipment at your dental clinic from CAD/CAM to imaging devices and dental units.*

The **Planmeca Romexis®** software is a unique all-in-one concept, assuring true integration of all dental devices at your clinic. One easy-to-use interface is used for all patient images from X-rays to CAD/CAM. All information is stored in one centralised database.

The same software networks all Planmeca equipment, offering exceptional features and remote monitoring possibilities. This ensures unforeseen time and cost efficiency for clinics, allowing your entire team to fully concentrate on patient treatment.

One easy-to-use interface

1 Planmeca Romexis

2D imaging
Infection control
Information and monitoring
3D imaging
CAD/CAM solutions
Dental units

The most versatile software solution

All business scopes
- Private practices with one treatment room
- Medium sized clinics
- Multi-site group practises
- Hospitals and universities

All specialities
- Radiology
- Implantology
- Prosthodontics
- Orthodontics
- Endodontics
- Maxillofacial surgery
- ENT
- CAD/CAM
- Esthetic dentistry

All modalities
- Panoramic images
- Cephalometric images
- Intraoral images
- Photos
- CBCT images
- 3D intraoral scans
- 3D photos
- TWAIN devices

All platforms
- Native support for Windows and Mac
- **Planmeca mRomexis™** imaging application for iOS and Android devices
- **Planmeca Romexis® Cloud** image transfer service

Unique features and performance

Planmeca Romexis® is a flexible software suite with advanced features designed to fulfil the needs of any dental facility – from a small clinic to a large hospital. In addition to our unique specialist tools, advanced security and quality assurance, as well as intelligent mobile apps, Planmeca Romexis offers excellent compatibility with patient management systems.
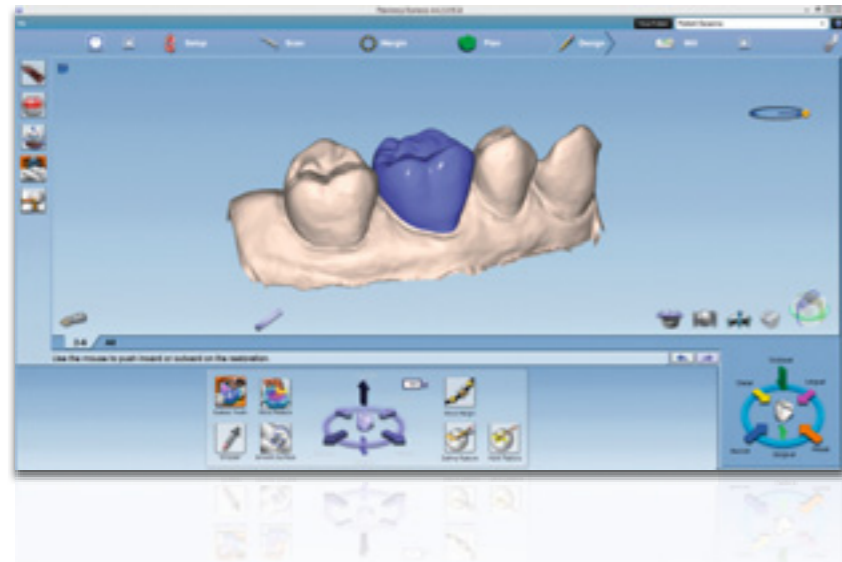
Open STL for CAD/CAM
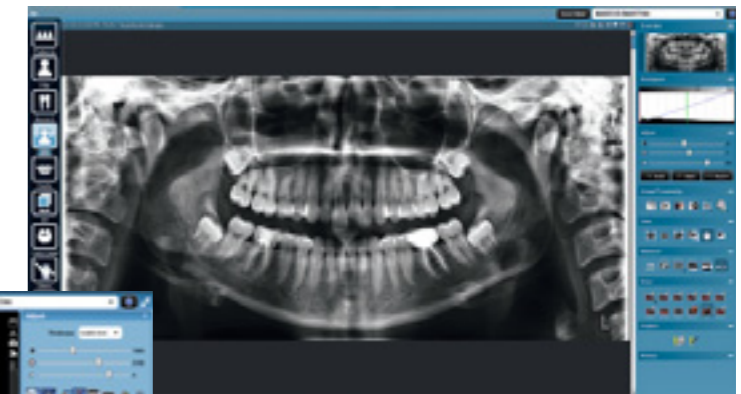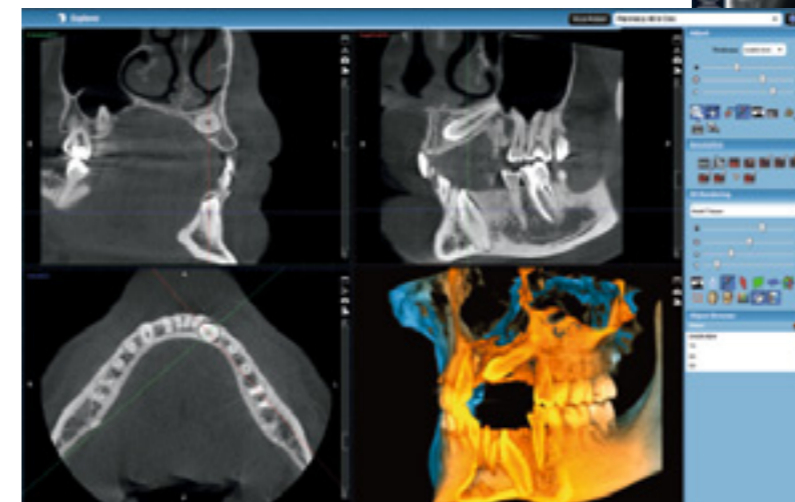
Tools for all specialities

- 2D imaging
  - X-ray images and photos
  - 2D cephalometric analysis
  - digital smile design
- 3D imaging
  - Implant planning
  - implant guide design
  - Airway analysis
  - TMJ analyis
  - Cross sectional and panoramic views
  - Orthodontic treament planning
  - 3D photo and surface images
- CAD/CAM
  - Scanning, designing and milling
- Reporting
  - Printing, database queries, attachments

Easy sharing of results

- The central **Planmeca Romexis®** server keeps all images, 3D models and treatment plans organized and easily accessible
- Support for multi-site setups
- **Planmeca Romexis® Cloud** service for easy image and information transfer
- **Planmeca mRomexis™** mobile imaging application
- Free **Planmeca Romexis® Viewer**

Open and compatible

- Integration with practice management systems like Dentrix, Axium
- Connects with Henry Schein DDX
- Integrated order forms for 3D Diagnostix, 360imaging, and Materialise Dental services
- Connectivity to hospital systems via DICOM compliance
- Export & Import in standard formats in 2D and 3D including DICOM
- Open STL file format for CAD/CAM
- Integration with various specialty software: Dolphin 3D, Simplant, NobelClinician and coDiagnostix

Built-in security and quality assurance

- Central monitoring of X-ray units, dental units and milling machines
- Infection control logging
- Audit trail and quality assurance using built-in reporting
- Secure communication
- Powerful user and group management
- Active Directory support

Free Planmeca Romexis® Viewer application
planmeca.com/Viewer

Full-featured viewer application
No installation required
Mac and Windows support
Distribute to specialists or patients

Unveil the perfect smile

*A smile can make a difference. The **Planmeca Romexis® Smile Design** software upholds the standard of excellence we are known for, as it allows dentists to design the smile of their patient's dreams in a matter of minutes. It does not require any additional equipment or software to function – offering easy to use tools for designing beautiful, natural smiles.*

"My patients have also been very pleased to be able to genuinely be part of the process from the start. When the expectations and plans have been carefully reviewed to start with, the end result will more likely meet the expectations of the patient."

— Aki Lindén (CDT)

A fast and easy workflow

Planmeca Romexis Smile Design is characterised by its smooth and streamlined workflow. The software allows manipulation of the position, shape or dimensions of each tooth individually to achieve the best possible look and fit, ensuring fantastic results in only a few minutes.

Become a smile designer today

Planmeca Romexis® Smile Design can be included as a part of the **Planmeca Romexis®** platform which is a comprehensive 2D, 3D and CAD/CAM software. A standalone version of the software is also available for download from our **Planmeca Online™** store – with a free trial offered. The software is available for Mac and Windows in 14 languages.

**Join our free Smile Design webinars
planmeca.com/smiledesign/webinars**
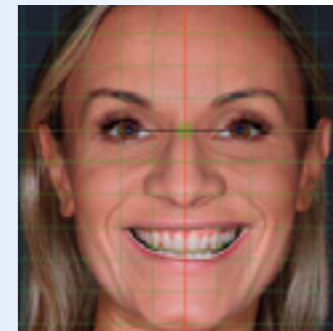
**Start your free trial today!
planmeca.com/online**

**Become a smile designer in 2 minutes
planmeca.com/LearnToSmileDesign**

Give your patients a reason to smile!

Clear communication

Plameca Romexis® Smile Design is an exceptional tool for communication. It allows dentists to communicate with an interdisciplinary team of specialists and dental laboratories visually and numerically – ensuring that treatment goals accepted by the patient are reached. Designs can be securely shared via the **Planmeca Romexis® Cloud** image transfer service or the **Planmeca mRomexis™** mobile imaging application.

Integration with CAD/CAM and Ortho solutions

Planmeca Romexis Smile Design allows dentists to do more than clear visualisation. Completed smile designs can be fluidly exported on to any CAD/CAM software for realisation, such as **Planmeca PlanCAD® Easy**, **Planmeca Romexis® 3D Ortho Studio** or any **Planmeca Romexis®** 3D module. The 2D design acts as a visual guide or reference for physical mockup designing, as well as final restoration.

Design a digital mockup in 3 minutes on the first visit

1 Plan and analyse
- Adjustable vertical and horizontal orientation lines
- Draw e.g. the incisal, papillary and smile lines
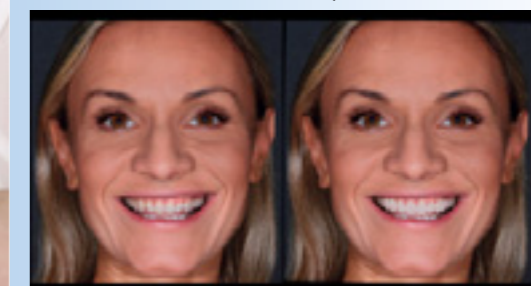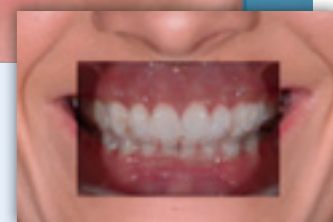- Accurate measurements after image calibration

2 Design and simulate
- Quickly scalable tooth silhouettes
  - Versatile editing possibilities – from one tooth to all teeth
  - Tooth shape library
  - Possibility to add own tooth shapes to library
  - Automatic width and height measurements, as well as ratio calculation
- Tooth mirroring tool for symmetry
- Tools for gingival area modification, crown lengthening and tooth straightening
- Possibility to work with retractor and smile images simultaneously for gumline design
- Tooth shade selection (VITA Classical shade guide and some bleached shades) or selecting color from existing teeth
- Photorealistic simulation

3 Present and communicate
- Show before and after comparison immediately on-screen
- Utilise print comparisons
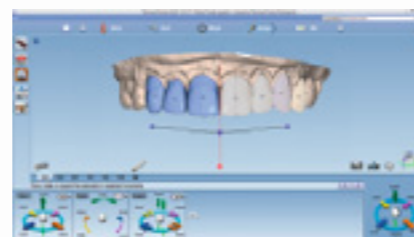- Send designs to iPhone or email
- Create automatic PDF reports

Your mobile world of imaging

*Our advanced **Planmeca mRomexis™** imaging application for iOS and Android allows you to flexibly view and capture images on mobile tablet devices. Remove the constraint of place – easily consult with colleagues and communicate with patients both in and outside your clinic.*

Increased flexibility with Planmeca mRomexis™

Use our fast, easy, and light **Planmeca mRomexis™** mobile imaging application to view all your images in the **Planmeca Romexis®** database on a local network, or to carry images with you on your tablet device. You can also use the application to capture 2D X-ray images with Planmeca equipment, or to take photos with the tablet camera.

Expand the possibilities of Planmeca Romexis and experience the new level of freedom our mobile world can offer!

Key benefits:

- Available for both iOS and Android tablets
- Supports an extensive range of images – 2D and 3D X-ray images, 3D dental models, STL files, **Planmeca ProFace®** facial photos, and standard photos
- Direct connectivity with the **Planmeca Romexis®** server for retrieving or saving images
- Convenient acquisition of 2D X-ray images with Planmeca equipment
- Capturing photos with the camera of the mobile device
- Voice annotations to images can be recorded using the mobile device's microphone
- Flexible and secure retrieving of images via the **Planmeca Romexis® Cloud** image transfer service
- Excellent tool for patient education and communication

For iOS and Android

Download the **Planmeca mRomexis™** application for iOS and Android from the App Store or Google Play.

Share images and expertise online

*Planmeca Romexis® **Cloud** is a secure image transfer service for **Planmeca Romexis®** users and their partners. Now you can easily share images and CAD/CAM cases with any specialist or patient.*

- Seamlessly integrated into **Planmeca Romexis®** ensuring an efficient workflow – no need for external applications or CDs and DVDs
- Planmeca Romexis software and **Planmeca Romexis® Cloud** subscribtion are required for sending new cases
- Dental laboratories can receive CAD/CAM cases without additional software

Planmeca Romexis® Cloud

IMAGES
REFERRALS
INTERPRETATIONS
TREATMENT PLANS

Share expertise

- Recipients are automatically notified of new cases
- Secure transfer of information
- Receive cases at no cost – only e-mail required
- You can also view cases using **Planmeca Romexis® Viewer** or **Planmeca mRomexis™**

Exchange virtual patients

Virtual patient cases can include:
- 2D X-ray images and photos
- CBCT volumes and 3D photos
- Dental models: **Planmeca PlanScan®** intraoral scans and any STL files
- Documents: Referrals and reports

Communicate information

All treatment plan elements are automatically included:
- Annotations and measurements
- Radiological findings
- Restorative design parameters, such as material and shade

Planmeca's CBCT family – fan tastic five

*Planmeca ProMax® 3D is a product family consisting of exceptional all-in-one units. With three different types of three-dimensional imaging – as well as panoramic, extraoral bitewing and cephalometric imaging – **these intelligent products can meet all your maxillofacial imaging needs.***

Adjustable FOV and location

Planmeca ProMax® 3D s

Volume sizes
Ø50 x 80 mm
Ø50 x 50 mm
Stitched volume 90 x 60 x 80 mm

Planmeca ProMax® 3D Classic

Volume sizes
Ø80 x 80 mm
Ø80 x 50 mm
Ø50 x 80 mm
Ø50 x 50 mm
Extended volume: Ø110 x 80 mm
Stitched volume 140 x 105 x 80 mm

Planmeca Pro Max® 3D Plus

Volume sizes
Ø160 x 90 mm
Ø160 x 50 mm
Ø90 x 90 mm
Ø90 x 50 mm
Ø70 x 70 mm
Ø70 x 50 mm
Ø40 x 70 mm
Ø40 x 50 mm

Planmeca ProMax® 3D Mid

Volume sizes
Ø200 x 170 mm
Ø200 x 100 mm
Ø200 x 60 mm
Ø160 x 170 mm
Ø160 x 100 mm
Ø160 x 60 mm
Ø100 x 100 mm
Ø100 x 60 mm
Ø80 x 80 mm
Ø80 x 50 mm
Ø40 x 80 mm
Ø40 x 50 mm

Planmeca ProMax® 3D Max

Volume sizes
Ø230 x 260 mm
Ø230 x 160 mm
Ø230 x 100 mm
Ø230 x 60 mm
Ø130 x 160 mm
Ø130 x 130 mm
Ø130 x 100 mm
Ø130 x 90 mm
Ø130 x 55 mm
Ø100 x 130 mm
Ø100 x 90 mm
Ø100 x 55 mm
Ø50 x 55 mm

True all-in-one units for all your imaging needs.

Advanced imaging technolog y

Our intelligent high-tech solutions and algorithms guarantee an ideal imaging geometry, perfect usability, and crystal-clear images free from noise and artefacts.

New!

User-friendly Planmeca ProTouch™ control panel

• Clear and straightforward graphical user interface guides you smoothly through the work process

• Pre-programmed sites and exposure values for different image types and targets save you time and allow you to focus on your patients

• The control panel can also be operated remotely from the imaging workstation

120 kV tube voltage

120 kV tube voltage enables optimised quality for challenging imaging cases – reducing artefacts and ensuring higher contrast images.

Optimised imaging modes for different needs

• **Low dose** mode captures an image with a minimal dose of radiation. Ideally suited for orthodontic, pediatric and sinus studies. Voxel size 400 or 600 μm

• **Normal** mode is the best choice for most common imaging needs. Voxel size 200 μm

• **High definition** mode is designed for imaging of small objects, such as ear bones. Voxel size 150 μm

• **Braces** protocol offers optimised exposure settings for imaging patients with brackets. Voxel size 150 μm

• **High resolution** provides more detail, when necessary. Voxel size 100 μm

• **Endodontic** mode offers the best resolution with the smallest size. Voxel size 75 μm

ROI for higher resolution images

The ROI (Region of Interest) reconstruction function can generate a new small voxel volume from the image data of a previously taken large voxel volume. This enables a more precise diagnosis without the need to expose your patient to additional radiation.

Original volume, 400 μm

Reconstructed volume with higher resolution, 200 μm
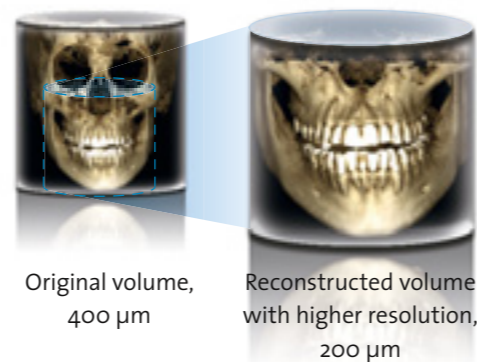
Never miss a shot with Planmeca CBCT units

Movement, metal artefacts, and small voxel sizes are generally recognised as challenges to CBCT image quality. With Planmeca CBCT units and their advanced image enhancement options, you can rise above these concerns and succeed every time. The options can either be selected preventively before imaging or utilised afterwards to achieve reliable results. The choice is yours!

Movement artefact correction with Planmeca CALM™

• Iterative movement correction algorithm

• Eliminates the need for retakes

• Cancels the effects of patient movement

• Excellent when imaging more lively patients

Metal artefact reduction with Planmeca ARA™

• Reliable algorithm for artefact-free images

• Removes shadows and streaks caused by metal restorations and root fillings

• Tried and tested – the results of extensive scientific research

Noise removal with Planmeca AINO™

• Noise-free images without losing valuable details

• Lowers exposure values by reducing noise

• Improves image quality when using small voxel sizes (e.g. in the endodontic imaging mode)

• Enabled by default when using the Planmeca **Ultra Low Dose™** imaging protocol

2D SmartPan™ – unique panoramic imaging

• A unique system for 2D imaging

• Uses the same 3D sensor for 2D panoramic imaging, eliminating the need to change sensors

• Users can browse between panoramic images and select the most suitable one for diagnosis

• Same patient positioning and image processing parameters as in 2D imaging programs
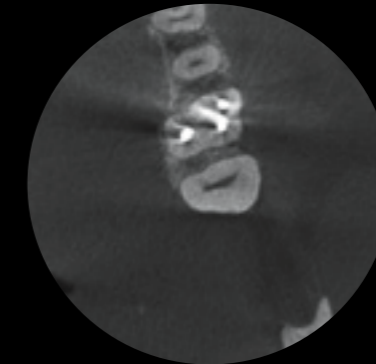
Without movement artefact correction
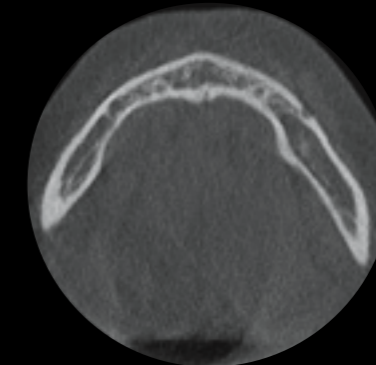
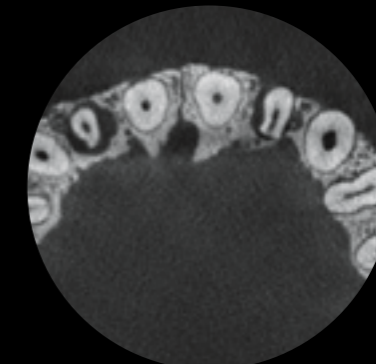With the Planmeca CALM™ movement removal algotrithm
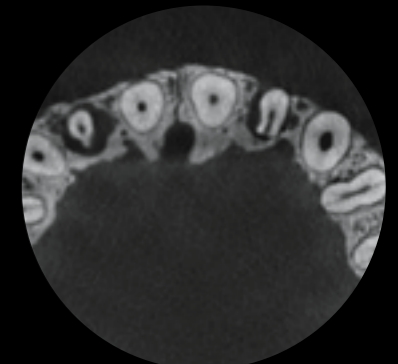
Without artefact removal
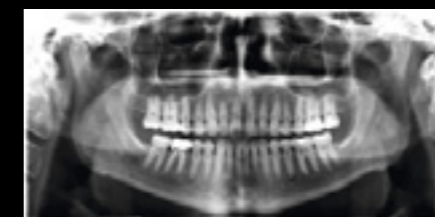
With the Planmeca ARA™ artefact removal algotrithm

Without noise removal

With the Planmeca AINO™ noise filter

SmartPan™ panoramic

SmartPan™ bitewing

Unique 3D combinations – an industry first

3X 3D

Planmeca Romexis

We're the first company to combine three different types of 3D data with one X-ray unit. The **Planmeca ProMax® 3D** family brings together a Cone Beam Computed Tomography (CBCT) image, 3D face photo and 3D model scan into one 3D image – using the same advanced software. This 3D combination creates a virtual patient in 3D, helping you with all your clinical needs.
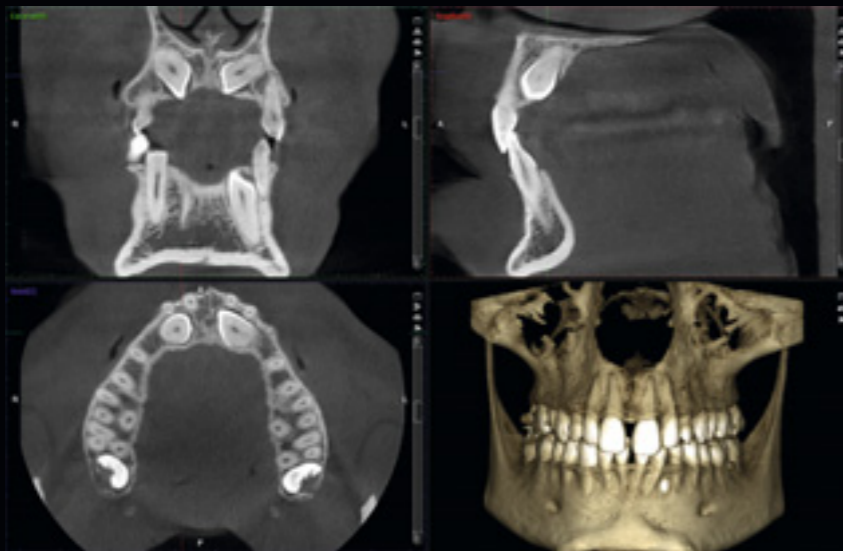
Unique 3D combinations for advanced dentistry

See more than ever before

3X³ᴰ

3D X-ray image

Cone Beam Computed Tomography (CBCT) is an X-ray imaging technology where a large number of 2D images are taken of a patient from different angles. A 3D volumetric image is then calculated from these 2D projections. The resulting images can be viewed with our advanced imaging software from any angle, including the axial, coronal, sagittal and cross-sectional planes.

The world's first X-ray integrated face camera

Scanning a plaster cast to a digital model

Scanning an impression to a digital model
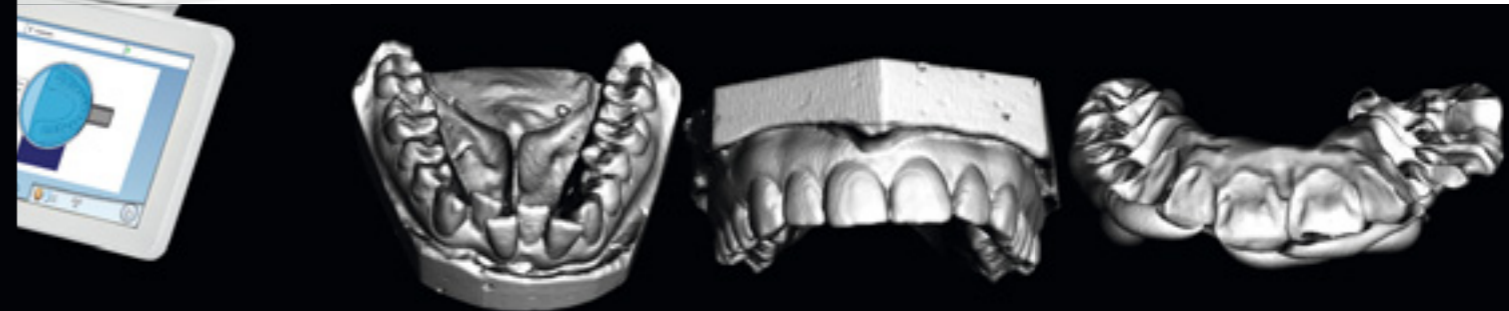
Scanned impressions of upper and lower arches and bite index in 3D

3D face photo

Planmeca ProFace® is an exclusive 3D face photo system available for all of our 3D X-ray units. This pioneering integrated system produces a realistic 3D face photo and CBCT image in a single imaging session. You can also take a separate 3D face photo without exposing your patient to any radiation.

3D model scan

You can use all X-ray units in the **Planmeca ProMax® 3D** family to scan both impressions and plaster casts – an exciting feature that was an industry first for our CBCT units. With our advanced **Planmeca Romexis®** software, the digitised models are available immediately and stored for later use.

1
Planmeca
Romexis

Pioneering low dose 3D imaging

Planmeca ProMax® 3D units offer a unique *Planmeca Ultra Low Dose™* imaging protocol that enables CBCT imaging with an even lower patient radiation dose than standard 2D panoramic imaging.

More information, less radiation

Planmeca Ultra Low Dose™ can be used with all voxel sizes and in all imaging modes from Normal to Endodontic mode. Using the Planmeca Ultra Low Dose protocol reduces the effective patient dose by an average of 77% without a statistical reduction in image quality*.

The unique and pioneering imaging protocol is based on intelligent 3D algorithms developed by Planmeca. Our 3D imaging system always allows the clinician to choose the optimal balance between image quality and dose, based on the ALARA principle.
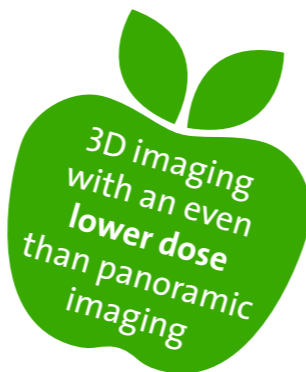
* Study of Orthodontic Diagnostic FOVs Using Low Dose CBCT protocol (Ludlow, John Barrett and Koivisto, Juha).

planmeca.com/ULD-poster

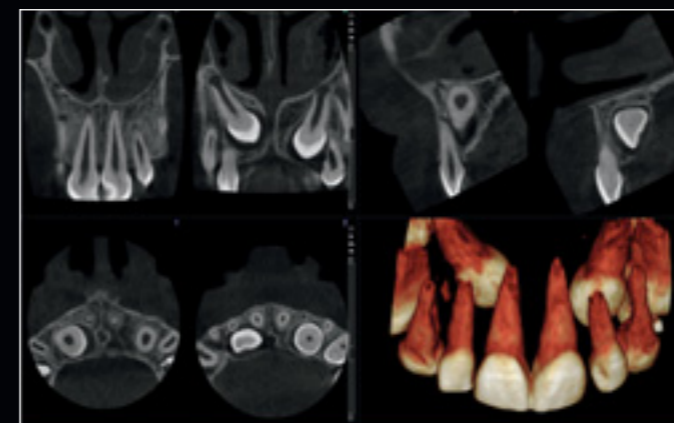## Ideal for many clinical cases

The Planmeca Ultra Low Dose protocol has proven to be ideal for many clinical cases.

- Orthodontics:
  - Defining the amount of bone around the root
  - Localising unerupted and impacted teeth before orthodontic treatment
  - Defining orthodontic landmarks for cephalometric analysis
- Post-operative and follow-up images in maxillofacial surgery
- Airway studies
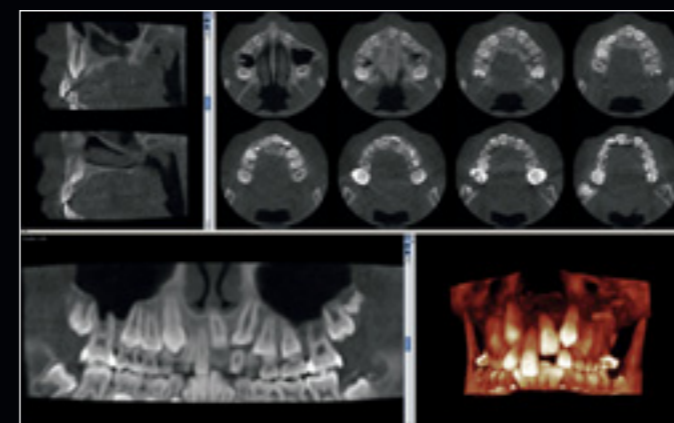- Sinus studies
- Implant planning

3D imaging with an even lower dose than panoramic imaging

90 kV
8 mA
12 s

90 kV
5.6 mA
4 s

The Planmeca Ultra Low Dose™ protocol has changed 3D imaging completely

We at MESANTIS® 3D DENTAL-RADIOLOGICUM produce about 7,500 CBCT images per year at eight locations in Germany.

Our main concern in X-ray imaging is to reduce the possible radiation dose as much as is reasonably achievable (ALARA principle). Traditional digital 2D X-rays at an orthodontist's clinic usually have an effective dose ranging between 26–35 µSv (ICRP 2007). Conventional CBCT images of the head with modern CBCT equipment show an effective dose ranging between 49–90 µSv.

The latest image protocol with a specific associated algorithm is called the Planmeca Ultra Low Dose™ protocol. In medical terms, it allows radiologists to adjust imaging parameters individually according to the clinical needs of each case. The mA-values, in particular, can be individually adjusted and reduced for each patient, as it is required according to all

international scientific guidelines. Therefore, it is possible to further reduce the effective dose significantly by using the Planmeca Ultra Low Dose protocol. Depending on the field of view, nowadays CBCT equipment with a Planmeca Ultra Low Dose algorithm has an effective dose between 4 to 22 or 10 to 36 µSv.

Our patients and referring colleagues are always happy to hear that the effective dose for certain indications is now even lower than in traditional 2D X-ray imaging. Since last year we have been able to replace the common CBCT protocols with the Planmeca Ultra Low Dose protocol.

At MESANTIS® 3D DENTAL-RADIOLOGICUM in Germany, the Planmeca Ultra Low Dose imaging protocol is used either with a small or large field of view. Using the new protocol, a lot of patients can benefit from improved 3D diagnostics without being exposed to a higher radiation dose.

Prof. Dr. Axel Bumann

Prof. Dr. Axel Bumann DDS, PhD, Orthodontist, Oral surgeon, Oral and Maxillofacial Radiology, MESANTIS® 3D DENTAL-RADIOLOGICUM

Prof. Dr. Bumann states that he has not received any financial reward or other benefit for this interview.

Planmeca ProMax® 3D Mid
- FOV Ø 200 x 170 mm / Voxel size 600 µm
- Effective patient dose 14.7 µSv

Planmeca ProMax® 3D Classic
- FOV Ø 40 x 50 mm / Voxel size 150 µm
- Effective patient dose 14.4 µSv

Planmeca ProMax® 3D Max
- FOV Ø 85 x 50 mm / Voxel size 400 µm
- Effective patient dose 4.0 µSv

Planmeca ProMax® 3D Mid
- FOV Ø 200 x 170 mm / Voxel size 600 µm
- Effective patient dose 29.2 µSV

The most advanced 3D modules

*Our pioneering **Planmeca Romexis®** software offers specially designed tools for implantologists, endodontists, prosthodontists, periodontists, orthodontists, maxillofacial surgeons, and radiologists.*
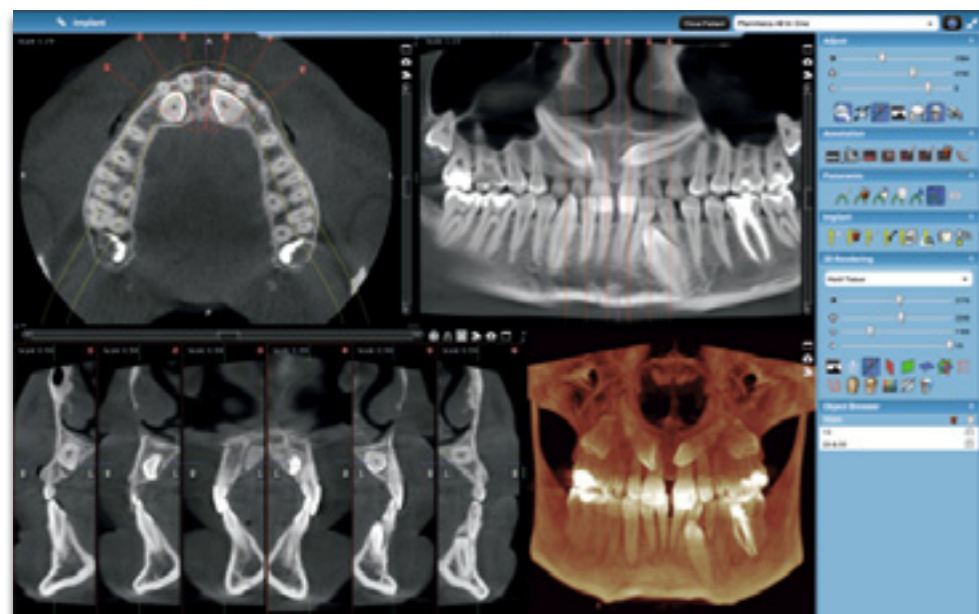
Excellent tools for quality images

With a complete set of tools for image viewing, enhancement, measurement, drawing and annotations, **Planmeca Romexis®** improves the diagnostic value of radiographs. Versatile printing and image import and export functionalities are also included. The software consists of different modules – so you can choose those most suited to your needs.
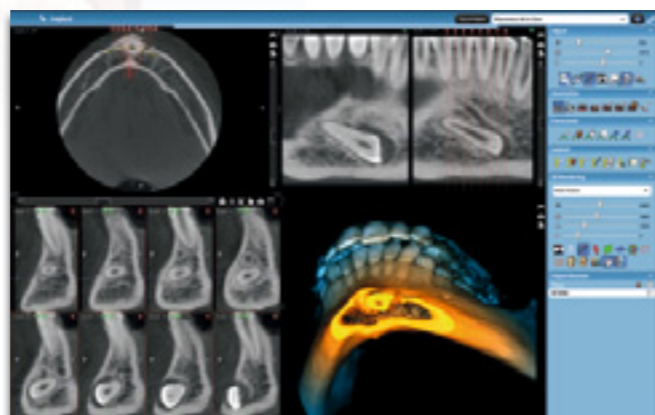
Convenient 3D diagnosis

The Planmeca Romexis 3D rendering view gives an immediate overview of the anatomy and serves as an excellent patient education tool. It allows images to be viewed instantly from different projections or converted into panoramic images and cross-sectional slices. Measuring and annotation tools – such as nerve canal tracing – assist in safe and accurate treatment planning.

Superimpose CBCT

New to Planmeca Romexis 3D, the module allows the superimposition of two CBCT images. It is a valuable tool for before-and-after comparisons and can be used for orthognathic surgery follow-ups, as well as orthodontic treatments, for example. The module also allows users to compare CBCT and MRI images side by side – providing a comprehensive view of a patient's anatomy.
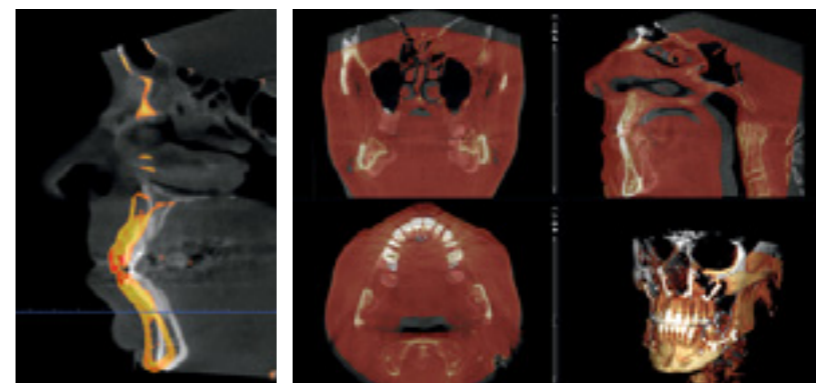
Tampere University Hospital, Medical Imaging Center, Finland
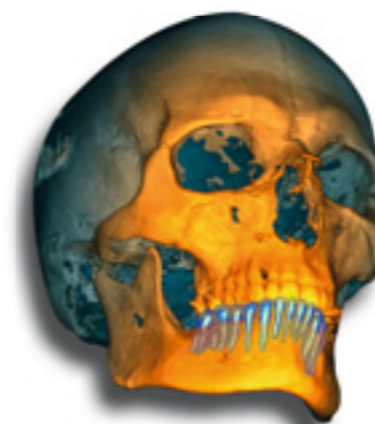
Tooth segmentation

Planmeca Romexis provides a new, intuitive and efficient tool for segmenting a tooth and its root from a CBCT image. The guided process enables quick segmentation of a patient's full dentition. Surface models of segmented teeth can be visualised, measured and utilised e.g. in the **Planmeca Romexis® 3D Ortho Studio** module as part of orthodontic treatments.

Planmeca Romexis® 3D imaging highlights

- Implant planning with realistic implant models and abutment designer
- Implant guide design
- Cross sectional multi-planar reconstruction
- Panoramic and cephalometric views
- Airway analysis
- 3D Region Grow – software assisted volumetric segmentation
- Radiological findings module
- TMJ analysis
- Orthodontic treament planning
- 3D photo and surface images
- Merge modalities to create 3D virtual patient

The complete implant workflow

Our **Planmeca Romexis® 3D Implant Planning** module offers all the necessary tools for fully digital implantology – from planning to guided surgery. The software's implant library includes realistic implant models and abutments, as well as collections of sleeves for guided surgery. After completing the implant plan, a surgical guide can be immediately designed in the same **Planmeca Romexis®** software with just a few clicks.
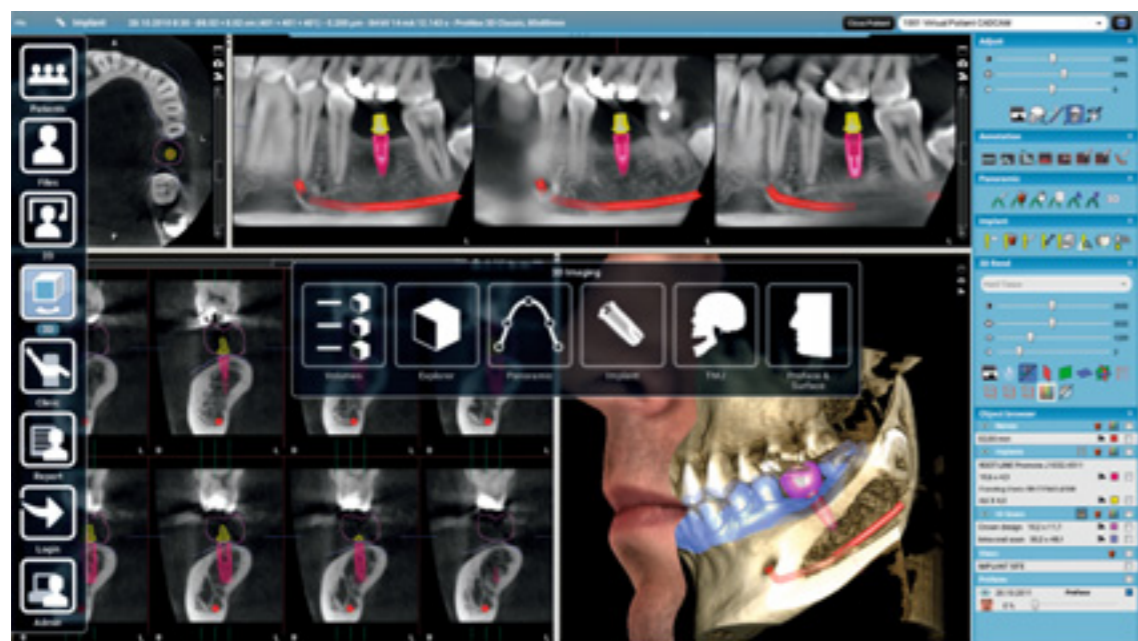
Realistic implant models from over 60 manufacturers

The **Planmeca Romexis®** software platform provides the perfect environment for top-down implant planning. By superimposing a crown and dental model onto CBCT data, users can create a complete virtual setup for optimally positioning the implant – taking prosthodontic and surgical perspectives into account.


Mark the nerve on the CBCT image

Superimpose the 3D model scan onto the CBCT image with the Planmeca Romexis® software

Use the Planmeca Romexis® crown library, or import a patient-specific crown from the CAD system to the software
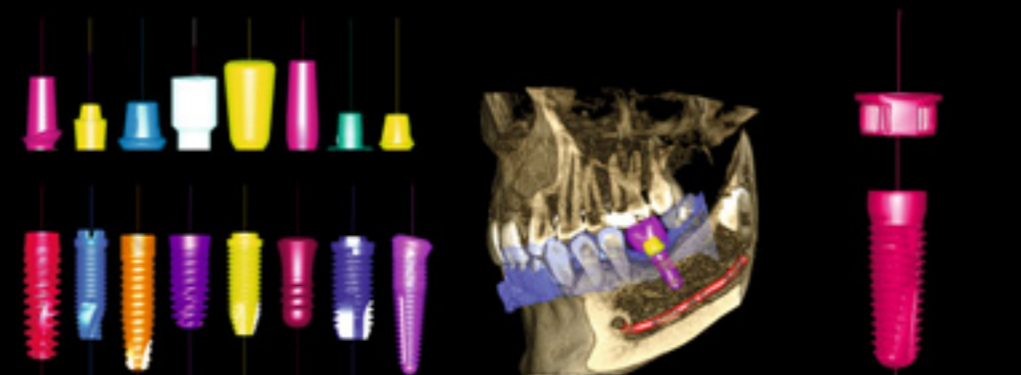
Select the preferred implant (abutment) and sleeve from the extensive Planmeca Romexis® library and find the optimal position for it from a prosthetic and surgical perspective
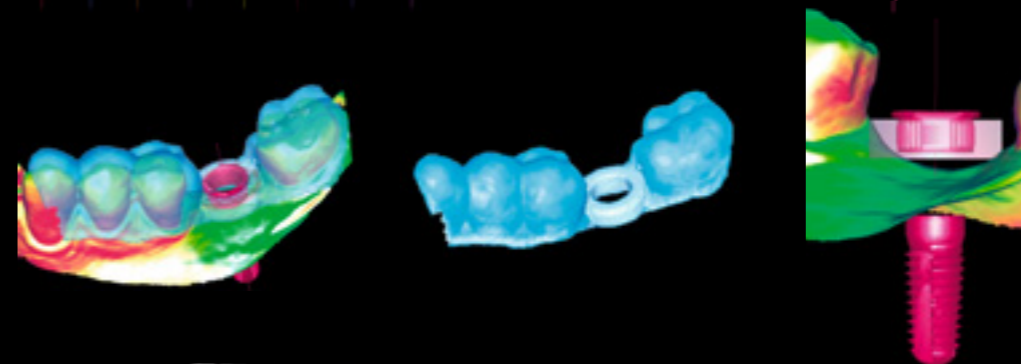
Design the surgical implant guide with just a few clicks in Planmeca Romexis® – the software will create an open STL file of the design

Print the surgical guide with Planmeca Creo™ or any other suitable 3D printer

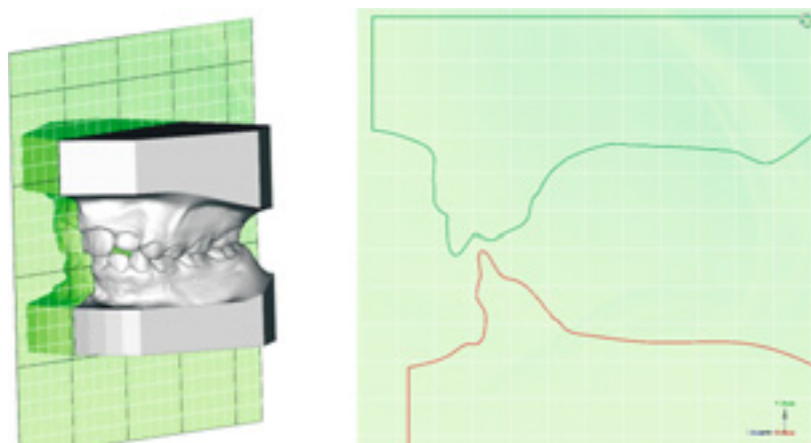# Planmeca Romexis® 3D Ortho Studio – modern 3D tools for orthodontics

The **Planmeca Romexis® 3D Ortho Studio** module provides orthodontists and dental laboratories with several innovative tools. The advanced software is designed for the examination and analysis of digital dental models scanned e.g. with **Planmeca ProMax® 3D** X-ray units or the **Planmeca PlanScan®** intraoral scanner. It includes an extensive set of premium tools for treatment planning in 3D.
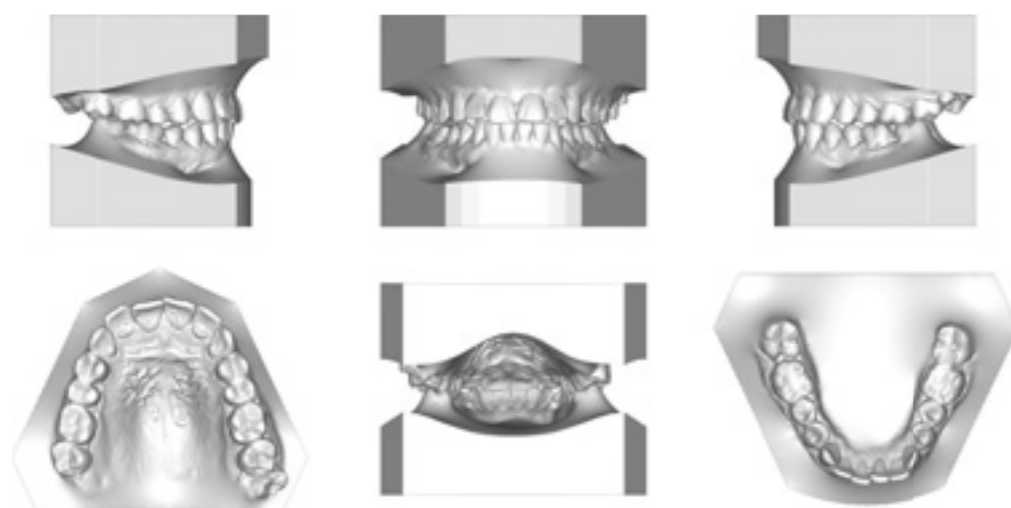
Dental model analysis

Dental impressions and plaster casts scanned with the **Planmeca ProMax® 3D** model scanning mode can be aligned with the bite index using the **Planmeca Romexis®** software. Examination, analysis and treatment planning are then conveniently done in the **Planmeca Romexis® 3D Ortho Studio** module.

The module makes dental model analysis easier then ever by offering all the necessary tools for virtual base creation, occlusion inspection, and versatile teeth and arch measurements.
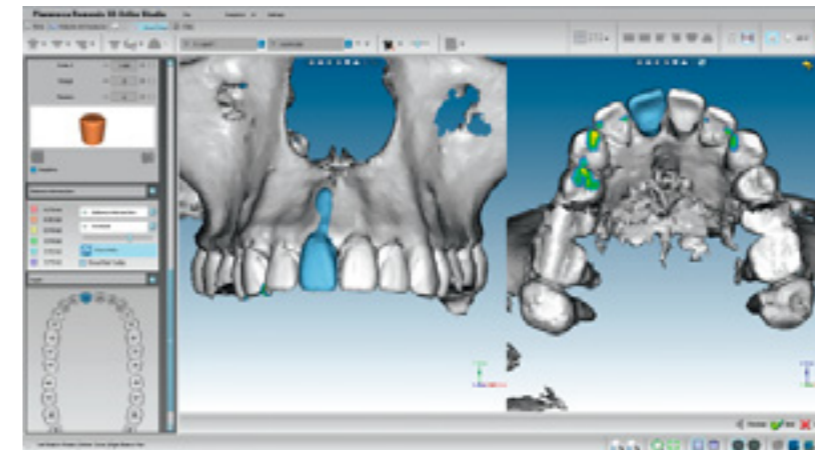

Planmeca PlanScan®

Plaster cast in Planmeca ProMax® 3D


Impression scan in Planmeca ProMax® 3D

Treatment planning and verification in 3D

A staged treatment plan can be established in Planmeca Romexis 3D Ortho Studio by displacing the teeth in a virtual tooth setup while visualising intersections and contacts.

For improved visualisation, segmented roots and bone surfaces from CBCT images can be combined.

All the applied changes such as tooth movements, interproximal reductions, and tooth extractions are summarised in a detailed treatment plan report. The plan can be easily shared with others.

It is also possible to make 3D comparisons of treatment plan models and patient scans to verify treatment progress.
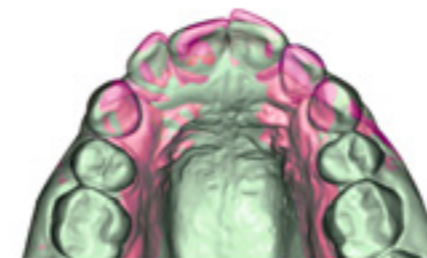
Export of digital dental models in STL format

Planmeca Romexis 3D Ortho Studio generates a series of digital dental models for each treatment stage. The models can be exported in STL format for 3D printing and custom appliance design and manufacturing.

The module is compatible with the Windows operating system.

The Braces imaging protocol for Planmeca ProMax® 3D units

Our special Braces* imaging protocol offers optimised exposure settings for imaging patients with brackets. The acquired images can be utilised when designing braces. The Braces imaging protocol is optimised for use with **suresmile**.


to be sure.

Suresmile® certification

Planmeca ProMax 3D units have been certified for use with **suresmile** by OraMetrix.

The comprehensive treatment management system **suresmile** is designed to enable orthodontists to visualise and simulate multiple diagnostic set-ups and design customised archwires for every patient. The accuracy of the patient scans plays a critical role in maximising the effectiveness of the system.

*Available for Planmeca ProMax® 3D Classic, Planmeca ProMax® 3D Mid and Planmeca ProMax® 3D Max.
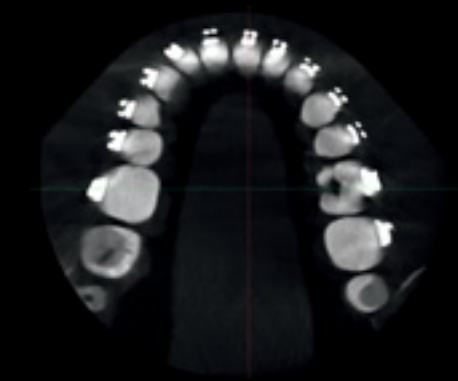
Patient specific implants – you imagine it, we make it

Planmeca ProModel™ offers patient-specific implants and physical models for maxillofacial surgery – all individually designed for the best possible results.

The implants are designed and manufactured to match any form, ensuring an exact fit to the patient's anatomy. The service also includes physical 3D skull models and surgical guides for assisting in both pre-planning and the surgery itself.
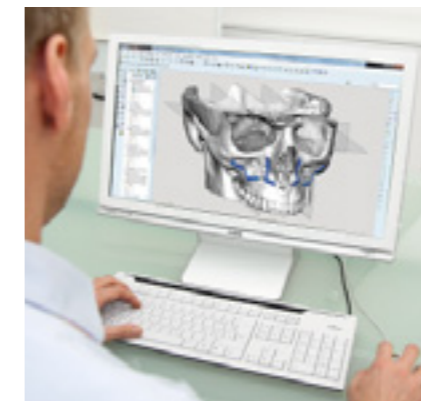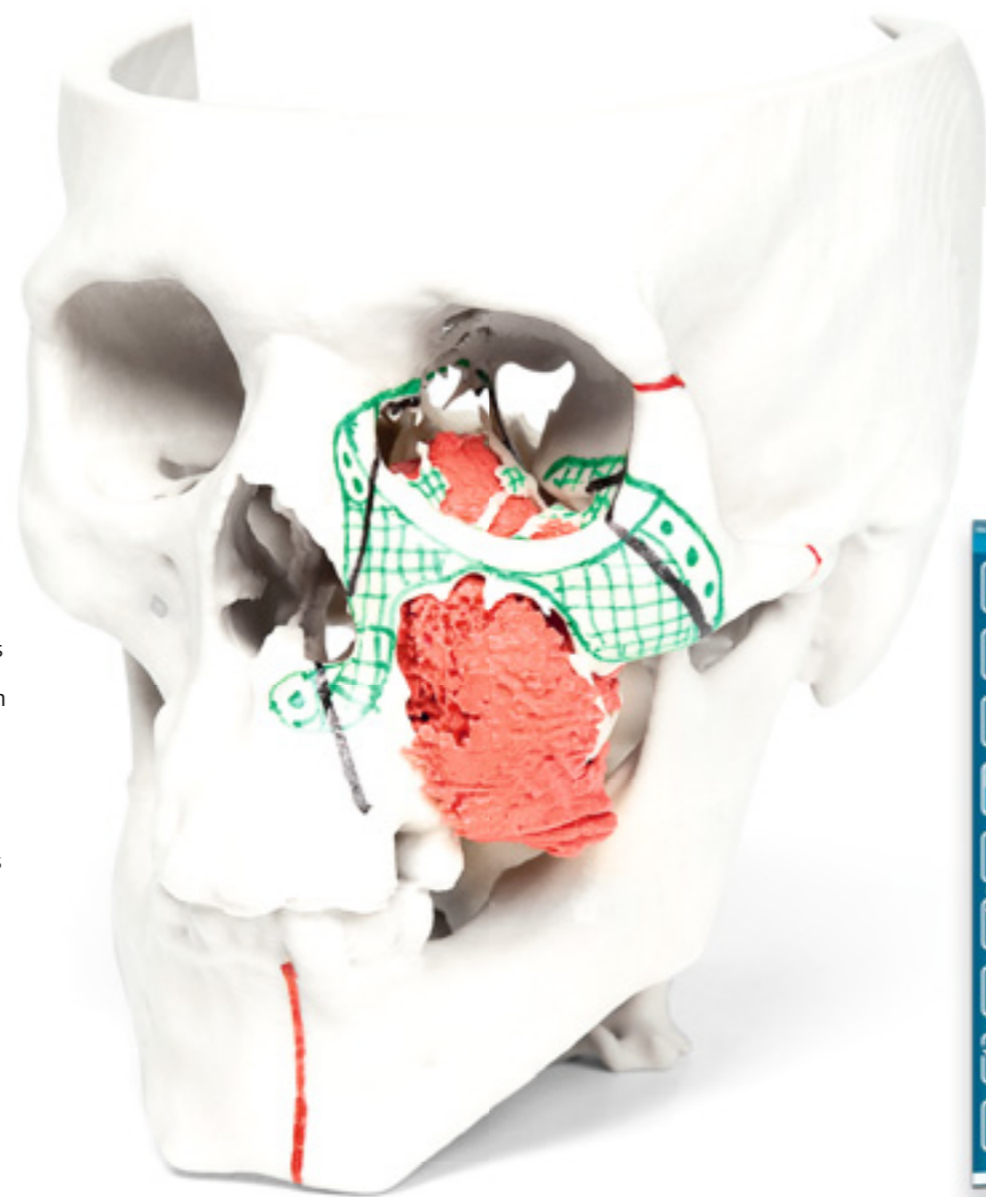
The 3D design is created in an online meeting between surgeon and designer.

Skull model for surgical pre-planning and ready-to-use patient specific implant.

Planmeca ProModel™ service concept

- A unique service for creating patient specific implants, surgical guides and skull models from CBCT/CT images

- 3D implants are designed in an online session between the surgeon and a Planmeca designer

- Quick and easy – from order to delivery in just a few business days

- Significantly lowers costs and reduces operation times by up to 4 hours

- Faster and more precise operations leading to better aesthetic results

Faster operations, precise fit and better aesthetic results

Real-time jaw movement – in 3D

Planmeca 4D™ Jaw Motion *is the only true CBCT integrated solution for tracking, recording, visualising, and analysing jaw movement in 3D. It offers incomparable visualisation and measurement data of mandibular 3D movements in real-time – creating a fourth dimension in diagnostics.*

Key features:

- The only CBCT integrated jaw tracking solution

- Track, visualise, and record jaw movement in 3D

- Visualise movements in the **Planmeca Romexis®** software in real time

- Record movements for later use and analysis

- Measure and visualise the movement paths of points of interest in frontal, sagittal, and axial movement graphs and in 3D

- Export movement and measurement information to 3rd party software in an XML or CSV format for analyses and treatment planning

- Align digital dental models with a CBCT image for improved visualisation

Key components of Planmeca 4D™ Jaw Motion

- CBCT image of a patient, for example a **Planmeca Ultra Low Dose™** image

- **Planmeca ProMax® 3D Mid** or **Planmeca ProMax® 3D Max** X-ray unit equipped with the **Planmeca ProFace®** face photo option

- **Planmeca Romexis® 4D Jaw Motion** software module

- Special glasses and a lower jaw tracking device with light-weight reflective spheres
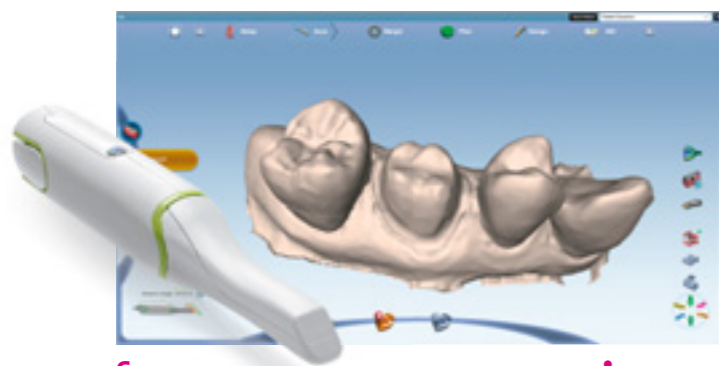
Applications include:

- Support for temporomandibular (TMD) diagnostics

- Mandibular jaw and condyle movement analysis

- Preoperative planning and postoperative treatment verification
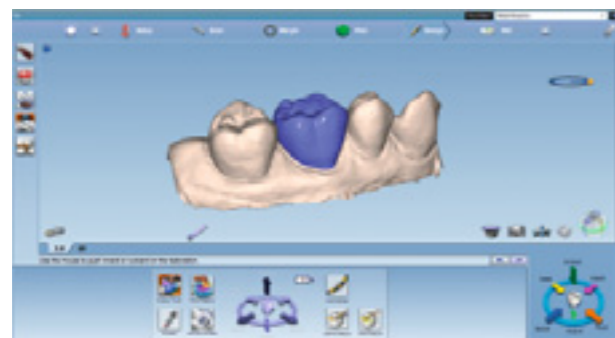
- Articulator programming

The smoothest workflow in CAD/CAM dentistry

PLANMECAFIT™

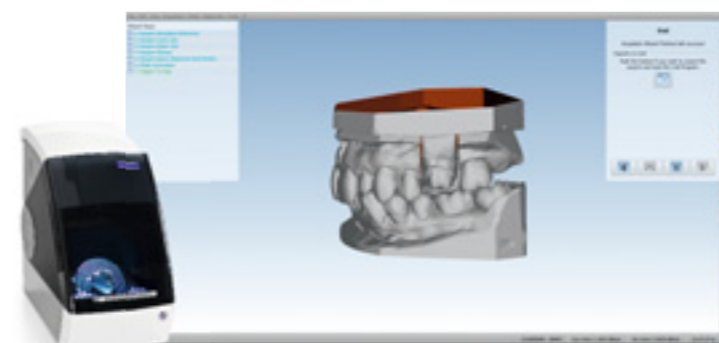**CAD/CAM for dental clinics**

Scan
Planmeca PlanScan®

Design
Planmeca PlanCAD® Easy

Mill
Planmeca PlanMill® 40 S

Planmeca Romexis®
lab order form

CAD/CAM for dental labs

Scan
Planmeca PlanScan® Lab

Design
Planmeca PlanCAD® Premium

Mill
Planmeca PlanMill® 50

Milling center

Milling center
PlanEasyMill™
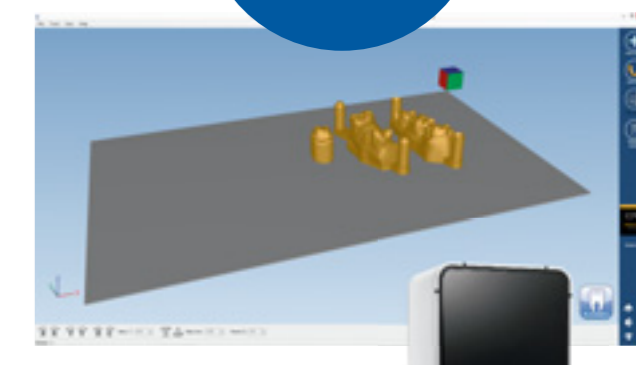
3D print
Planmeca Creo™

Brand new!

Brand new!

PLANMECA**FIT**™

CAD/CAM for dental clinics

*From ultra-fast intraoral scanning to sophisticated designing and high-precision chairside milling, our cutting-edge **Planmeca FIT**™ system for dental clinics includes all the necessary tools for a completely integrated and digital workflow. The open interfaces between devices and software allow you to choose the entire chairside workflow or smoothly communicate with your partner laboratory via the **Planmeca Romexis® Cloud** image transfer service.*

Planmeca PlanScan®

Ultra-fast intraoral scanner for open CAD/CAM.
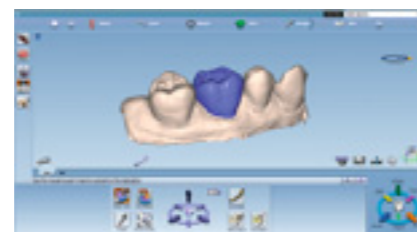
Planmeca PlanCAD® Easy

Easy and efficient design tool for prosthetic works.

Planmeca PlanMill® 40 S

Powerful and precise unit for milling at clinics.

Precision beyond comparison – discover the perfect FIT for you
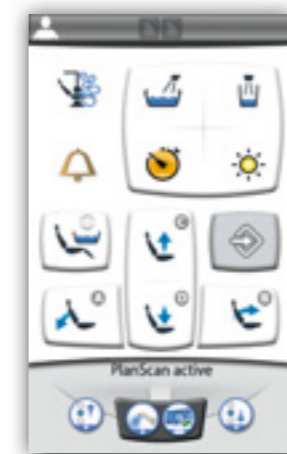
Planmeca PlanScan®
Ultra-fast intraoral scanner for open CAD/CAM

Chairside scanning like never before

- Colour and grayscale scanning
- Autoclavable and changeable tips in different sizes for impeccable infection control
- Powder-free scanning
- Moisture control with built-in anti-fogging technology
- Real-time scanning with sound guidance
- Accurate scans from a single unit to a full arch
- Open STL file format
- True dental unit integration
- Plug-and-play device – easy to share

The unparalleled benefits of dental unit integrated Planmeca PlanScan®

- Smooth and effortless workflow lets you concentrate on your patient
- Constant access to real-time scanning data
- Hands-free operation with wireless foot control
- Can be upgraded to any Planmeca dental unit
- Can be shared between different operatories
- Intelligent **Planmeca Romexis®** software licensing – different work phases (scan, design and manufacture) can be performed simultaneously by different users.

PLANMECA**FIT**™

CAD/CAM for dental clinics

Planmeca PlanCAD® Easy

Easy and efficient design tool for prosthetic works

Our open CAD software suite designed especially for dentists is the perfect tool for sophisticated 3D designing and planning at a dental clinic. The software is easy and fast to use and ideal for designing a wide range of prosthetic works – from a single crown to bridges.

- Extensive range of indications: crowns, inlays, onlays, veneers, and bridges
- User-friendly designing – fast, easy, and carefree
  - automatic saving
  - automatic design: contact strength, anatomical shape, and minimum material thickness
- Option to modify anatomics manually after automatic designing
- Easy to send the final design to be milled from the same software
- Part of the **Planmeca Romexis®** software

> Smooth usability and automatic design of restorations

Simple workflow from description to milling
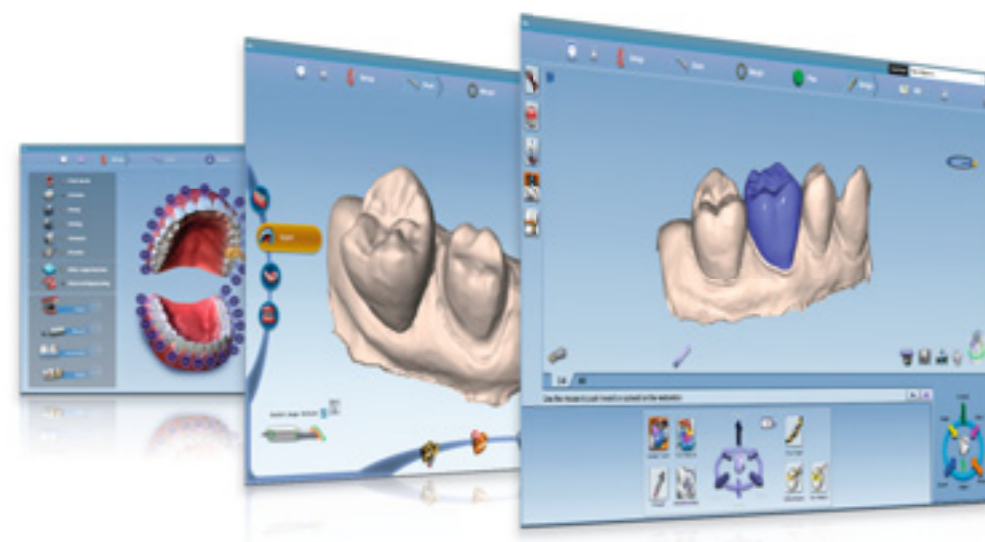
Planmeca PlanMill® 40 S

Powerful and precise unit for milling at clinics

Planmeca PlanMill® 40 S is our brand new unit for fast and accurate milling directly at a dental clinic. With its enhanced performance and numerous smart features, the unit offers the most advanced milling experience on the market.

- State-of-the-art design
- Linear motors for the highest accuracy
- On-board computer for an independent workflow and optimal control
- Fast milling speed – 80,000 RPM and 8–10 minutes per restoration
- Expanded range of applications – abutments, crowns, inlays, onlays, veneers, and bridges
- Automated tool charger for 10 tools
- Smart tool paths – optimised to suit material characteristics
- Guided maintenance – from daily cleanings and water changes to annual preventive maintenance notifications

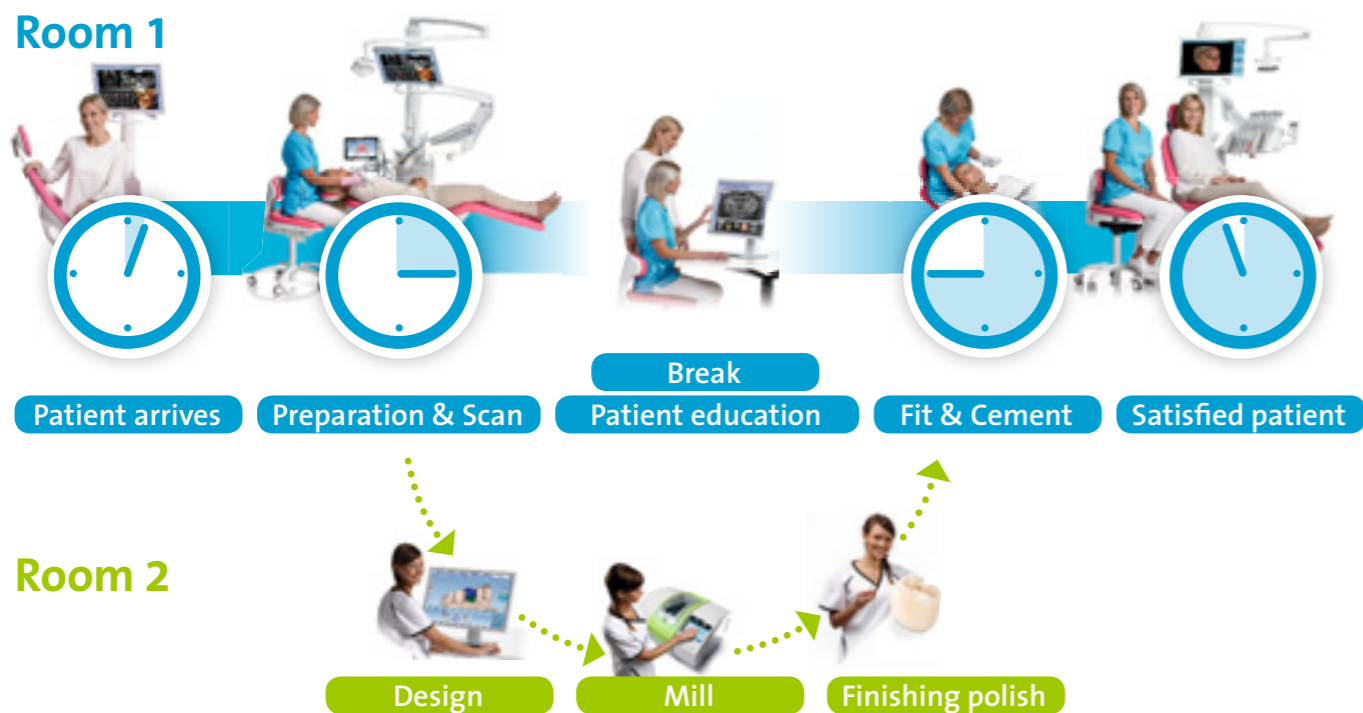> **Planmeca Romexis® Clinic Management** for real-time monitoring

PLANMECA**FIT**™

CAD/CAM for dental clinics

Take advantage of the optimal clinic workflows with Planmeca Romexis® software
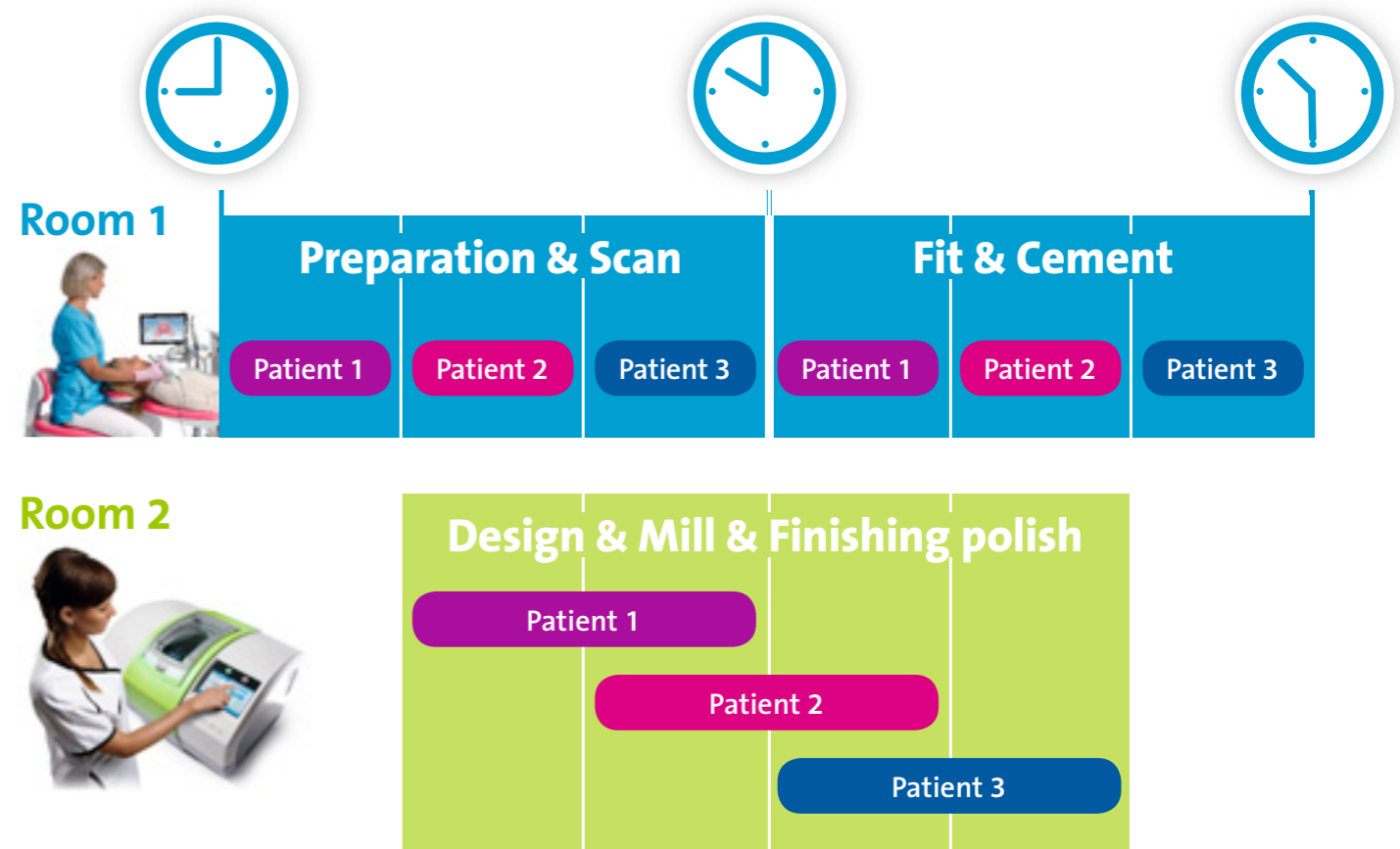
Complete patient satisfaction

Planmeca FIT™ *is a completely streamlined approach to high-quality dental care. Instead of two visits, it allows patients to be treated in one hour – with no temporary crowns or physical dental models required. Ensure full patient satisfaction and efficiency at all phases with Planmeca FIT one-hour dentistry!*

Maximised uptime

The key to ensuring an optimal patient flow lies in streamlined efficiency. **Planmeca FIT™** *enables you to maximise your clinic's uptime by eliminating non-productive steps. A clear division of work and responsibility will allow you to treat more patients in a shorter period of time and utilise resources to the fullest.*

Room 1

Patient arrives | Preparation & Scan | Break / Patient education | Fit & Cement | Satisfied patient

Room 2

Design | Mill | Finishing polish

Room 1

Preparation & Scan			Fit & Cement		
Patient 1	Patient 2	Patient 3	Patient 1	Patient 2	Patient 3

Room 2

Design & Mill & Finishing polish

Patient 1
Patient 2
Patient 3

# Planmeca PlanScan® – seamless connectivity with dental labs

With the **Planmeca Romexis®** software platform, your dental laboratory is always ready to receive digital impressions. Scanning data and all other necessary information is sent via our secure **Planmeca Romexis® Cloud** image transfer service – or through the database shared with the clinic. The result is an unbeatable solution for a completely digital workflow.

Dental technicians can instantly access the scan data for designing

Case Patient 1
Case Patient 2
Case Patient 3
Case Patient 4

Patient 1

Patient 2

Patient 3

Patient 4
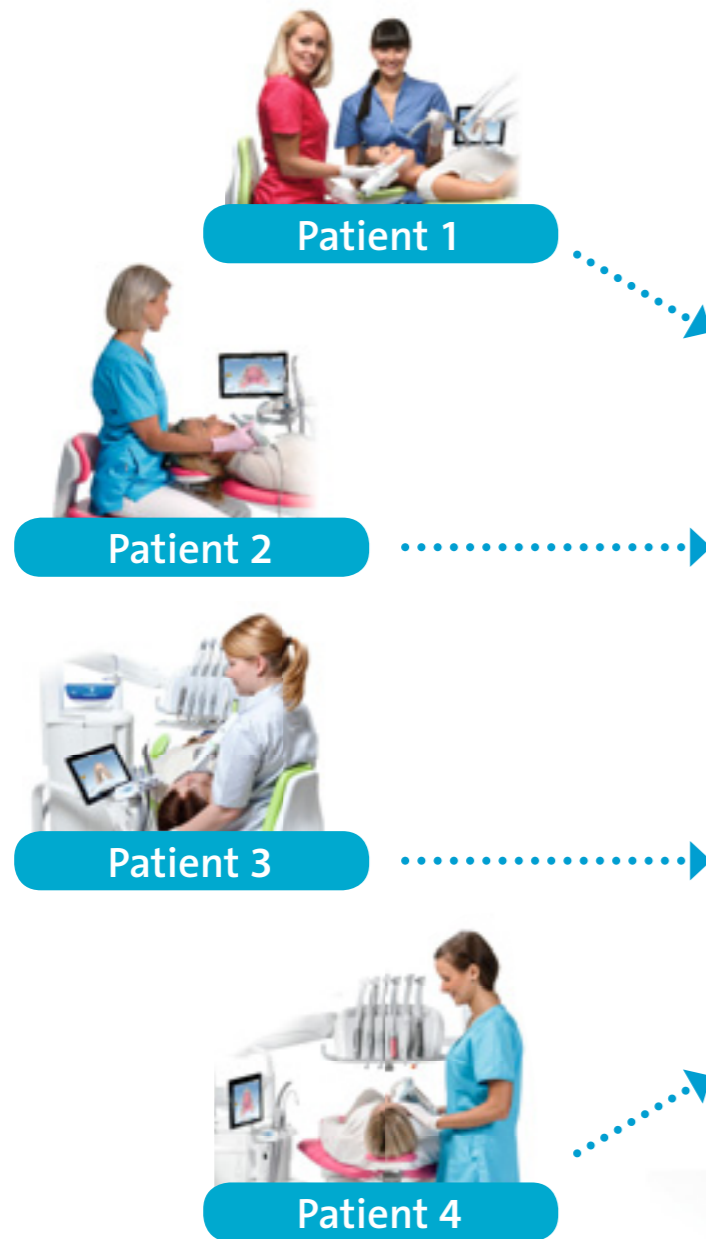
Planmeca dental units – your best investment

We are proud to present Planmeca's world-leading range of dental units.
Planmeca Sovereign® Classic *is our newest dental unit, packed with intelligent design details.* ***Planmeca Compact™ i Touch*** *has more than 50,000 satisfied customers around the world, from private practices to universities and hospitals, while* ***Planmeca Compact™ i Classic*** *is an ideal choice for general dentistry with its standard features.*

New!
Planmeca PlanID™
Personal settings by flashing a contactless card

Planmeca Compact™ i Classic

Planmeca Compact™ i Touch

Planmeca Sovereign® Classic

Intuitive touch panel for perfect ease of use

The power of a digital dental unit

Planmeca's digital dental units bring unforeseen smoothness to your daily workflow. They guarantee ergonomic working positions and instant access to personal user settings, leading to considerable time and cost savings for the whole clinic.

Intuitive user interface

Our intuitive touch panel is straightforward and easy to use with customisable functions, treatment positions, instrument settings, and presets. The entire dental unit can be controlled from the same user interface.

Dental unit integrated tablet

Control all dental unit operations conveniently from an integrated chairside tablet device.
The **Planmeca SmartGUI™** mobile application* allows the user interface of **Planmeca Compact™ i Touch** and **Planmeca Sovereign® Classic** units to be accessed and operated flexibly through either a tablet or smart phone.

Download the **Planmeca SmartGUI™** application for iOS and Android from the App Store or Google Play.

* Intended for trainings, educational use, maintenance and adjusting settings.

SmartGUI

Touch panel as a mouse

• User interface can be flexibly used as a mouse

• Chairside computer or tablet device can be controlled from the touch panel

• No extra mouse needed

Different users, different needs

• Customisable dental unit functions, treatment positions, instrument settings, and presets

• Personal settings always available on all the dental units at a clinic

• Easy instrument interchange according to personal preferences

• All necessary functions can also be carried out from the dental unit's wireless foot control

Quick patient change with automated infection control

• Automated flushing and cleaning cycles

• Clear user guidance in 20 languages

• Minimised manual efforts with software-controlled operations

• Time and labour cost savings with scheduled infection control cycles

Enjoy your chairside work

Planmeca Romexis

The multi-purpose Flexy™ holder

The modular **Flexy™** holder for suction tubes and instruments supports all your treatment needs. You can also easily integrate your **Planmeca PlanScan®** intraoral scanner and tablet device for optimal chairside workflow.

Personal settings easily available

Planmeca PlanID™ allows access to personal settings on any dental unit at a clinic with a simple flash of a card.

Ease of use – just plug and play

The intuitive touch panel is straightforward and easy to use with customizable treatment center functions, treatment positions, instrument settings and presets.

Smartly designed instrument console

Our effortless console positioning allows instruments to be placed at the optimal ergonomic position. The console can also be moved to the assistant side for a smooth and efficient workflow. Instruments with quick connectors are interchangeable by user.

Foldable leg rest

The automatic leg rest makes it easy for patients to enter and exit the chair, ensuring a smooth workflow. It also provides excellent patient comfort and is practical for doctor-patient consultations and prosthodontic treatments.

Comfortable working positions

The wide height adjustment range allows you to work comfortably in a standing position, while the very low chair position also makes it possible to treat patients who are semi-reclined.

Unrestricted operator access

The narrow top of the backrest allows the dental team to get as close as possible to the treatment area.

Extensive legroom

The side-lifting chair and small cuspidor base maximize legroom for both dentist and assistant – allowing the whole team to get as close as possible to the patient.

Wireless foot control

All necessary functions can be carried out from the treatment center's foot control, keeping your hands free and minimizing cross-contamination. You can also use the foot control to operate your **Planmeca PlanScan®** intraoral scanner.

Revolutionary connectivity for your Planmeca devices

*Our **Planmeca Romexis® Clinic Management** software provides real-time information and monitoring of device usage and events. This pioneering software module offers unique benefits and services for all the different users at a clinic.*

Planmeca devices can be connected to the **Planmeca Romexis® Clinic Management** software. It collects information on all equipment usage and offers practical tools for managing clinics. It allows storing personal dental unit settings, such as chair positions and instrument settings, and enables applying specified user restrictions for different user groups.

Web-based reporting – view device status and usage dashboards from anywhere

NETWORK

Benefits for group practices

• Monitor the clinic's status with all networked devices in one easy-to-read graphical overview

• Access accurate, real-time information on all dental unit operations

• Achieve significant cost-savings through better operational planning based on actual usage

• Achieve significant time and cost-savings with remote software updates

Benefits for clinical staff

• Easily adjust and save individual chair positions and instrument presets

• Instantly access saved user settings from all dental units at the clinic

Benefits for maintenance and infection control

• Conveniently monitor dental unit mileage remotely

• Minimise any possible downtime with real-time user-assistance

• Trouble-shooting is easy and fast: both real-time information and history of the device available

• Preventive maintenance can be planned and optimised according to real usage

• Audit trail and quality assurance of infection control procedures using built-in reporting

Industry-leading 2D X-ray units

Introducing our world-class range of 2D X-ray units
– offering the most advanced and versatile devices
and software to meet all your 2D extraoral
and intraoral imaging needs.

True
extraoral
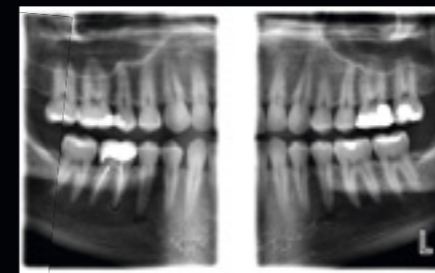bitewing
images

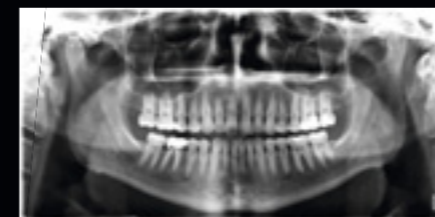*Planmeca ProX™*

*Planmeca ProScanner™*

Planmeca ProOne®

Planmeca ProSensor® HD

Planmeca ProMax® 2D

True Bitewing program, adult

Standard panoramic image
of the same patient as the bitewing above

Intelligent 2D modules

*Our advanced **Planmeca Romexis®** software suite offers the most versatile tools for 2D imaging. This flexible dental imaging suite adapts to your needs and will grow into the third dimension together with your practice.*
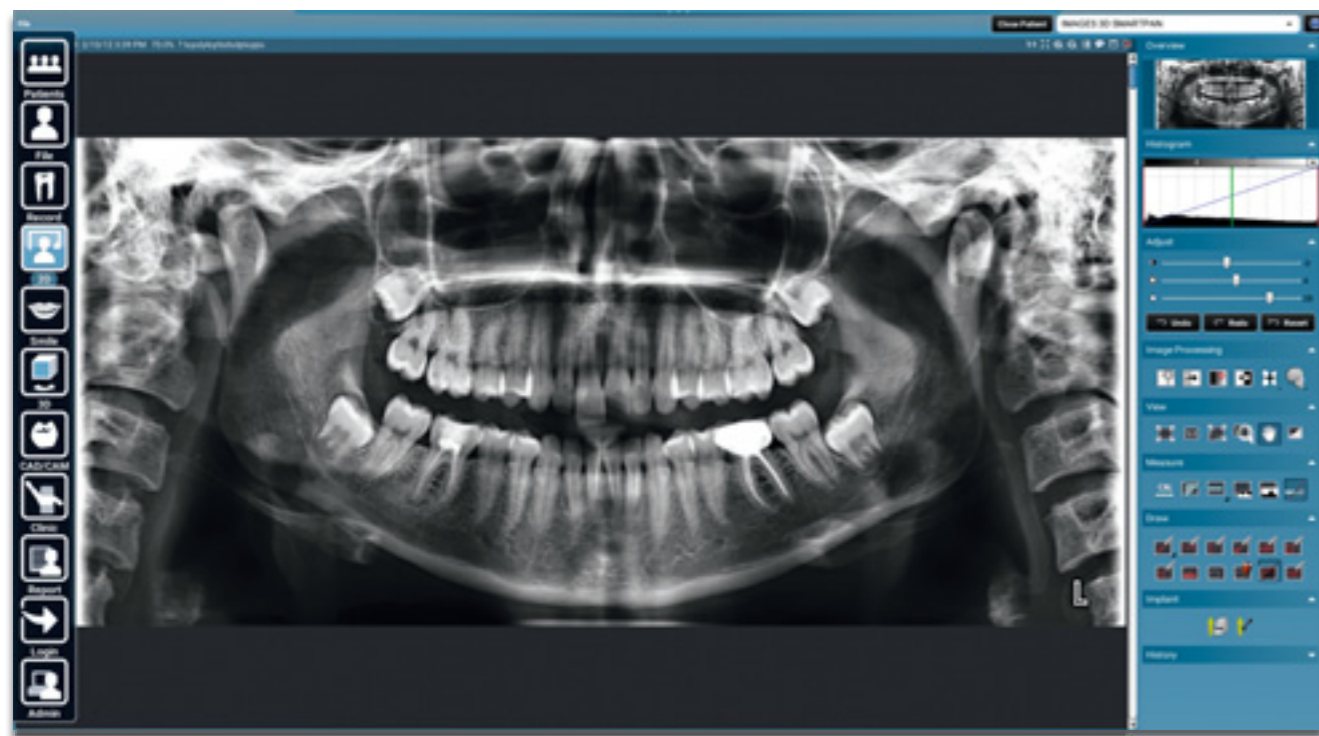
Planmeca Romexis® Cephalometric Analysis module

Take advantage of the **Planmeca Romexis® Cephalometric Analysis** module's wide range orthodontic and orthognathic tools.

• Tools for creating cephalometric analyses, superimpositions, and surgical treatment plans (VTO) in minutes

• Fully customisable analyses, norms, and reports

• Microsoft Excel export and import function

• Compatible with the Windows operating system

Online automatic analysis service

New!

Acquire cephalometric analyses regarless of time and place with the **Planmeca Romexis®** automatic cephalometric analysis service.

• Online automatic cephalometric tracing in a few seconds

• Over 50 analyses available for download immediately after tracing

• Direct link from the Planmeca Romexis 2D module for ordering analyses
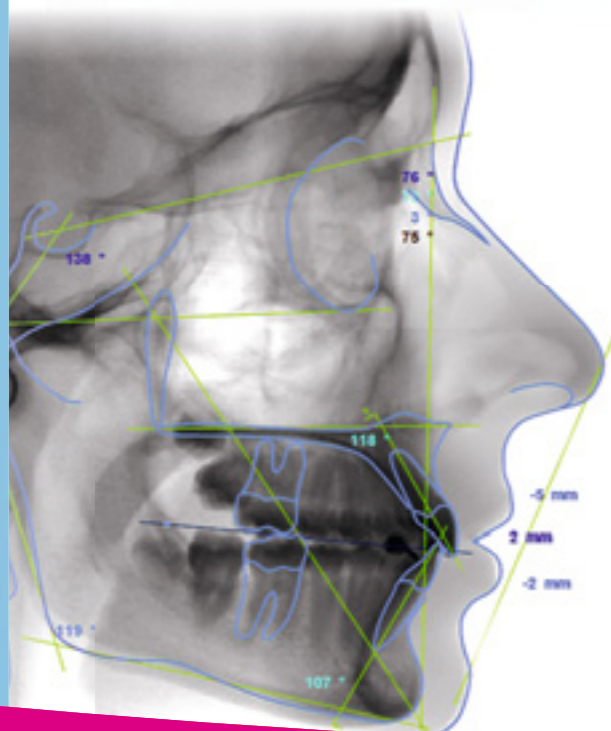
Integrated document management

The printing module with multi-page support is ideal for creating professional, high-quality printouts and radiology reports to be sent to referring dentists.

Documents of any type can be attached to patient files, providing a convenient storage for cephalometric tracing reports, referral letters and other information.


Advanced implant planning

Planmeca Romexis® provides powerful tools for implant planning, including realistic implant models from over 60 manufacturers.
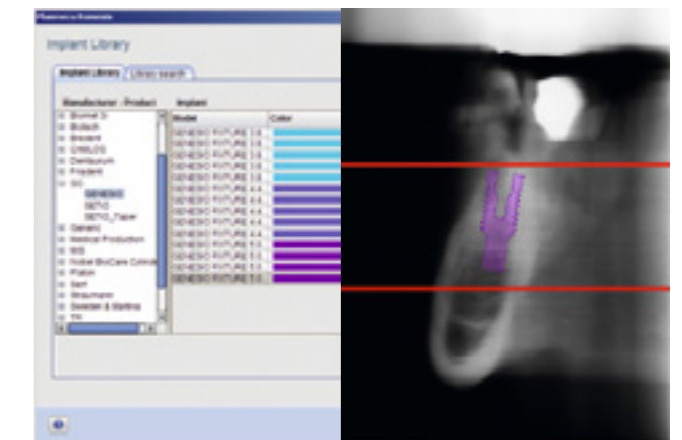
Radiology interpretation module

The **Planmeca Romexis® Radiological Findings** module is the most advanced findings-recording tool on the market. Developed in cooperation with clinicians, it offers worklists and easy reporting of 2D and 3D images. The module is especially designed for multi-site operations where sharing of work is essential.
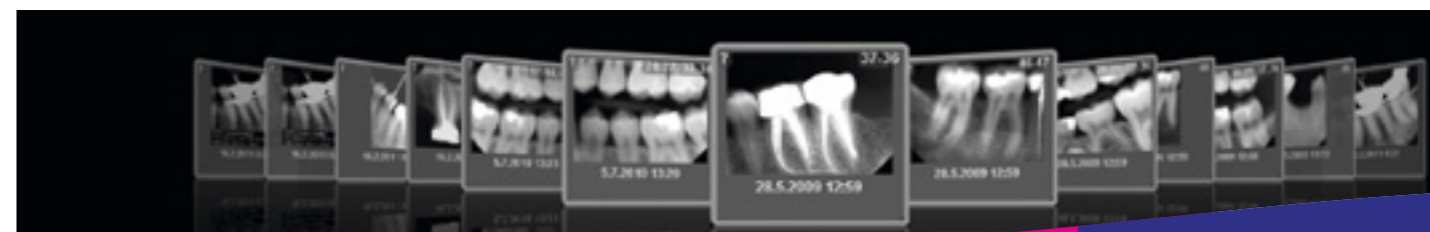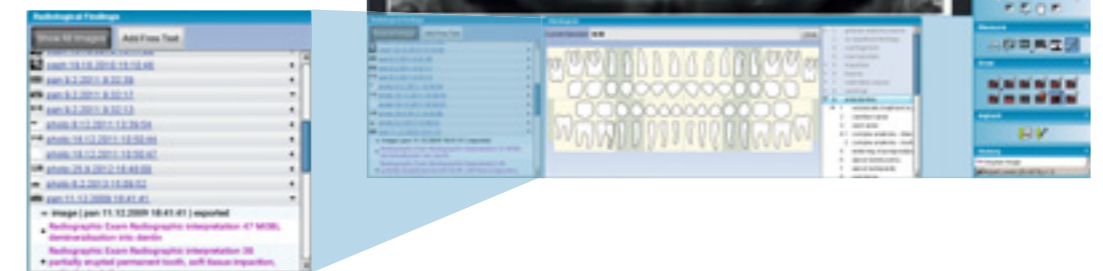
One software for all.

Planmeca Oy designs and manufactures a full line of industry-leading dental equipment, including 3D and 2D imaging devices, CAD/CAM solutions, dental care units and software. Planmeca Oy, the parent company of the Finnish Planmeca Group, is strongly committed to better care through innovation, and it is the largest privately held company in the field.

10037269/0317/en