PLANMECA

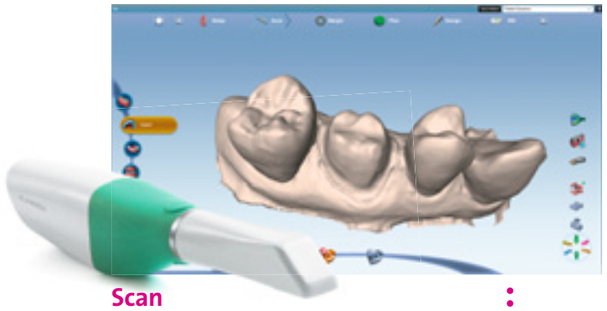
CAD/CAM solutions

ENGLISH

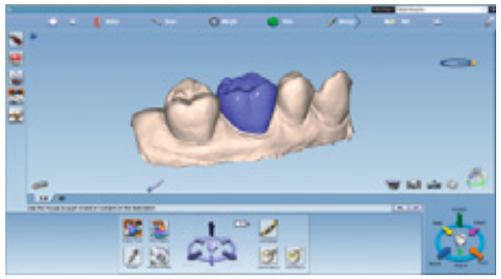
The smoothest workflow in CAD/CAM dentistry

PLANMECA FIT®

CAD/CAM for dental clinics



Scan
Planmeca Emerald™
Planmeca PlanScan®

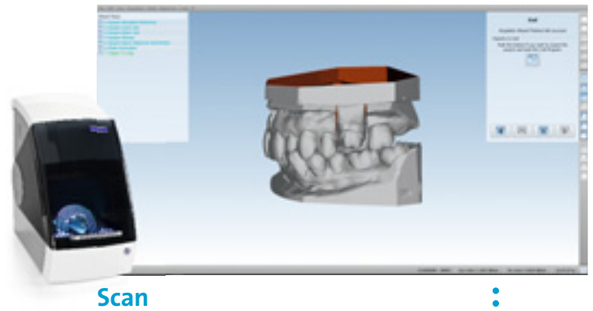


Design
Planmeca PlanCAD® Easy

Mill
Planmeca PlanMill® 40 S
Planmeca PlanMill® 30 S

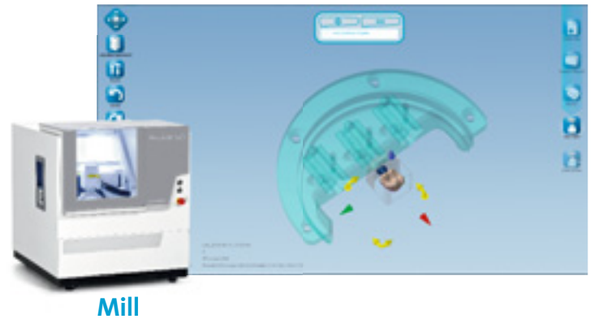
Planmeca Romexis®
lab order form

CAD/CAM for dental labs



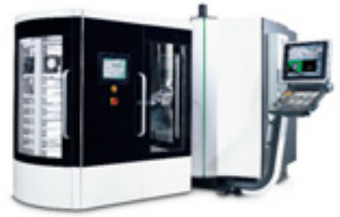
Scan
Planmeca PlanScan® Lab

Design
Planmeca PlanCAD® Premium

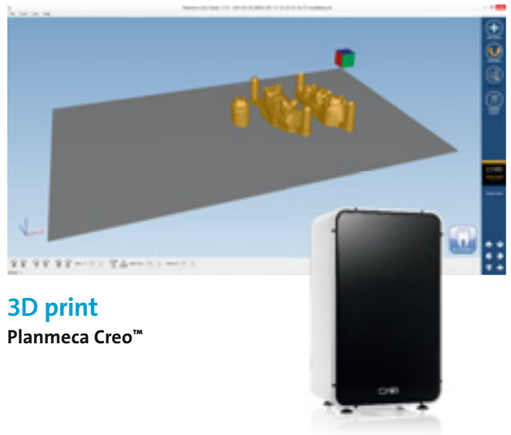


Mill
Planmeca PlanMill® 50

Milling center



Milling center
PlanEasyMill™



3D print
Planmeca Creo™

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.*

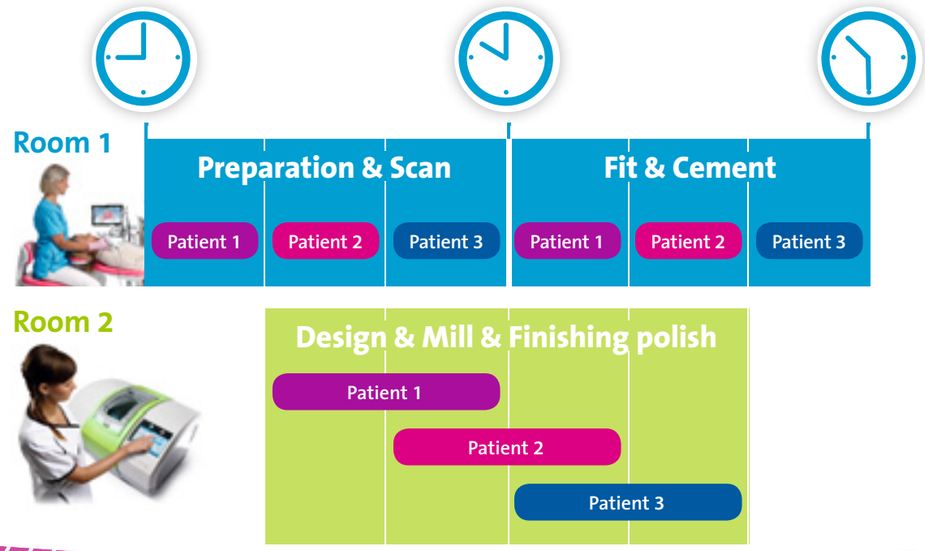
Optimised chairside workflows

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

Planmeca FIT® enables you to maximise your clinic's uptime by eliminating non-productive steps. With intelligent **Planmeca Romexis®** software licensing, different work phases (scan, design and manufacture) can be performed simultaneously by different users. This allows you to treat more patients in a shorter period of time and utilise resources to the fullest.



Planmeca Emerald™

The crown jewel of intraoral scanning

*The brand new **Planmeca Emerald**™ is a small, lightweight, and exceedingly fast intraoral scanner with superior accuracy. It is the perfect tool for smooth and efficient chairside workflows. Capturing digital impressions has never been as easy!*

Experience intraoral scanning like never before

- Small, lightweight and ergonomic design
- Powder-free, quick scanning with sound guidance
- Latest laser technology guarantees accurate 3D models with vivid colours
- Smart two button function – no need to touch the computer while scanning patients
- Plug & Play: USB 3.0 connection directly to PC or Planmeca dental unit
- Actively heated tip prevents fogging
- Autoclavable and changeable tips for impeccable infection control
- Support for open STL and PLY file formats
- Scans intraorally, impressions and models
- Scan option for Microsoft Surface Pro tablets coming soon

Planmeca PlanScan®

Accurate intraoral scanner for open CAD/CAM

*Discover **Planmeca PlanScan**® – our acclaimed intraoral scanner for accurate digital 3D impressions. This high-performance intraoral scanning solution can be integrated into your digital Planmeca dental unit or connected to a laptop. Planmeca PlanScan provides a seamless user-experience and supports an ideal digital treatment workflow.*

For flexible and efficient intraoral scanning

- Grayscale and colour scanning
- Three tip sizes – autoclavable and changeable for impeccable infection control
- Powder-free scanning with sound guidance
- Actively heated tip prevents fogging
- Support for open STL and PLY file formats
- Plug & Play device – easy to share
- Scans intraorally, impressions and models

Discover the unique benefits of our dental unit integrated intraoral scanners

- Smooth and effortless workflow lets you concentrate on your patient
- Constant access to real-time scanning data
- Utilize additional screens on dental unit to achieve outstanding ergonomic working position
- Hands-free operation with wireless foot control
- Can be upgraded to any currently available Planmeca dental unit

Planmeca PlanCAD® Easy

Easy and efficient design tool for prosthetic works

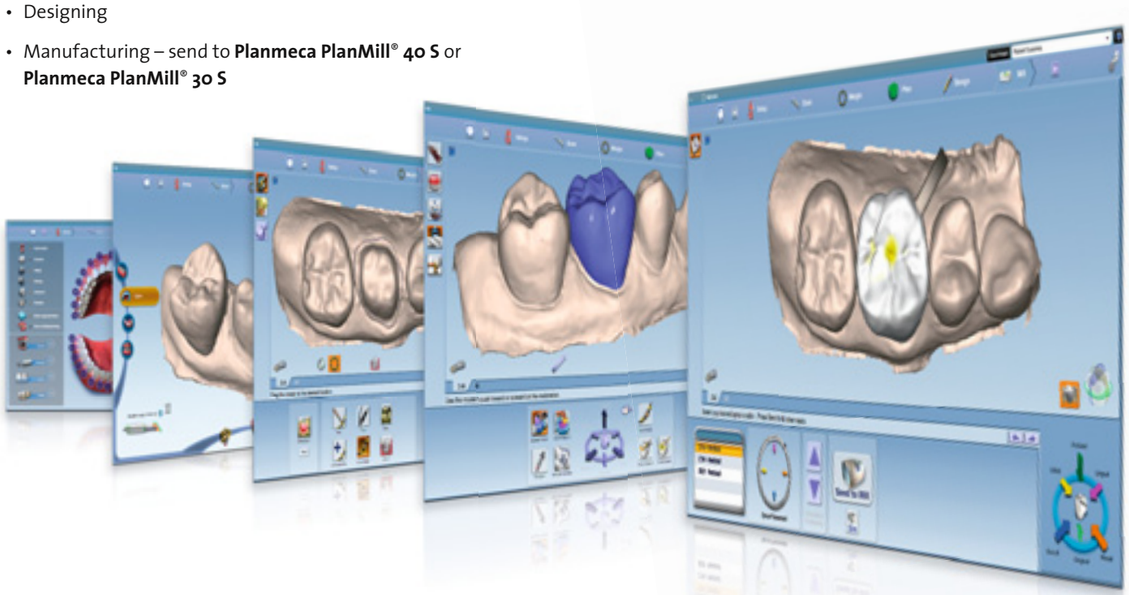
Our open CAD software suite designed especially for dentists is the perfect tool for sophisticated 3D designing and planning at a dental clinic. The software is easy and fast to use and ideal for designing a wide range of prosthetic works – from a single crown to bridges.

- Extensive range of indications: crowns, abutments, 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
- Part of the **Planmeca Romexis®** software

Smooth usability and automatic design of restorations

Simple workflow from description to milling

- Work description
- Scanning
- Marking the margin line
- Designing
- Manufacturing – send to **Planmeca PlanMill® 40 S** or **Planmeca PlanMill® 30 S**

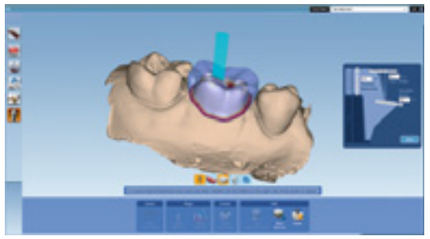


Seamless implant workflow for clinics

*The **Planmeca PlanCAD® Easy** software's new implant workflow is an ideal solution for efficient dental clinics. It allows you to design hybrid abutments and manufacture them chairside with the **Planmeca PlanMill® 40 S** milling unit.*

- Automatic alignment of scan body scans to the corresponding implant library information
- Screw-retained, fully anatomical abutments on titanium bases
- Option to create a two-piece restoration with an individual abutment and cemented suprastructure
- Tools for creating an optimal emergence profile and support for the suprastructure
- The software prevents the design of abutment geometries that conflict with the suprastructure's material integrity

Emergence profile design for a one-piece hybrid abutment



Creation of a two-piece restoration: hybrid abutment and crown

Planmeca PlanMill®

Take milling to the next level

*Our **Planmeca PlanMill**® milling units are the leading choice for fast and accurate milling directly at a dental clinic. With their enhanced performance and numerous smart features, the units offer the most advanced milling experience on the market.*

- Linear motors for the highest precision
- On-board computer for an independent workflow and optimal control
- Expanded range of applications – abutments, crowns, inlays, onlays, veneers, and up to 6-unit bridges
- Smart tool paths – optimised to suit material characteristics
- Guided maintenance – from daily cleanings and water changes to annual preventive maintenance notifications
- The pioneering **Planmeca Romexis® Clinic Management** software module for ultimate efficiency: real-time monitoring of task status, milling statistics, diagnostic log view, and quick guides

Planmeca PlanMill® 40 S

For powerful and precise milling

- Fast milling speed – two spindles, 80,000 RPM, and 8–10 minutes per restoration
- Automated tool changer for 10 tools

Planmeca PlanMill® 30 S

Entry-level unit offers great value

- High-speed single-spindle milling unit
- Approximately 16–18 minutes per crown
- Rotary axis enables milling both sides of the block with a single spindle
- Automated tool changer for 5 tools

Materials

Ceramic materials

IPS e.max CAD
IPS Empress CAD
IPS Empress CAD Multi
VITA SUPRINITY PC
VITABLOCS Mark II
VITABLOCS TriLuxe forte
Straumann n!ce

Hybrid ceramic materials

VITA ENAMIC
VITA ENAMIC multiColor
GC CERASMART

Resin-based materials

Telio CAD

Zirconium materials

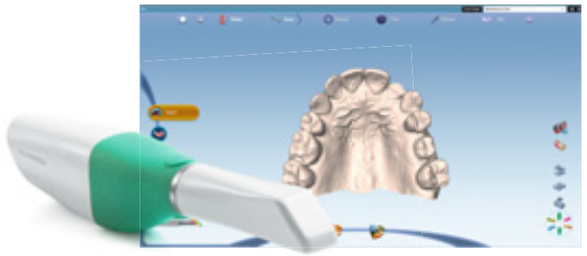
IPS e.max ZirCAD

Abutment blocks for Planmeca PlanMill® 40 S

IPS e.max CAD
Telio CAD

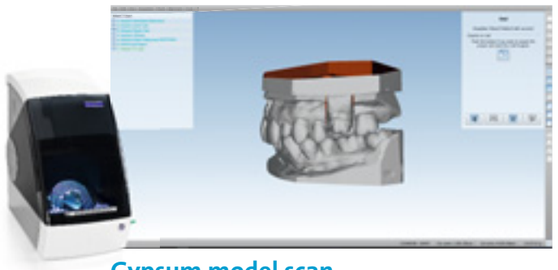
CAD/CAM for dental labs

*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 and a maintenance free desktop scanner, sophisticated design software for a full range of indications, and an accurate 5-axis milling machine.*



Intraoral scan

Planmeca Emerald™
Planmeca PlanScan®

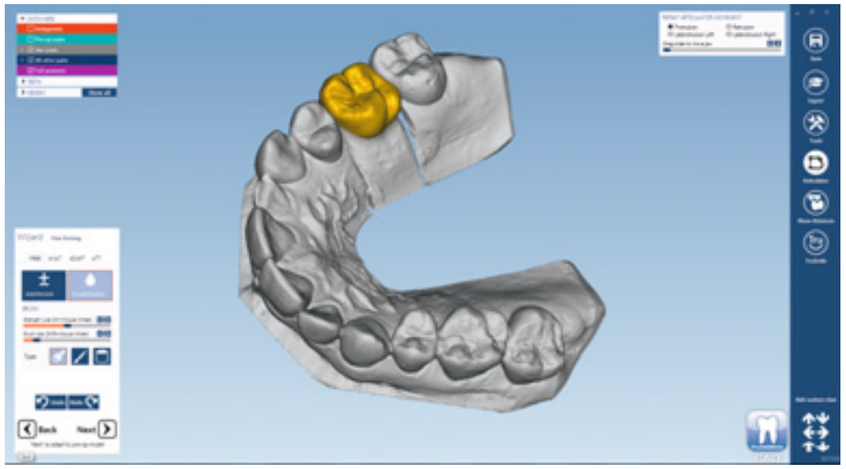


Gypsum model scan

Planmeca PlanScan® Lab

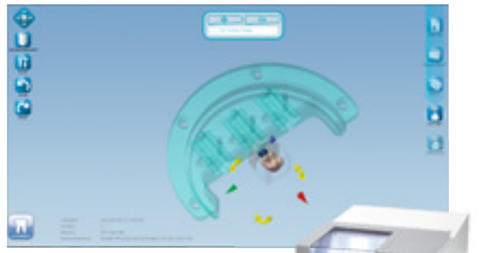
Import

STL file
PLY file



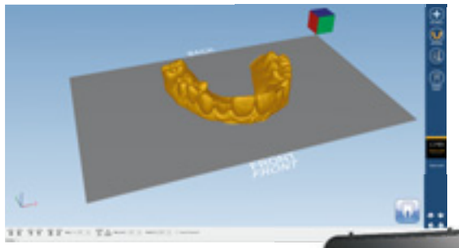
Design

Planmeca PlanCAD® Premium



Mill

Planmeca PlanMill® 50



3D print

Planmeca Creo™

Planmeca intraoral scanners

Receive data regardless of time and place

*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 a database shared with the clinic. The result is an unbeatable solution for a completely digital workflow.*

Real-time data transfer from Planmeca Emerald™ or Planmeca PlanScan®

Clinic 1

Clinic 2

Clinic 3

Clinic 4

Case from Clinic 1
Case from Clinic 2
Case from Clinic 3
Case from Clinic 4

Planmeca PlanScan® Lab

High-quality desktop scanner for gypsum models

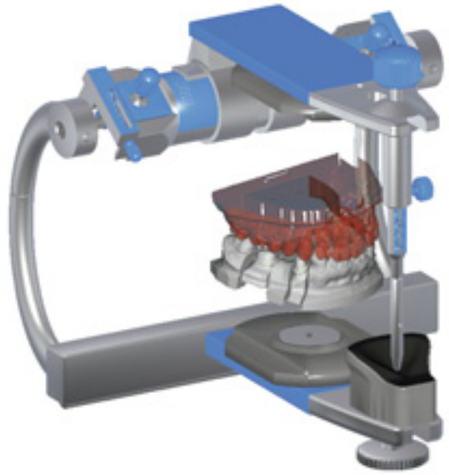
***Planmeca PlanScan**® **Lab** is our fast and accurate desktop scanner for scanning gypsum models and impressions. The scanner is easy to operate and can be used for a variety of indications, ranging from single-unit crowns and abutments to full-arch bridges and implant bars.*

Planmeca PlanCAD® Premium

Perfect design software for prosthetic restorations

*Our open **Planmeca PlanCAD® Premium** software for dental laboratories is an optimal tool for designing high quality restorations for a full range of indications.*

Import scans from an intraoral or desktop scanner



Highlights

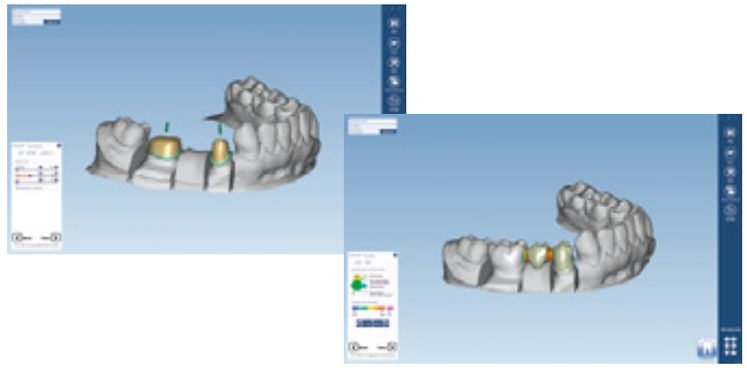
- Planmeca intraoral scanner import – reads colour texture models, margin line data, and order descriptions
- Quick launch option from **Planmeca Romexis®**
- User-friendly tools for modifying designs, including a virtual articulator
- The software can be tailored to different user needs: the user can work in a wizard or with a customised workflow
- Open implant libraries for custom abutment design
- Open STL import and export

A full range of indications

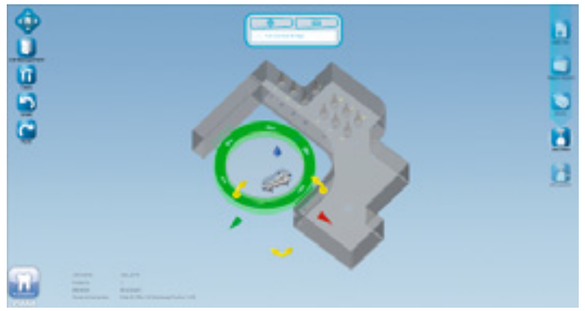
- Crown and bridge design
  - copings, anatomical copings, monolithic restorations, frameworks, provisionals
- Inlays, onlays, and veneers
- Wax-up design
- Telescopic crowns
- Custom abutments
  - screw-retained and cemented
- Implant bar and bridge design
- 3D printed models
- Bite splints

Open and easy workflow for flexible designing and manufacturing

Import a scan from Planmeca Emerald™, Planmeca PlanScan®, or Planmeca PlanScan® Lab



Design



Send to Planmeca PlanMill® 50 for manufacturing

Planmeca PlanMill® 50

5-axis milling unit for accurate and reliable results

*Complete your digital workflow with the 5-axis **Planmeca PlanMill® 50** milling unit. It is suitable for both wet and dry milling of discs and blocks. The unit's easy-to-use CAM software accepts STL files.*

Materials

Discs

Zirconium
Wax
PMMA

Blocks

Ceramic materials
Hybrid ceramic materials
Resin-based materials
Zirconium materials

Planmeca Creo™

3D printer for creative minds

***Planmeca Creo™** is our precise 3D printer for creating a wide range of indications. It is an excellent tool for dental labs and large clinics aiming to expand their production capabilities and increase efficiency.*

Materials

Dental models

Surgical guides

More materials coming soon!

PlanEasyMill™

Milling services for dental laboratories

*Our **PlanEasyMill**™ milling centre offers cutting-edge milling services for dental laboratories. Quick deliveries and superior service combined with a wide selection of materials guarantee successful results.*

AUTHORIZED MILLING PARTNER of ivoclar vivadent: passion vision innovation

PlanEasyMill also offers 3D printed dental models based on digital impressions.

PLANMECA FIT®

Planmeca Emerald™ intraoral scanner

Indications	Inlays/onlays Veneers Crowns Bridges Full arches Scan bodies Models Impressions
Integration	Integrated into a Planmeca dental unit or connected to a PC – Microsoft Surface Pro tablet integration coming soon
Data output	Scans of lower and upper arches in occlusion exported as open STL files
Scanning options	True colour
Scanning tip	1 option; removable, autoclave, sterilisable
Field of view (width x height)	17.6 x 13.2 mm
Anti-fogging technology	Actively heated tip, guaranteed non-fogging operation when used intraorally
Capturing speed	Video capture displays over 36 3D data sets per second
Cable interface	USB A type connection on the laptop end USB C Type connection on the scanner end All cables are designed to transmit data via USB 3.0
Light source	Red, green, and blue lasers
Scanning technology	Projected pattern triangulation
Dimensions	Scanner with tip: 41 x 45 x 249 mm (1.6 x 1.8 x 9.9 in.)
Weight	Scanner body: 218 g (7.5 oz) Scanner tip: 17 g (0.6 oz)

Minimum PC system requirements

Computer	Laptop PC or desktop PC – Microsoft Surface tablet specifications coming later
Prosessor	Intel i7, 7th generation (7700 series) or better
RAM	16 GB
Graphics card	NVIDIA GeForce GTX 1060 4 GB or better
Monitor	Full HD resolution
Cable interface	USB 3.0
Operating System	Windows 10 (64 bit) Pro

Planmeca PlanScan® intraoral scanner

Indications	Inlays/onlays Veneers Crowns Bridges Full arches Scan bodies Models Impressions
Integration	Integrated into a Planmeca dental unit or connected to a PC
Data output	Scans of lower and upper arches in occlusion exported as open STL files
Scanning options	Colour and grayscale
Scanning tips	Removable, autoclavable, sterilisable
Field of view (width x height)	Colour tip: 11.8 x 18.0mm Size 2, Standard tip: 15.0 x 20.0 mm Size 1, Landscape tip: 12.7 x 9.2 mm Size 0, Portrait tip: 12.5 x 11.8 mm
Anti-fogging technology	Actively heated tip, guaranteed non-fogging operation when used intraorally
Capturing speed	Video capturing displaying over 10 aligned 3D data sets per second
Cable interface	Firewire 800 or Thunderbolt (via adapter)
Light source	Blue laser
Scanning technology	Projected pattern triangulation
Dimensions	Scanner with tip: 48 x 53 x 276 mm (1.9 x 2.1 x 10.9 in.)
Weight	Scanner body: 516 g (18 oz) Scanner tip: 28 g (1 oz)
Scanning software support	Windows 8.1 (64 bit) Pro Windows 10 (64 bit) Pro

Planmeca PlanCAD® Easy software

Indications	Inlays/onlays Veneers Crowns Bridges Abutments
Floating licenses	Scan license Design & Mill license Complete license (scan, design and mill) Mill only license
Operating systems	Windows 8.1 (64 bit) Pro Windows 10 (64 bit) Pro

Planmeca PlanMill® 40 S milling unit

Power requirements	100/240 VAC
Mains frequency	50/60 Hz
Power input	1000 W
Weight	72.6 kg (160 lbs)
Dimensions when closed (W x H x D)	661 x 455 x 508 mm (26 x 17.5 x 20 in.)
Minimum required clearances	Sides 51 mm (2 in.) Rear 51 mm (2 in.) Top 305 mm (12 in.)
Storage temperature	-40–70°C (-40–158°F)
Operating conditions	15–35°C (59–95°F) 0–90% relative humidity maximum altitude 2000 meters (6,592 feet)
Air supply requirements	Pressure and flow: Constant 3.5–9.0 bar (50–130 psi) Minimum 60 l/min (2 cfm) Air purity: Solid contaminants (class 3); filtration level better than 5 µm for solids Water content (class 4); maximum pressure dew point +3 °C Total oil content (class 3); maximum oil content 1 mg/m^3
Cooling lubricant tank	3.4 l
Tool Changer	10 tool positions, automated
Spindle	80 000 rpm
Data connection	Cat5 or Cat6 Ethernet cabling

Planmeca PlanMill® 30 S milling unit

Power requirements	100/240 VAC
Mains frequency	50/60 Hz
Power input	1000 W
Dimensions when closed (W x H x D)	661 x 455 x 508 mm (26 x 17.5 x 20 in.)
Minimum required clearances	Sides 51 mm (2 in.) Rear 51 mm (2 in.) Top 305 mm (12 in.)
Storage temperature	-40–70°C (-40–158°F)
Operating conditions	15–35°C (59–95°F) 0–90% relative humidity maximum altitude 2000 meters (6,592 feet)
Air supply requirements	Pressure and flow: Constant 3.5–9.0 bar (50–130 psi) Minimum 60 l/min (2 cfm) Air purity: Solid contaminants (class 3); filtration level better than 5 µm for solids Water content (class 4); maximum pressure dew point +3 °C Total oil content (class 3); maximum oil content 1 mg/m^3
Cooling lubricant tank	3.4 l
Tool Changer	5 tool positions, automated
Spindle	80 000 rpm
Data connection	Cat5 or Cat6 Ethernet cabling

Planmeca CAD/CAM™ Lab

Planmeca PlanScan® Lab desktop scanner

Dimensions when closed (W x H x D)	250 x 450 x 450 mm (9.8 x 17.7 x 17.7 in.)
Weight	20 kg (44 lbs)
PC	High performance desktop pc with monitor
Multi-die scanning	Yes
Calibration	Automated with a calibration plate
Scanning times	40 sec. full arch
Accuracy	5 microns
Light source	White light
Scanning technology	Structured light, 2 cameras
Scanning area	90 x 80 x 55 mm (3.54 x 3.15 x 2.17 in.)
Impression scanning	Yes
Software	Full integration with Planmeca PlanCAD® Premium
Export file format	STL, OBJ, OFF, PLY

Planmeca PlanCAD® Premium software

Import file format	STL, OBJ, OFF, PLY
Export file format	STL
Upgrades	Optional yearly upgrades

Software modules

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

Planmeca PlanMill® 50 milling unit

Power requirements	115/230 VAC
Mains frequency	50/60 Hz
Current	1.5/3.0 A
Nominal output	750 W
Dimensions when closed (W x H x D)	620 x 612 x 664 mm (24.4 x 24.1 x 26.1 in.)
Actuator type	Stepper motors
Control	IMC40
Protective cover	Pivoting cover (to be raised)
Guides	Precision steel guides in X, Y, Z axes
Ranges of motion	X axis: 150 mm / lead screw 5 mm Y axis: 115 mm / lead screw 5 mm Z axis: 90 mm / lead screw 5 mm A axis: 360 degrees B axis: 110 degrees
Air supply requirements	6–9 bar (with constant application) Minimum 60 l/min (2 cfm)
Cooling lubricant tank	2.5 l
Spindle	Jäger Spindle 60 000 rpm
Tool Changer	10 tool positions, automated
Operating conditions	Maximum altitude 2000 meters
Fuse (micro fuse 5x20 mm)	T10AH / 250V UL/CSA
CAM software	Automated toolpath calculation with Planmeca PlanCAM™ software

Planmeca Creo™ 3D printer

Print technology	Digital Light Processing (DLP)
Resolution (XY)	68 µm, 1920 x 1080
Layer thickness	50 µm (possible to adjust between 5–200 µm)
Light source	LED
Guaranteed LED life	5,000 hours
Build volume	130 x 81.5 x 130 mm (5.1 x 3.2 x 5.1 in.)
AC input	100/240 V
Weight	30 kg (66 lbs)
Dimensions (W x H x D)	42 x 72 x 32 cm (16.5 x 28 x 12.5 in.)
Minimum required clearances	Front: 50 cm (19.7 in.) Sides: 10 cm (3.9 in.) Rear: 5 cm (2 in.) Top: 10 cm (3.9 in.)
Operating temperature	15–32 °C (60–90 °F)
Materials from	Planmeca

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.

PLANMECA

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