

# Frontrunners in open CAD/CAM dentistry

## CAD/CAM for dental clinics

## **PLANMECAFIT**

Planmeca PlanMill® 40

# CAD/CAM for dental labs



Planmeca PlanMill® 50

# CAD/CAM for dental clinics

# PLANMECAFIT

Open CAD/CAM System

From ultra-fast intraoral scanning to high-precision chairside milling, our cutting-edge digital solutions include 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.















Dental lab

# Planmeca PlanScan®

## Ultra-fast intraoral scanner for open CAD/CAM

Discover **Planmeca PlanScan**® – our cutting-edge 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.

- Colour and grayscale scanning
- Autoclavable and changeable tips in different sizes for impeccable infection control
- Moisture control with built-in anti-fogging technology
- Powder-free scanning
- Very easy to use

- Exceptional ergonomics
- Real-time scanning with sound guidance
- Accurate scans from a single indication to a full arch
- Comfort for the patient and dentist
- Open STL file format
- True dental unit integration
- Works with a laptop easy to share







# Planmeca PlanScan®

## The smoothest scanning workflow

Experience chairside scanning like never before with the **Planmeca PlanScan**® intraoral scanner. Its unique integration with Planmeca dental units guarantees a smooth workflow, as real-time scanning data is immediately available from your chairside tablet.

## Dental unit integrated intraoral scanner

The ultra-fast and accurate **Planmeca PlanScan**° can be easily integrated into
your digital Planmeca dental unit. Due to
the chairside Full HD tablet device, you
have constant and optimal access to live
scanning data. This allows you to focus
on clinical work in the treatment area
without any distractions. The scanner
also provides practical sound guidance to
ensure optimal data capture.

## Unique foot controlled scanning

What really sets Planmeca PlanScan apart from other scanners is that you can also conveniently control its use from the dental unit's foot control, leaving your hands free for scanning and patient treatment at all times. You can use the foot control to easily toggle between prep, opposing and buccal views, so that you can focus on scanning without interruptions. Hands-free operation also guarantees impeccable infection control.

### Easy and flexible use

Planmeca PlanScan has been designed for an efficient workflow – it is used just like any other instrument and shared effortlessly between different users. The plug-and-play scanner can also be easily installed in different dental units and different rooms. The flexible licensing system allows simultaneous use on multiple workstations during different CAD/CAM workflow steps.



## The unparalleled benefits of 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
- Plug-and-play scanner with sound guidance
- 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



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# Planmeca PlanCAD® Easy

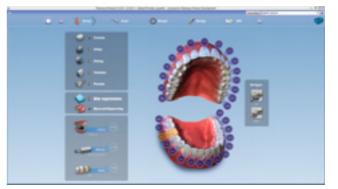
## Easy and efficient design tool for prosthetic works

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

# Immediate access to scans and designs from any Planmeca Romexis® workstation.

- Easy design of inlays, onlays, veneers, crowns and bridges
- Fully automated design from an anatomic tooth library
- Automatic adaptation to contact strength specified by user
- Cusps, marginal ridge and other anatomical shapes are taken to the design from the adjacent teeth
- Minimum material thickness is applied to the design for long-lasting results
- Design up to 16 teeth in the same session
- Superimposed camera view for easy marking of margins
- User-friendly tools to modify the shape and look of the design
- · Automatic saving for flexible usage
- · Only five steps from work description to milling





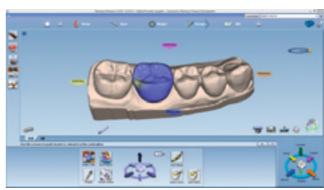
**Step 1.** Work description



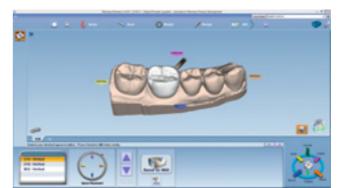
Step 2. Scan



Step 3. Margin line



tep 4. Design



Step 5. Manufacturing – send to Planmeca PlanMill® 40



Only five steps from work description to milling





# Planmeca PlanMill® 40

## High-precision milling unit for dental practices

The **Planmeca PlanMill® 40** milling unit enables quick and accurate milling directly at a dental clinic. The 4-axis milling unit is designed for ceramics and resin-based materials.

- Two high-speed spindles (50 000 rpm)
- Automatic tool changer for 6 tools (3 tools for each side)
- Simultaneous 4-axis milling
- For blocks up to 60 mm in length
- Different strategies for different materials optimized speed without compromising quality
- Perfect milling even for ultra thin veneers
- · Automated tool quality control after each milling
- Computer-controlled operations the system tells the user when to change tools and water

## **Materials**

### **Ceramic materials**

IPS e.max CAD, IPS Empress CAD

Resin-based materials

Ivoclar Telio CAD



The pioneering Planmeca Romexis® Clinic Management software module

### Features for Planmeca PlanMill® 40

• Real-time monitoring of task status

Milling statistics

• Diagnostic log view



# CAD/CAM for dental labs

The **Planmeca CADCAM™ Lab** workflow starts from **Planmeca PlanCAD® Premium**, which connects all workflow steps under one software. 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 make the system a perfect choice for any laboratory.

### Planmeca PlanScan<sup>®</sup> data

Import intraoral scanning data, including ice view, order description and marginline.

### STL files

Import files in an STL format from any open system.

# Quick launch from Planmeca Romexis®

Get the most out of your CAD/CAM workflow and expand your indication range by designing in Planmeca PlanCAD® Premium.









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# Planmeca PlanScan<sup>®</sup> Lab

## High-quality scanner for gypsum models

**Planmeca PlanScan® Lab** is a 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.

- Accuracy 5 µm
- · Structured light technology
- 2 cameras
- 5 axis scanning system
- Scanning time for full arch: 40 sec
- Multi-die plate for 9 dies
- Automated optics calibration
- Open STL, PLY, OBJ, OFF files
- Maintenance free
- Comes with Planmeca PlanCAD® Premium software







# Planmeca PlanCAD® Premium

# Planmeca Romexis

## Perfect design software for prosthetic restorations

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

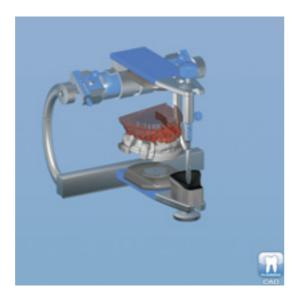
# Import scans from Planmeca PlanScan<sup>®</sup> or Planmeca PlanScan<sup>®</sup> Lab

### **Highlights**

- Planmeca PlanScan® import, reads ICEVIEW, margin line data and order description
- Quick launch option from Planmeca Romexis®
- User friendly tools for design modification, including virtual articulator
- The software can be tailored to different user needs: the user can work in wizard or customised workflow
- Open implant libraries for custom abutment design
- Open STL import and export

### A full range of indications

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

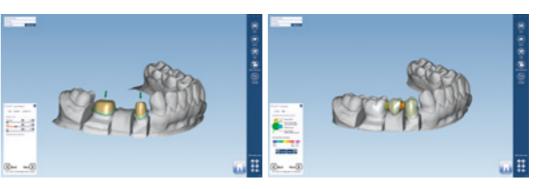






## Open and easy workflow for flexible design and manufacturing

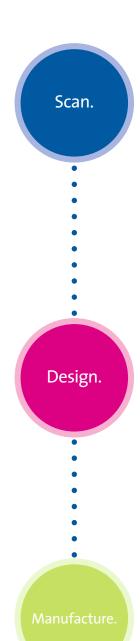




Design



Send to Planmeca PlanMill® 50 for manufacturing



PLANMECA

# 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. Easy to use CAM software accepts STL files.

- · 5-axis milling
- Automated tool changer for 10 tools
- Automatic tool length measurement, tool lifetime and breakage control
- · Night mode function
- High-speed spindle (60 000 rpm)
- Materials in standard 98 mm discs or blocks
- · Wet and dry milling
- Open CAM (STL import)



## **Materials**

#### Discs

Zirconium, Wax, PMMA

#### **Blocks**

Ceramic materials, resin-based materials



# 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 quarantee successful results.





### **Technical specifications**

### **PLANMECAFIT**

### Planmeca PlanScan<sup>®</sup> intraoral scanner

Indications	Inlays/onlays, veneers, crowns, bridges, full arches, scan bodies
Integration	Integrated into a Planmeca dental unit or connected to a laptop
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 20.0mm
	Size 1, Landscape tip: 12.7 x 9.2mm
	Size 0, Portrait tip: 12.5 x 11.8mm
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
Scanning software support	Windows 8
Cable interface	Firewire 800 or Thunderbolt (via adapter)

### Planmeca PlanCAD® Easy software

Indications	Inlays/onlays, veneers, crowns, bridges
Floating licences	Full scan and design licence
	Scan only licence
	Design only licence

### Planmeca PlanMill® 40 milling unit

Power requirements	120/240 VAC
Mains frequency	50/60 Hz
Power input	300 W
Weight	100 kg (220 lbs)
Dimensions when closed (W x H x D)	676 x 399 x 605 mm (26.6 x 15.7 x 23.8 in.)
Minimum required	Front 610 mm (24 in.)
clearances	Sides 50 mm (2 in.)
	Rear 25 mm (1 in.)
	Top 305 mm (12 in.)
Storage temperature	-40°C to 70°C (-40°F to 158°F)
Operating conditions	10°C to 38°C (50°F to 100°F)
	10% to 90% relative humidity
	maximum altitude 2000 meters
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/m³
Cooling lubricant tank	4 liters
Tool Changer	6 tool positions, automated
Spindle	50 000 rpm
Data connection	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

### 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
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



Dental health is the cornerstone of your well-being.

Restorations created with **Planmeca FIT**™ have

been individually crafted to fit your unique needs

- ensuring durability that will stand the test of time.



Find more info and your local dealer **www.planmeca.com** 



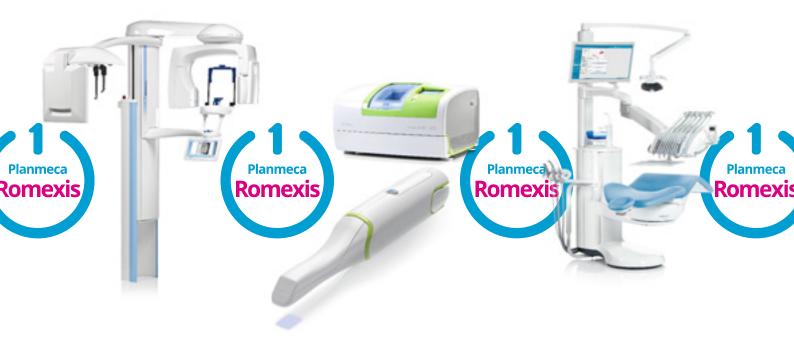








### One software for all.



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**

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

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