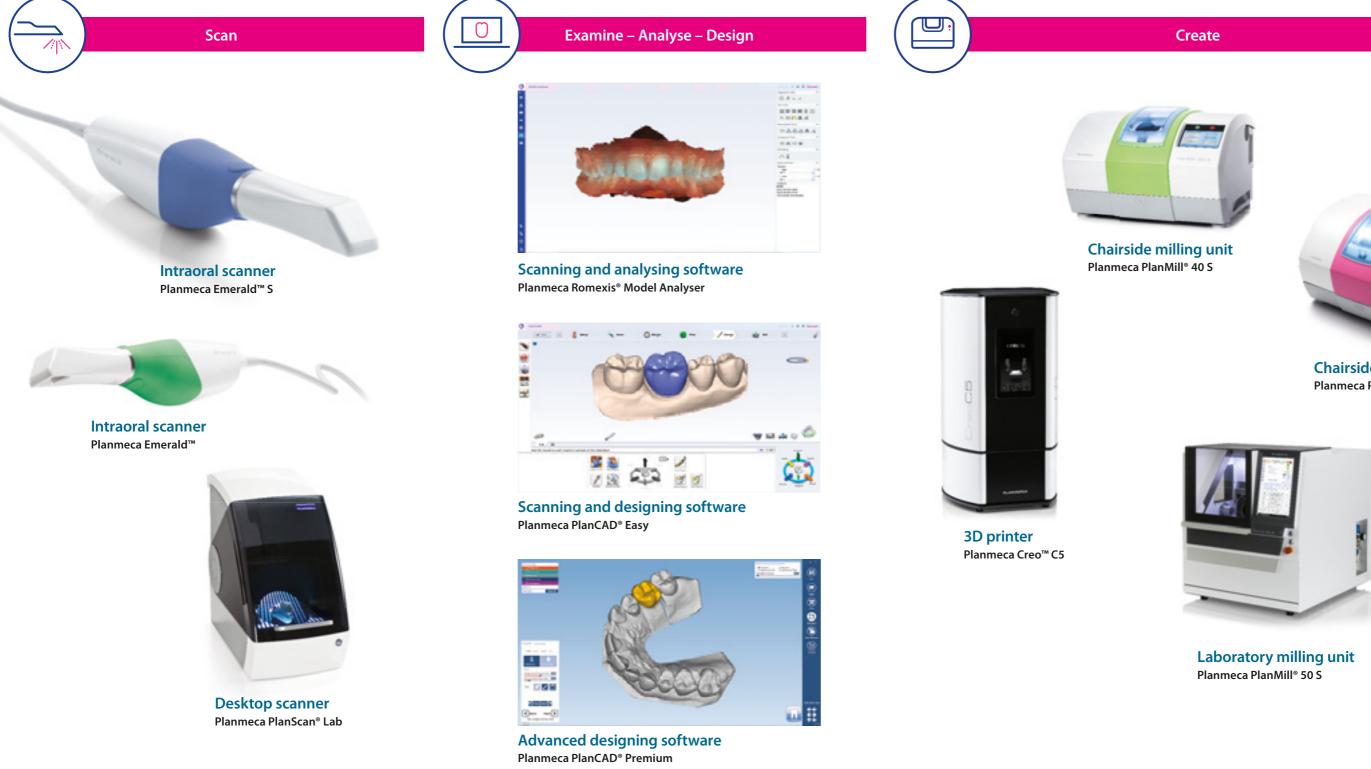
CAD/CAM SOLUTIONS



ð

Frontrunners in open CAD/CAM dentistry

Planmeca offers a comprehensive selection of high-end CAD/CAM solutions for various needs. Different clinical workflows are conveniently carried out from start to finish with our open, top-quality CAD/CAM devices and software. The choice is yours!





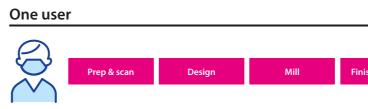
Chairside milling unit Planmeca PlanMill[®] 30 S

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 the 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 WORKFLOW Treat 1 patient in 1 hour



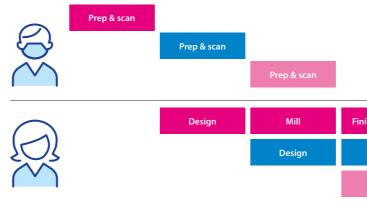
Two users in different locations



Planmeca FIT[®] is a completely streamlined approach to high-quality dental care. Instead of several 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 Treat 3 patients in 1.5 hours

Two users working as a power team



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.

$\overset{O}{\leftarrow}$	h (1h)
ishing polish	Fit & cement
	Fit & cement
ishing polish	

		\sim	
	Fit & cement		
		Fit & cement	
			Fit & cement
shing polish			
Mill	Finishing polish		
Design	Mill	Finishing polish	

Planmeca intraoral scanners

Our great selection of intraoral scanners includes a suitable scanner for every need. All our scanners are fully integrated into Planmeca devices and software, enabling exceptionally smooth workflows. At the same time, the open architecture allows users to share their scans as they like. The newest addition to our scanner family, **Planmeca EmeraldTM S**, is a brilliant premium version of the beloved **Planmeca EmeraldTM**. The new scanner is twice as fast as its predecessor and offers a truly pleasant scanning experience!

Planmeca Emerald[™] S and Planmeca Emerald[™] Capturing digital impressions has never been as easy!

New!



spectacular improvements:Superior capturing speed

• Tooth shade assistant

· Beautiful, vivid and natural colours

Planmeca Emerald[™] – the original crown jewel of intraoral scanning

- Fast and accurate
- Small and lightweight



Planmeca Emerald[™] S – hyper-speed scanning with superior usability

All the great features of the original Planmeca Emerald[™] combined with

Outstanding usability – easier scanning experience



PLANMECA 7

Different tips for different needs

Always the right tool in your hands

With two different scanning tip sizes, the **Planmeca Emerald**[™] scanners meet all your needs. They also allow using transillumination technology for caries detection: just change the tip and you have two outstanding devices in one!

Standard tip

SlimLine tip

interproximal areas even easier.

SlimLine tip is thinner and smaller than the standard tip,

mouths. It makes reaching posterior teeth and capturing

and an ideal choice for scanning patients with smaller

Standard scanning tip is the perfect tool for performing general intraoral scanning extremely fast and conveniently.





See the teeth in a whole new light!



Planmeca Cariosity[™] tip

Planmeca Cariosity[™] scanning tip is an excellent tool for caries diagnostics: it helps clinicians to detect approximal, occlusal and secundary caries as well as cracks in their early stages.

With the Cariosity tip, you can see through the tooth. You can turn the light on from one side at a time or simultaneously from both sides to get the best possible view for diagnostics.



The unbeatable combination of examining HD colour and caries detection views side by side makes diagnostic procedures even easier. The views can also be saved and documented effortlessly.

Caries detection is done with a radiation-free near-infrared light, which is safe for the patient.

All diagnostic tools are available at once through seamless integration with X-ray images in Planmeca Romexis[®] software.

- ✓ Autoclavable tips for impeccable infection control
- Heated tip for active fog prevention
- Change the tip anytime and continue scanning



Just change the tip and you are ready to go! 80.0

ESSEL!

Vast range of indications

Expand your clinical capabilities

Flexible **Planmeca Emerald**[™] intraoral scanners support various different workflows. With a wide range of treatment options, the scanners offer benefits across several specialities.



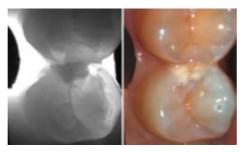


Scan a full dental arch in under a minute. Send scans to the lab of your choice or use them in your own digital workflows. Document your patients' teeth for future use and comparisons.



2D Snapshot

Use the scanner as an intraoral camera and capture 2D snapshots with natural colours. Engage patients, document existing conditions or consult with colleagues.



Cariology

Detect caries and cracks in their early stages with the Cariosity tip.

Dental unit integration Use Planmeca intraoral scanner just like any other instrument

The unique integration of the intraoral scanner with a Planmeca dental unit enables chairside scanning in a way you have never experienced before. The dental unit integration guarantees a smooth workflow and ideally ergonomic working positions.

Key benefits

- · Smooth and effortless workflow lets you concentrate on your patient
- · Additional screens on the dental unit can be utilised to achieve outstanding ergonomics
- · Hands-free operation with wireless foot control
- Hygienic operation No need to touch a mouse or keyboard



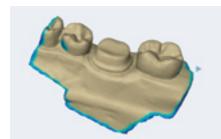
Implantology

Scan implant positions with the help of scan bodies for abutment design. Scan abutments to create crowns and bridges on top of them. Combine scan data with a CBCT image for digital implant planning and surgical guide design.



Orthodontics

Scan full arches for digital orthodontic treatment planning. Combine intraoral scan data with a CBCT image to see the root movements. Follow treatment progress and results.



Prosthodontics

Get instant feedback: check your preparations from the computer screen. Scan preparations and abutments to create crowns, inlays and onlays, veneers and bridges. Scan temporary restorations and wax-ups to create final designs. Scan full arches to create dental splints, removable prostheses and other prosthetic indications.



Maxillofacial surgery

Combine intraoral scans with CBCT data for treatment planning and manufacturing prostheses.



Take advantage of the scanner's compatibility with various orthodontic systems: See the constantly growing list of all the orthodontic solution providers at www.planmeca.com/orthocompliance.



Scanning and designing software

Easy and efficient design tool for prosthetic works

Planmeca PlanCAD[®] Easy is our open CAD software suite designed especially for dentists. It 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 applications: 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
- automatic removal of unwanted data
- Option to modify the restoration manually after automatic designing
- Part of the Planmeca Romexis® software

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



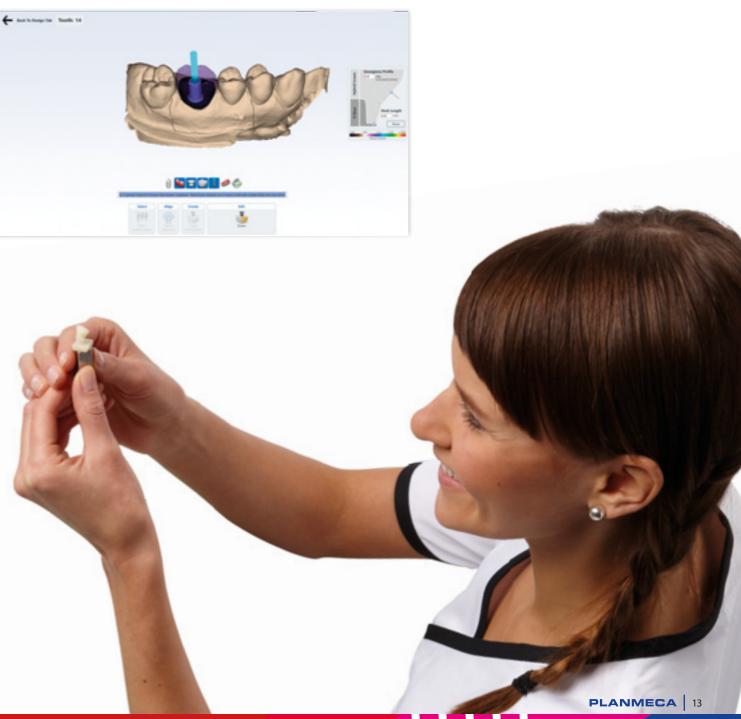
Smooth usability and automatic design of restorations

....

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 abutment crowns and manufacture them chairside.

- Automatic alignment of scan body scans to the corresponding implant library information
- Screw-retained hybrid abutment crowns on titanium bases
- · Tools for creating an optimal emergence profile





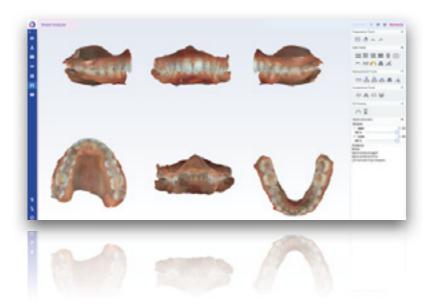
Scanning and analysing software

Ingenious tool for scanning, analysing and transferring digital impressions

Planmeca Romexis® Model Analyser is a new, user-friendly software module dedicated to easy working with intraoral scans. It streamlines the workflows especially in orthodontics and brings them to a whole new level.

Main features

- Direct intraoral scanning with **Planmeca Emerald**[™] and **Planmeca Emerald**[™] **S** intraoral scanners
- Examine digital models using predefined views
- Examine tooth width, arch length and free measurements
- Compare scans captured at different times: follow treatment results or tooth wear
- Create bases for 3D printable models
- Send digital impressions to 3rd parties using Planmeca Romexis[®] Cloud transfer service





Chairside milling units

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 Powerful and precise

- Fast milling speed two spindles, 8-10 minutes per restoration
- Automated tool changer for 10 tools

Planmeca PlanMill[®] 30 S

Efficient and cost-effective

- High-speed single-spindle milling unit, 11–13 minutes per restoration
- Rotary axis enables milling both sides of the block with a single spindle
- Automated tool changer for 5 tools





3D printer for chairside manufacturing

The ultimate chairside 3D printer built for speed

Planmeca Creo™ C5 is the combination of speed and precision you have been waiting for. Designed specifically for dental clinics, the durable and compact chairside 3D printer enables fabricating dental applications, such as surgical guides, in a single patient visit.



Planmeca Creo[™] C5 is a fast, calibration-free solution that has been developed in cooperation with some of the best clinical experts in dental technology. The distortion-free LCD technology and the robust aluminium body of the printer ensure outstanding mechanical precision, which results in highly accurate and predictable prints. The LCD technology allows you to print multiple objects at once without extended printing times, saving your time for the next patient.

Key benefits

- Industry quality at an accessible price
- LCD printing technology and aluminium construction allow highly fast and accurate printing
- Easy to take into operation just plug and play
- Open import for STL and PLY file formats
- Pre-programmed optimised material settings
- No calibration or fixed service intervals needed

Optimised printing materials with sophisticated resin handling system

To ensure safe and high-quality results, the printing materials for Planmeca Creo C5 are medically approved and specifically optimised for the printer. Different resins for different applications allow you to offer new chairside services to your customers.

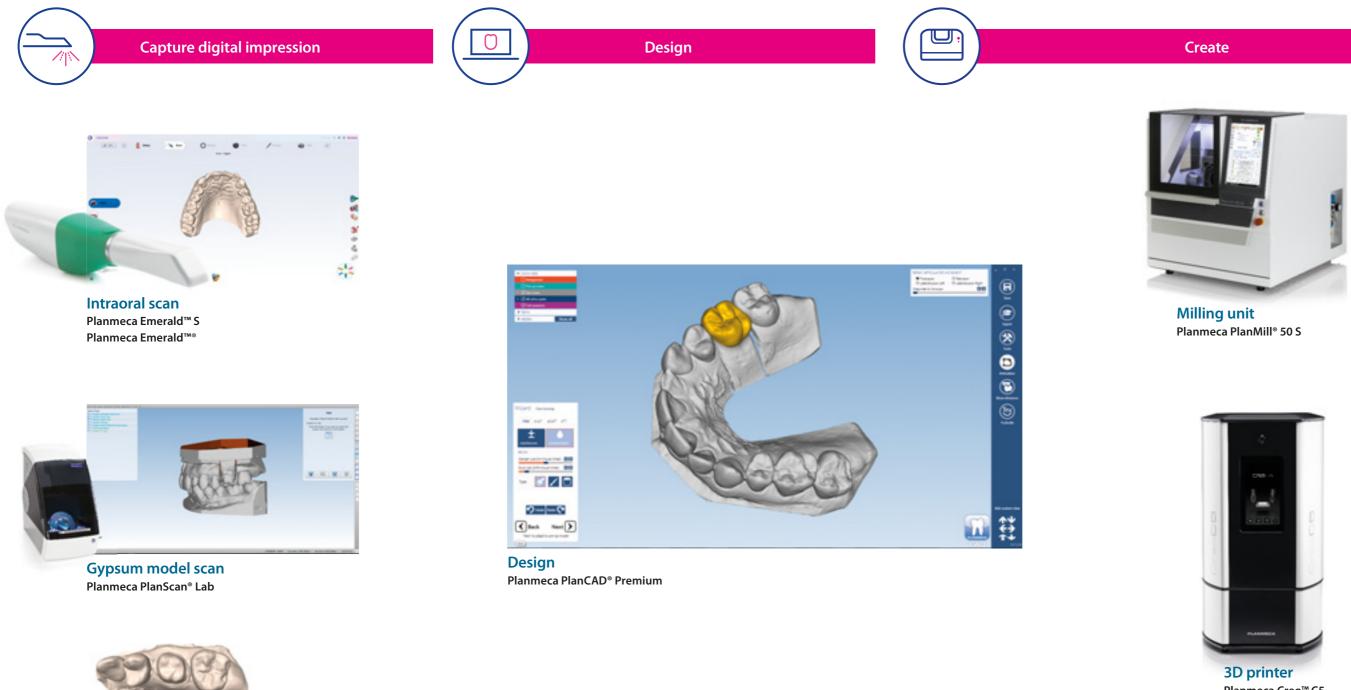
The materials come in brand new and convenient capsules. They are a completely unique way to dispense high-quality 3D printing materials – without any of the material going to waste.





CAD/CAM for dental labs

The Planmeca CAD/CAM[™] 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.



Import STL file PLY file

Planmeca Creo™ C5

Desktop scanner

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.





Main features

- Scans models and impressions
- Accuracy: 5 μm
- Structured-light technology
- Multi-die plate for 9 dies
- Scan time for a full jaw: 40 seconds
- Output: open STL, PLY, OBJ data
- Low-maintenance
- Scan software operated from Planmeca PlanCAD[®] Premium



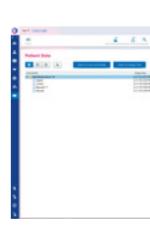
Advanced designing software

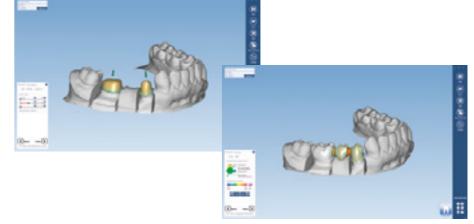
Perfect design software for prosthetic restorations

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

Open and easy workflow for flexible designing and manufacturing

Import a scan from a Planmeca intraoral scanner or Planmeca PlanScan[®] Lab





Design

Send to Planmeca PlanMill[®] 50 S for manufacturing



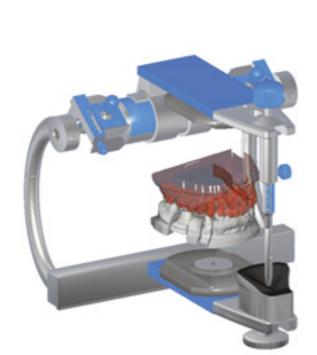
Import scans from an intraoral or desktop scanner

Highlights

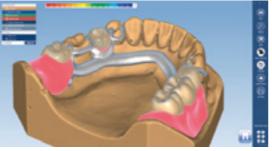
- Planmeca intraoral scanner import reads colour texture models, margin line data and order descriptions
- Quick launch option from Planmeca Romexis®
- User-friendly tools for modifying designs, including a virtual articulator
- The software can be tailored to different user needs: the user can work 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
- Smile design
- Full denture design
- Removable partial denture design











PLANME

Laboratory milling unit

Powerful 5-axis milling unit for dental labs

The 5-axis **Planmeca PlanMill® 50 S** unit is a powerful tool for wet and dry milling of discs and blocks. Equipped with a high-speed spindle and an automatic changer for 12 tools, the powerful milling unit has been designed specifically for dental labs.

Planmeca PlanMill® 50 S can be used to mill discs, blocks and prefabricated titanium or cobalt chrome abutments. The easy-to-use CAM software of the unit supports open STL files.

Materials

Standard 98mm blank with shoulder

- Zirconium
- PMMA
- WAX
- Peek

PlanMill blocks

- Glass Ceramics
- Reinforced Glass Ceramics
- Reinforced Composites
- Temporary materials

Prefabricated Abutments

- Titanium
- CoCr





Milling center

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.





PLANMECAFIT[®] Technical specifications

Planmeca Emerald[™] intraoral scanners

Indications Inlays/onlays Veneers Crowns Bridges Full arches Scan bodies Models Impressions Integration Integrated into a Planmeca dental unit or connected to a PC Scans of lower and upper arches in occlusion exported as open STL and PLY files Data output True colour Scanning options 2 autoclavable scanning tip options: Standard Scanning tips and SlimLine. Autoclavable Cariosity tip for caries detection Anti-fogging technology Actively heated tip: Guaranteed non-fogging operation when used intraorally 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 with tip) Planmeca Emerald S: 229 g (8.1 oz) Planmeca Emerald: 235 g (8.3 oz)

Minimum PC system requirements

Computer	Laptop PC or desktop PC
Prosessor	Intel i7, 7th generation (7700 series) or better
RAM	Planmeca Emerald S: 32 GB
	Planmeca Emerald: 16 GB
Hard disk	512 GB
Graphics card	NVIDIA GeForce GTX 1070 4 GB or better
Monitor	Full HD resolution
Cable interface	USB 3.0
Operating System	Windows 10 (64 bit) Pro

Planmeca PlanCAD[®] Easy scanning and designing software

Main features	Scanning with the Planmeca intraoral scanners
	Taking 2D snapshots
	Designing restorations
	Imports and exports: STL, PLY
	Creating lab order forms (PDF)
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 Romexis[®] Model Analyser scanning and analysing software

Main features	Scanning with the Planmeca intraoral scanners
	Taking 2D snapshots
	Model analysing and viewing
	Tooth width, arch length, and free measurements
	Bolton and space analyses
	Model base creation
	Comparison of scans
	Imports and exports: STL, PLY
	Creating lab order forms (PDF)

Planmeca PlanMill[®] 40 S chairside milling unit

chanside mining drift		
Power requirements	100/240 VAC	
Mains frequency	50/60 Hz	
Power input	1000 W	
Weight	72.6 kg (160 lbs)	
Dimensions when closed $(W \times H \times D)$	662 x 441 x 544 mm (26 x 17.4 x 21,4 in.)	
Minimum required clearances	Sides 51 mm (2 in.)	
	Rear 25 mm (1 in.)	
	Top 305 mm (12 in.)	
Storage temperature	-40–70°C (-40–158°F)	
Operating conditions	5-40°C (41-104°F)	
	0–80% 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	
Tool Changer	10 tool positions, automated	
Spindle	80 000 rpm	
Data connection	Cat5 or Cat6 Ethernet cabling	

Planmeca PlanMill® 30 S chairside milling unit

2		
100/240 VAC		
50/60 Hz		
1000 W		
61 kg (135 lbs)		
662 x 441 x 544 mm (26 x 17.4 x 21,4 in.)		
Sides 51 mm (2 in.)		
Rear 25 mm (1 in.)		
Top 305 mm (12 in.)		
-40-70°C (-40-158°F)		
5-40°C (41-104°F)		
0–80% relative humidity		
maximum altitude 2000 meters (6,592 feet)		
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/m³		
5 tool positions, automated		
100 000 rpm		
Cat5 or Cat6 Ethernet cabling		

Planmeca Creo[™] C5 3D printer

Open import	STL, PLY
Printing technology	LCD
Printing materials	Printing materials for dental models and surgical guides. More materials coming soon.
Build area	68 x 120 x 100 mm (2.7 x 4.7 x 3.9 in.)
Dimensions	Ø 300 mm (11.8 in.), h 500 mm (19.7 in.)
X,Y resolution	< 50 µm
Z resolution	25–100 μm
Weight	32 kg (70.5 lbs)

Planmeca CAD/CAM[™] Lab Technical specifications

Planmeca PlanScan[®] Lab desktop scanner

250 x 450 x 450 mm (9.8 x 17.7 x 17.7 in.) 20 kg (44 lbs)
20 kg (44 lbs)
20 (g (11)03)
High performance desktop pc with monitor
Yes
Automated with a calibration plate
40 sec. full arch
5 microns
White light
Structured light, 2 cameras
90 x 80 x 55 mm (3.54 x 3.15 x 2.17 in.)
Yes
Full integration with Planmeca PlanCAD® Premium
STL, OBJ, OFF, PLY

Planmeca PlanCAD[®] Premium advanced designing 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
	Custom abutments (screw-retained & cemented)
	Implant bar & bridge design
	3D printed models
	Smile Creator
<i>Additional:</i> Bite Splint module	Bite splints
<i>Additional:</i> Provisional module	Provisional crowns and bridges
<i>Additional:</i> ZRS Tooth Library	An extensive library of natural teeth by Manfred Wiedmann
<i>Additional:</i> Full Denture module	Digital dentures
<i>Additional:</i> Partial CAD module	Removable partial dentures

Planmeca PlanMill® 50 S laboratory milling unit

Dimensions when closed (W x H x D)	566 x 612 x 665 mm (22.3 x 24.1 x 26.2 in.)
Weight	95 kg (209.4 lbs)
Cover	Swivel hood with safety interlocking
Consumption of compressed air	Approx. 60 l/min (min. 6,5 bar)
Spindle	60 000 rpm
Tool Changer	12 tool positions, automated
CAM software	Automated toolpath calculation with Planmeca PlanCAM™ software

PLANMECA 31



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.

Follow us on social media!

PLANMECA

Asentajankatu 6 | 00880 Helsinki | Finland | tel. +358 20 7795 500 | fax +358 20 7795 555 | sales@planmeca.com | www.planmeca.com

Images may contain optional items not included in standard delivery. Available configurations and features may have country or area specific variations. Some products displayed above may not be available in all countries or areas. Rights for changes reserved.

Planmeca, All in one, Anatomat Plus, Cobra, Comfy, Digital perfection, Economat Plus, Elegant, Flexy, Perio Fresh, PlanEasyMill, Planmeca 4D, Planmeca AINO, Planmeca ARA, Planmeca CAD/CAM, Planmeca CALM, Planmeca Cariosity, Planmeca Chair, Planmeca Carify, Planmeca Compact, Planmeca Teco, Planmeca Emerald, Planmeca FIT, Planmeca Intra, Planmeca Riomexis, Planmeca Lumion, Planmeca Lumio, Planmeca Maximity, Planmeca Minea, Planmeca Mineado, Planmeca Minetto, Planmeca Momexis, Planmeca Noma, Planmeca Olo, Planmeca Online, Planmeca PlanCAD, Planmeca PlanCAM, Planmeca PlanClear, Planmeca PlanDesk, Planmeca PlanC, Planmeca Planosil, Planmeca Planosil, Planmeca PlanScan, Planmeca PlanVew, Planmeca PlanCAD, Planmeca PlanCAM, Planmeca PlanCe, Planmeca ProMax, Planmeca Plande, Planmeca Planosil, Planmeca Planosir, Planmeca PlanScan, Planmeca PlanVew, Planmeca ProCeph, Planmeca ProfOp, Planmeca ProMax, Planmeca ProModel, Planmeca ProScener, Planmeca ProSensor, Planmeca Romexis, Planmeca Serenus, Planmeca SingLED, Planmeca SmartGUI, Planmeca Solanna, Planmeca Sovereign, Planmeca Ultra Low Dose, Planmeca Vision, Planmeca Viso, Planovis, Plan