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## Planmeca ProFace<sup>™</sup>

3D photo and 3D X-ray in one imaging session



PLANMECA

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reddot design award

winner 2012

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## plan world

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Cover image Planmeca ProFace received the "red dot 2012: product design" award

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## Planmeca Group

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a Group

## k



DistributionManufacturing

# Planmeca offers the keys for your success

Since the very beginning, Planmeca has looked to the future. Over the past 40 years, our company has become the world's largest family-owned business in its field. Our success stems from creating products that are innovative, advanced and well-received. We thank you, our valuable customers, for our success.

Planmeca's vision has always been to deliver better usability and ergonomics as well as uncompromised hygiene through advanced technology and design to our customers worldwide. Improving the whole workflow from seamlessly integrated, efficient equipment all the way to the satisfied customer – patient, radiologist or dentist – is our passion.

Our strength is providing – together with the other manufacturing companies belonging to Planmeca Group – all equipment for a dental and medical practice. We supply dental care units, dental and medical imaging devices, software for imaging and clinic management, cabinetry, dental instruments, and sterilisation centres.

The full-service distribution companies of Plandent Division add to the Group's offering by providing services as well as a complete choice of dental materials. Planmeca Group's widespread selection is a clear advantage to you as well.

Planmeca's dedication to listening to the customer and delivering what is best for each customer – a private clinic, public dental care center or an educational institution – is a competitive advantage for us. It is also our promise to you.

Amos

HEIKKI KYÖSTILÄ PRESIDENT











heat the building.

of Planmeca. ment more precise.



# Planmeca's new premises increase flexibility

Dlanmeca's new addition is located within walking distance from its headquarters in Helsinki, Finland. The new production premises add 118,000 square feet to the existing production and office space. As in Planmeca products, the newest technology is also utilised in the production process. The technologically advanced machining as well as the new powder painting department are located in the new building. The new powder painting department, in addition to being faster and yielding more uniform paint quality, is more ecological. For instance, the heat generated in the painting process is redirected to

"The added capacity in the machining and painting process allows more flexibility to our production", says Mr Heikki Kyöstilä, President

In addition, the ground level warehouse is all automated with two robotic forklifts handling the logistics. This type of automated warehouse is first of its kind in Finland and makes warehouse manage-

The Planmeca subsidiary Planmed that manufactures medical imaging equipment for mammography and orthopaedic diagnostics has also moved its offices and production into the new building.



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The new Planmeca Compact™ i Classic is a cost-effective dental unit equipped with all basic functionalities. The unit has a traditional keyboard with clear control keys for unit, chair and instrument functions. The keyboard is integrated into a robust aluminium console that tolerates disinfectants used in the dental clinic well.

The new dental unit is offered with a predefined instrument range that covers all basic instruments. The instrument selection can be extended with an electric scaler, a LED polymerisation light and an intraoral camera.

The unit has a fixed legrest and a double articulated, easily adjustable headrest that allows ergonomic positioning of the patient's head. It also comes with a new and robust foot control that makes all key functions easily accessible for the dental team.

"The new Planmeca Compact i Classic offers our customers the same optimised ergonomics as our Planmeca Compact<sup>™</sup> i Touch dental unit", says Ms **Kaisu Ilomäki,** Product Manager for Planmeca's Dental Care Units division. "We are happy to expand our dental unit range with a cost-effective solution for the needs of general dentistry. All the features have been carefully selected in order to provide only the most necessary functions for basic purposes."

## New exciting tool for discovering Planmeca's world of imaging Planmeca Imaging Application for iPad

The free new Planmeca Imaging Application for iPad enables users to explore Planmeca's imaging devices and software through their iPad. The application provides a thorough product information package for Planmeca's customers.

The user can view Planmeca's showroom in a 360 degree angle view and enter different product categories ranging from 3D and 2D imaging devices to software. The application also includes clinical images, a virtual GUI for the Planmeca ProMax<sup>®</sup> 3D product family and software demo videos

The Planmeca Imaging Application for iPad can be downloaded for free from the App Store.

## Planmeca Chair<sup>™</sup> offers the best in dental chair design

The new and improved Planmeca Chair™ provides excellent working ergonomics for the dental team and perfect comfort for the patients. The renewed chair always comes with a swivel function and is available with either a fixed or automatic legrest.

A nose-to-toes legrest kit is also available for enhancing the Trendelenburg position used in emergency situations, especially in the event of a patient collapsing. The aim of the position is to increase blood flow to the brain, and it involves lowering the backrest while simultaneously raising the legrest.

The 180-degree swivel function allows the chair to be swivelled 90 degrees left and right. This, together with the mobile base with wheels, provides unique freedom in operatory design and chair positioning. The firm armrests and the optimally designed backrest maximise patient comfort.

Planmeca Chair can be equipped with the Planmeca SingLED<sup>®</sup> operating light for optimised illumination.

Available on the App Store

## New software releases from Planmeca

The recent software updates from Planmeca have brought many new breakthrough features and improvements to 2D and 3D imaging, including:

- New module to support the Planmeca ProFace<sup>™</sup> 3D photo option. Planmeca ProFace images can be viewed, analysed, measured and compared together with CBCT volumes in Planmeca Romexis<sup>®</sup>.
- New feature in the 3D Implant module for importing intraoral surface scans and crowns in standard STL format and superimposing them to CBCT data.
- Quick Launch preset options for select 3rd party software such as NobelClinician and Materialise Simplant.
- Many new realistic implant models in the Implant Library, including implants manufactured by Nobel BioCare.
- A new imaging mode in Planmeca ProMax<sup>®</sup> 3D, Planmeca ProMax<sup>®</sup> 3D Mid and Planmeca ProMax<sup>®</sup> 3D Max for scanning impressions and plaster casts. The scanned impression is available instantly as a digital cast in Planmeca Romexis<sup>®</sup> and can be superimposed with CBCT data or exported in open STL format.
- New generic crown library in the Planmeca Romexis<sup>®</sup> Implant Planning module.
- New rotating tube head to facilitate cephalometric imaging with Planmeca's 3D devices. The 3D sensor no longer needs to be removed before starting the cephalometric imaging process.
- New cloud service at Planmeca Online<sup>™</sup> for enabling easy image transfer from professional to professional.

Videos on YouTube



Download

pplication

the Planmeca imaging







## the "red dot award: product design 2012"

The multipurpose 3D imaging unit by Planmeca convinced the 30-member international expert jury of the "red dot award: product design 2012". Manufacturers from all over the world had submitted a total of 4,515 designs to the renowned product competition. Planmeca ProMax 3D ProFace inspired the experts and received the globally sought-after red dot for its fine design language in the product category of Life Science and Medicine.

Planmeca ProMax 3D ProFace is a unique combination of a CBVT imaging unit and 3D photo system that produces a realistic 3D face photo in addition to a 3D X-ray image in a single scan. This provides an effective tool for planning operations. The advanced imaging technology is combined with Planmeca's design philosophy consisting of simple and dynamic forms and easy-to-clean surfaces.

"One of the key design drivers was user comfort. The side entry allows easy access for all types of patients and the open construction allows direct visual contact to be kept with the operator during the whole procedure. The unique design makes the imaging process fast and relaxing for the patient", tells Mr Kari Malmén, Industrial Design Manager at Planmeca.

## Planmeca ProFace<sup>™</sup> now available also for Planmeca ProMax<sup>®</sup> 3D Max

The Planmeca ProFace™ 3D face photo option is now available also for the Planmeca ProMax<sup>®</sup> 3D Max X-ray unit. Previously the option has been available only for the rest of the Planmeca ProMax 3D family.



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Video: Meet the Industrial Designers of Planmeca and Planmed.



# Planmeca Sovereign<sup>®</sup> & Planmeca ProMax<sup>®</sup> 3D

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## **Planmeca Compact<sup>™</sup> i Classic** & Planmeca ProMax<sup>®</sup> SCARA2

*Classic functionality* 





# **Planmed Verity® – from** polystyrene doughnut to unique extremity scanner

COPY LEENA AALTONEN IMAGE JUHA KIENANEN

Planmeca Group's companies operate in the field of medical and dental technology, all producing innovations that sometimes go hand in hand. The award-winning Planmed Verity<sup>®</sup> extremity scanner, the exciting new imaging device from Planmed Oy, is a splendid example of the technology transfer between sister companies.





More information www.planmeca.com

lanmeca Ov Asentajankatu 6, 00880 Helsinki, Finland tel. +358 20 7795 500, fax +358 20 7795 555 sales@planmeca.com

## PLANMECA



Planmed Oy is part of Planmeca Group Planmed offers products for mammography and orthopaedic imaging that are wellnown for their imaging performance, user-friendliness and good ergonomics nce 1989, Planmed has provided tools for healthcare professionals in over 70 countries worldwide

and many other countries where





Developers have no intention of starting to twiddle their thumbs. "We cannot hang back as there will be competition. In fact we already have a clear plan in prospect and fresh ideas for other products in this category", state Dr Sami Tohka (right) and Mr Lauri Seppälä.

In 2005, the Research & Development team at Planmeca started to explore how they could make use of the existing technology of the Planmeca ProMax 3D dental X-ray unit in other type of imaging. One day the head of the R&D team, Mr Arto Virta brought his colleague a chair and asked him to lift up his leg so that an X-ray could be taken of the foot using a Planmeca ProMax 3D unit. A few years later this playful experiment led to a totally new product – the mobile extremity scanner Planmed Verity\*.

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The initial idea for a mobile extremity imaging device came from orthopaedists. Since the very beginning, the development team has cooperated with high-level clinical experts including radiologists, orthopaedists and physicists from Finnish university hospitals as well as the Massachusetts General Hospital in Boston, USA. In 2008 it was decided that the device would be commercialised by Planmed Oy.

To find out what the market and demand for this type of device was and what exactly it was to be used for, Planmed undertook market research. "For competitive reasons it was important to make use of our existing technology as much as possible. At the same time, however, the device had to be clearly distinguishable from all other medical devices on the market," Dr Sami Tohka, Sales and Marketing Director at Planmed says about the early stages of the project. To present the different ideas to the experts involved in the research, several different concept models were created. "We used polystyrene and other similar materials to build the most imaginative widgets one after the other and in 2009, the final concept was decided," Product Manager Mr Lauri Seppälä says with a smile.

#### New potential with mobile, low-dose 3D imaging

The careful development process proved worth the effort as Planmed Verity turned out as the first ever mobile 3D extremity imaging device, which currently has no real competitors. According to Seppälä, when a patient nowadays comes to a clinic with an injured extremity, the standard procedure is to take a 2D. In many cases, however, the injury does not show in a 2D image or a lot is left to guesswork.

"In the long run, our bold hope is to challenge the current gold standard of 2D imaging by offering a mobile low-dose 3D imaging option," Seppälä says. Due to its compact and mobile design, Planmed Verity can be easily transported and sited in virtually any existing X-ray room. "For example, in a hospital emergency department where patients come for the first time in injury cases, Planmed Verity is a great option. Easy patient access and mobile design combined with low dose is what makes it ideal for routine imaging," Tohka sums up its benefits.

#### Interesting applications

One of the most interesting applications of Planmed Verity is scaphoid imaging. Scaphoid fracture is the most common wrist fracture, accounting for 60 to 90% of all bone injuries of the wrist. However, up to 25% of these fractures may not show in initial radiographs. According to Seppälä, the complex structure of the scaphoid shows in a 2D image as overlapping, making it difficult to evaluate the injury. "In 2D imaging several different projections may be required, whereas from a single 3D image the whole anatomy can be analysed from different angles," he explains.

Also in the case of intra-articular surface fractures, where the break crosses into the surface of a joint, the evaluation of anatomy and treatment is very challenging. "For proper diagnosis it is critical to evaluate the relative position of the bone fragments and their relationship to ligament attachment. This can be achieved with highresolution (0.4 and 0.2 mm) imaging. In fact, our resolution actually exceeds the resolution of CT images," Tohka continues.

## Weight-bearing imaging in 3D

The totally unique feature in Planmed Verity is its 3D weight-bearing imaging option. In 2D weight-bearing imaging, the complex anatomy and structural overlap present a challenge for image interpretation. For example, in a 2D image of the forefoot, the numerous small bones show as overlapping, making it difficult to see how a bone is bent or how a single articular surface behaves. In such case there is a risk that the foot is diagnosed as healthy and the patient is sent home with an injury. By comparison, in 3D CT or MRI the patient is lying on the bed and the extremity is at rest. However, in order for a arrowing of the joint-space to show in the image, it is crucial that the extremity is under load during the scan. "Planmed Verity is the first device combining 3D with weight-bearing imaging, and it is currently the only one on the market, Seppälä proudly claims.

### The very promising future

According to Tohka, there is a great interest on behalf of universities in looking for new applications and developing treatment standards. There are in fact several research projects under way in university hospitals which in the future will expand to England, Germany, Italy and the US. "An interesting research study on how articular injuries show up in Verity images compared to MRI is currently under way and from our point of view, the preliminary results are very promising", Tohka explains. 👔

#### Planmed Verity<sup>®</sup> extremity scanner in a nutshell:

- compact in size, stand-alone and mobile: easy to site in almost any existing X-ray room • optimised patient comfort and versatile positioning with soft surfaced gantry and dedicated positioning travs
- high-quality 3D imaging with low dose at the point of care
- easy access even from wheelchair or hospital bed • weight-bearing imaging for imaging under load
- compact and attractive design; ideal also for elderly and paediatric patients

mark and is available for sale in the EU and many FDA approval is pending.

## Planmed Verity<sup>®</sup> wins the jackpot at the 2012 Medical Design Excellence Awards

The **Planmed Verity**<sup>\*</sup> Extremity Scanner won the sought-after title: the 2012 Medical Design Excellence Award (MDEA) Gold Winner, and was also nominated "Best in Show". MDEA is the premier awards competition for the medical technology community.

The judging of the MDEA competition is conducted by an impartial, independent multidisciplinary panel of jurors who evaluated a total of 41 finalist products in 10 categories.

Entries are evaluated on the basis of their design and engineering features, including innovative use of materials, user-related functions that improve healthcare delivery

and change traditional medical attitudes or practices, features that provide enhanced benefits to the patient, and the ability of the product development team to overcome design and engineering challenges so that the product meets its clinical objectives.

"We are particularly proud of this award. MDEA is highly recognised and appreciated within the medical device and imaging industry", states Mr Vesa Mattila, Vice President with Planmed Oy. "The compact, ergonomic and mobile Planmed Verity Extremity Scanner gorgeously combines modern and elegant design into a state-of-the art functional medical imaging system."

## "red dot award: product design 2012" design prize for **Planmed Verity**

Earlier this year, Planmed Verity convinced the 30-member international expert jury of the "red dot award: product design 2012".

Manufacturers from all over the world submitted a total of 4,515 designs to the renowned product competition. Planmed Verity received the globally sought-after red dot in the product category of Life Science and Medicine.

"Design of this device is both welcoming and gentle with a strong personality. The look is enhanced with a tear-drop shaped imaging bore and "The Bite" in the outer rim that helps patient positioning, states Mr Tapio Laukkanen, Industrial and UI Design Manager with Planmed Oy. Professor Dr. Peter Zec, initiator and CEO of the red dot design award, pointed to the high quality level of the competition: "The most distinguished products of the respective branch of industry faced up not only to the tough competition this year again, but also to the critical eye of the jury. The experts thoroughly examined, tested and evaluated each individual entry, applying the highest standards. With their performances, the laureates not only demonstrated an extraordinary design quality but they also showed that design is an integral part of innovative product solutions."



## Honorary Mention in Finnish design competition Fennia Prize

Planmed also received an Honorary Mention for its Planmed Verity<sup>®</sup> Extremity Scanner, in the Finnish design competition Fennia Prize 2012.

The objective of this international design competition for firms and companies is to support the production of high-standard products and services and to promote the competitiveness and internationalisation of industry. Alongside high standard design, evaluation criteria include usability, environmental and social responsibility and impact on business.

#### MEDICAL DESIGN EXCELLENCE AWARDS

Established in 1998, the Medical Design Excellence Awards (MDEA) is the medical device industry's premier design awards competition and the only awards program that exclusively recognises contributions and advances in the design of medical products. The MDEA competition is open worldwide to companies and individuals involved in the design, engineering, manufacture, or distribution of finished medical devices or medical packaging. www.MDFAwards.com

#### THE RED DOT DESIGN AWARD

The red dot design award, whose origins reach back to the 1950s, is carried out in three disciplines: the "red dot award: product design", the "red dot award: communication design" and the "red dot award: design concept". The award – the red dot - has established itself internationally as one of the most appreciated quality seals for outstanding designs. www.red-dot.de/press

Video: Meet the Industrial Designers of Planmeca and Planmed.



# **PlanEasyMill**<sup>™</sup> produces patient-specific implants for cranial and maxillofacial surgery



The new PlanEasyMill<sup>™</sup> service offered by Planmeca produces patient-specific implants for facial trauma reconstruction and tumour removal. This brings a valuable addition to the Planmeca ProModel service, which offers physical 3D skull models and surgical guides for realising incisions and cuts in the operating room according to a predetermined plan.

The 3D design is created in an online meeting between surgeon and designer.

Dlanmeca's patient-specific implant ProMax\* 3D CBCT or medical CT image meeting." of the patient. After careful diagnostics, the image is sent to Planmeca via the online service in **Planmeca Romexis**\* software or, model based on the patient's data.

implant is conducted via an online meeting final implant or even a crash on the milling unit. session between the surgeon and Planmeca's designer using state-of-the-art 3D CAD the milling machine, a virtual manufacturing software. "Usually the online meeting lasts simulation is conducted to verify that the from half an hour to an hour depending on the implant will be manufactured as designed. design of the implant," says Mr Jukka Kanerva, The large 5-axis milling machine equipped Division Director at Planmeca.

During the online design phase, the surgeon can comment and propose ideas freely and the designer adjusts the 3D model accordingly.

"Sometimes we also have several surgeons **I** process begins by acquiring a **Planmeca** participating simultaneously in an online

After the design of the implant is ready and approved by the surgeon, the next step is to finalise the design for the manufacturing alternatively, on a CD. Planmeca's professional process. The implant is machined out of implant designer then creates a 3D virtual a titanium block according to the virtual model of the CBCT/CT image and if needed, drill patches generated by computer-aided uses a 3D printer to produce an actual physical manufacturing software (CAM). This phase is very critical as a wrong manufacturing The design phase of the patient-specific strategy can cause poor surface quality of the

> Before placing the CAM designed model in with an automation robot carefully machines the implant with diamond drill bites and high speed cutting. The ready implant is packed and delivered to the customer with a certificate



Virtual tooling paths generated in CAM software.



Virtually simulated milling with 3D model.



guaranteeing that it has been produced according to the highest standards.

The turnaround time for patient-specific implants varies from 2 to 3 working days (plus delivery). "In the fastest cases, we have been able to deliver a ready implant to the surgeon within 16 hours of the design phase," states Kanerva.

The use of patient-specific implants reduces operation time by approximately



3.5 hours, improves the patient's aesthetic result and facilitates implant placement as the patient's anatomy has been taken into consideration already in the implant planning phase. Another important advantage is that patient-specific implants are designed to adapt to standard locking systems. "All in all, patient-specific implants make procedures more straightforward and help to reach better outcomes", Kanerva says. 🛽

# Planmeca signs record-breaking contracts

In total 70 MEUR dental education solutions for major Saudi Arabian and Finnish dental institutions



King Saud University, Riyadh

King Saud University and College of Dentistry King Saud University is a public university located in Riyadh, Saudi Arabia with almost 38 000 degree students. Founded as Riyadh University in 1957 by King Saud bin Abdulaziz, it was the first university in the kingdom not dedicated to religious subjects. In 1982 it was renamed King Saud University.

The College of Dentistry of King Saud University was the first university-based dental training institution in the Arabian Gulf. The College of Dentistry campus's new facilities include two buildings, of which one is allocated to female dental students and the other is a dental hospital. http://dent.ksu.edu.sa

King Saud bin Abdulaziz University for Heath Sciences and College of Dentistry The university was established under the umbrella of the National Guard and the Ministry of Higher Education. It is one of the most modern universities in the region and the Arab world, specialising in health sciences. The College of Dentistry in Riyadh has five departments: Maxillofacial Surgery and Diagnostic Science, Preventive Dental Science Department, Restorative Dental Science, Prosthetic Dental Science Department and Dental Auxiliary. www.ksau-hs.edu.sa Planmeca is delivering three fully digital teaching environments to King Saud University College of Dentistry and the National Guard of Saudi Arabia Health Affairs as part of an extensive local health care development and investment to education. This substantial delivery agreement includes a turnkey solution with more than 1 000 dental units, simulation units, 2D and 3D X-ray systems combined with an innovative software platform, which seamlessly incorporates the devices and partner solutions into a high-tech, attractive learning concept. A similar solution with 127 dental units and a complete imaging and teaching system will also be delivered to the University of Eastern Finland in Kuopio.



University of Eastern Finland, Kuopio layout

Planmeca's unique solution for dental universities has been adopted by numerous leading dental universities around the world.

"Planmeca's overall sales growth in 2012 is more than 30%. Our success proves that universities appreciate Planmeca's technology leadership and customer-focused product design. We are delighted to be working with these prestigious institutions. Planmeca's competitive advantage has been achieved by considerable investments in in-house R&D, cooperation with leading academic research groups and strong commercial partners," says Mr **Heikki Kyöstilä**, President of Planmeca Oy.

## Unique linkage of dental equipment and software

The success of Planmeca's university solution is based on the capability to network digital dental equipment and software. This offers completely new possibilities for educational, research and clinic operation purposes and benefits all user groups in the university clinic. The networked Planmeca digital dental units, X-ray devices and software are perfectly integrated and automatically register all user activities. This provides interactive teaching methods for the clinical faculty and an inspiring learning environment with electronic curriculum for the students. The unique dental unit concept supports seamless transition from pre-clinical simulation training to clinical training and actual patient treatment.

Planmeca's advanced software for clinic management provides significant cost and time savings and allows easy software upgrades for future functionalities. Furthermore, networked equipment with remote monitoring possibilities brings real-time information for the technical staff, which ensures smooth clinic operation. Userspecific settings for instrument adjustments or treatment positions can be easily transferred from one dental unit to another.

## Innovative clean-tech infection control system

One of the key competitive advantages of the Planmeca university solution is the state-of-the art centralised infection control system. The solution automates infection control procedures and provides unique quality-assurance to guarantee patient safety. The advanced water system is chemical-free and generates significant cost, labor and energy savings. This clean-tech solution is an outcome of Planmeca's decade-long research cooperation with leading academics specialised in infection control and biofilm removal.

## Strong commitment to high-quality dental education

The government of Saudi Arabia has given high priority to health care services development. With these projects, the Saudi Arabian Ministry of Higher Education is investing in the new facilities of the Female dental college and is building a new dental hospital on the male college campus. At the same time, the National Guard of Saudi Arabia is investing in top level teaching environment for educational and research purposes of the King Saud bin Abdulaziz University for Health Sciences College of Dentistry.

In co-operation with its local distributor Care Ltd., Planmeca is delivering the complete digital university installations including 990 Planmeca Compact i and Planmeca Sovereign dental units and 100 simulation units as well as a complete imaging system consisting of 19 Planmeca ProMax 3D dental X-ray units and 345 Planmeca ProX digital intraoral imaging systems, all interconnected with Planmeca Romexis software. The installations will be completed in fall 2012.



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COPY HANNA KURKI IMAGE JUHA KIENANEN

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## Advanced medical and dental equipment at the 2012 Ice Hockey World Championship in Helsinki



Planmeca Group participated last May in the Ice Hockey World Championship by providing a Planmed Verity<sup>®</sup> Extremity Scanner and a Planmeca Compact<sup>TM</sup> i dental care unit for the on-site emergency room at Helsinki Arena.

At the Arena, the **Planmeca Compact**<sup>™</sup> **i** dental unit helped in diagnosing dental injuries and giving first-aid treatment.

"The unit functioned very well regardless of the 'field operation' surroundings - no water or compressed air - at the stadium. A separate pressurised water container and a mobile air-compressor were installed to overcome this challenge. In addition to the dental unit, Planmeca delivered an intraoral imaging system that completed the high-quality dental emergency care settings", explains Mr Otso Salmi, Head Dentist at the competition.

"The most common dental injuries in icehockey are enamel-dentine fractures. In some cases the tooth can break so that it requires

root canal treatment. Sometimes a player can even lose a tooth or crack his jaw," Salmi says. In the May championships, however, no serious cases were recorded thanks to good-quality mouth guards and strict referee work. The most typical cases included dental fillings and repairing chipped teeth. "This was the first time a dental care station was brought into the ice-hockey hall. The new concept was appreciated both by the players and the organisation of the International Ice Hockey Federation."

The dedicated Planmed Verity\* 3D extremity scanner was used at the arena by Dr. Markku Tuominen, Head Physician for the Finnish National Ice Hockey Team, together with his medical team.

"Extremity injuries - hits, cuts and twists - are typical in icehockey. Planmed Verity is well-suited for this type of imaging as it has been designed to acquire a 3D image of the entire area at once. The pulsed X-ray technique also helps to keep the radiation dose low," Tuominen says.

"Verity was easy to use and it was also well suited for this kind of clinic. The benefits of on-site imaging were obvious: the fast diagnosis of the injuries enabled both the players and the teams to concentrate on the next steps."

> Link to article "Doctor is always in" on IIHF site





Dental unit user training at the Helsinki Arena was conducted by Jari Outavaara (above) and Markku Nappari (below, middle).



The 2012 IIHF World Championship in Helsinki, Finland and Stockholm, Sweden

The Ice Hockey World Championships, organised by the International Ice Hockey Federation (IIHF), took place on 4-20 May 2012 in Finland and Sweden. The participating national teams came from 16 countries and three continents. www.iihfworlds2012.com





Ms **Saara Muhli** trained the medical personnel of the Ice Hockey World Championship 2012 in Helsinki to use the Planmed Verity® extremity scanner. On the right **Dr. Markku Tuominen**, Head Physician for the Finnish National Ice Hockey Team..





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# "Outer beauty and inner values superbly combined"

Dentist Claudia Säger of Bad Salzuflen, Germany, is very enthusiastic about her Planmeca Sovereign<sup>®</sup> dental units and praises digital X-ray work with Planmeca ProOne<sup>®</sup>.

One year after establishing her own practice in Bad Salzuflen, dentist Claudia Säger still gets truly excited talking about her two dental units. She opted for **Planmeca Sovereign**\* after careful consideration. Säger praises the swivel feature that enables the unit to be turned in any direction, the ease with which the system can be switched between left and right-handed treatment, the award-winning design ("I pay attention to that too") and the infection control technology, as well as the update options that keep her equipment fit for the future.

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The Sovereign also triggers a positive echo from patients: "How very high-tech!" exclaimed the first visitors as they allowed themselves to sink into the viscoelastic upholstery. Older patients in particular are very pleased about the automatic movement from a normal sitting position to a lying position and vice versa.

"Children also find it thrilling to take a spin on the dental unit," smiles Claudia Säger. She regularly sees primary school classes and child care groups in her practice, which also incorporates a separate children's waiting room with furniture to match.

Besides traditional dentistry, her practice also focuses on phobic patients, individual prophylaxis, as well as pediatric dentistry with consultations twice a week, and aesthetic dentistry.

#### Good working equipment money well spent

After nine years in a group practice the opportunity arose for Claudia Säger to start her own business. "Others spend

their money on expensive cars or designer furniture, I put everything into technology for my practice," she states.

"Good working equipment is never a waste of money. With these units you only get carefully conceived things," says Claudia Säger in praise of Planmeca technology. Planmeca Sovereign dental units already incorporate many features which customers normally pay a lot extra for, or which are simply not available. "Take for example the swivel feature: I couldn't do without it these days." It is possible to swivel the unit in the axial direction so that it faces different areas of the treatment room; this allows me, for example, to turn a sensitive patient away from the draft of the air conditioning unit.

Also the chair's upright position, where the legrest folds down, is a valuable feature: It allows patient consultations to be held at eye level, a psychologically important factor.

Furthermore, Claudia Säger feels wellequipped for the future. "With proper maintenance of the units, it will be possible later to simply load software to activate new functions or to add equipment." The buttonfree touch panel is very user-friendly.

Daily routine tasks in terms of quality and infection control are very easy to accomplish with the Sovereign. The infection control logs can be filed and documented; they are saved in the software. A convincing feature of the device is its built-in hygiene system, which provides water rinsing during suction. The water in the tubes is also replaced regularly. "Every two hours the water is replaced completely with fresh water, before germs have a chance to incubate. I need no chemicals for that."

There is one Planmeca Sovereign in each of the two rooms, and Claudia Säger plans to install a Planmeca Compact i unit in a further room. It is a robust device for treating children, and is very well suited for child and adult prophylaxis.

## Elegantly designed digital X-ray unit

X-ray work is yet another area in which Planmeca technology has convinced Claudia Säger. She uses the Planmeca ProOne<sup>®</sup> X-ray unit and believes in digital imaging. "The images are of highest quality and the units are very easy to operate," she summarises her experience. The Planmeca Romexis\* imaging software also offers many features for sending images or exporting them to other systems.

"The equipment is also very elegantly designed." Planmeca's large X-ray unit is mounted on the wall, leaving enough room around the patient so that they do not feel trapped in a corner.

Claudia Säger is satisfied with Planmeca's maintenance and service for her equipment. The Planmeca branch in Germany is actually located in Bielefeld, quite close to her practice. "When I call them, they arrive within a few hours. Should things be really urgent, they'd come immediately." The technical staff from Bielefeld is very experienced and is able to remedy possible errors very quickly.

Many dentists who set up a practice run the risk of oversizing their technical facilities. "With my Planmeca equipment I see no risk of oversizing," says Säger. "On the contrary, it would be the right sort of oversizing; there are actually very few mistakes that can be made." She is more than happy with the price / performance ratio.

"I am still very pleased with both my Planmeca Sovereign dental units." More than that, after one year Claudia Säger is showing a positive balance sheet: "Things are going very well," she summarises the financial situation of her practice.





## REFERENCES

## Paediatric dentist and her small patients love Planmeca Compact<sup>™</sup> i

"As a wife of a physiotherapist and as someone who is very aware of her body, I love working with **Planmeca Compact<sup>™</sup> i**. It has some great attributes for everyday practice but especially for children and special care patients. The option of entering the chair in a knee break position instead of the more traditional position enables flexibility. The option of a very low entry position is great for my smaller patients, and important for reducing lifting as well as child independence issues. With a knee break chair I can also do standing wheel-chair transfers without having to lean awkwardly over the chair or around an armrest.

Small children can be easily positioned with or without the booster due to the chair design allowing great operator and assistant positioning. The child head positioning for comfort and angulation is the best that I have experienced.

In the past I have had significant tendinosis so I am constantly aware of stress on my right wrist. The over-the-patient delivery is much easier on my wrist and it is also great for reducing the risk of grazing my arm on burs whilst using the bracket tray. Flexible bracket tray position again assists with ergonomics. Children have not been worried or even commented on the over-the-patient delivery.

The chair can be adjusted to a flat position, which is ideal for management of an unconscious patient if that was ever to happen. The chair is easily programmable. Speed, water and air variability is great and the foot control simple to adapt to.

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The ceiling mounted operating light and X-ray unit means that there is one thing less to reach or climb. With mobiles and finger puppets that fit perfectly on light handles and handpieces when not in use, the equipment does not seem daunting even to my most apprehensive patients". 👔



Features I love about the Planmeca Compact i:

- OPG children can see their parent during the film
- (not facing a wall). • Ease of use and positioning.
- Easy manipulation of the image afterwards.
- · The chair can be adjusted low enough for most 5 year-olds and a stool can be used for those who are too small.



Dr Helen Cornwell BDS (Adel), MDSc (Melb), FRACDS Paediatric Dentist Conjoint Senior Lecturer (University of Newcastle)

## Planmeca's unique dental education concept takes over South East Asia



Planmeca Oy strengthened its position as the preferred university supplier of the dental field by signing a delivery agreement with the International Islamic University Malaysia (IIUM). In co-operation with the local distributor Amedix sdn. Bhd, Planmeca is equipping IIUM with 173 Planmeca Compact<sup>™</sup> i dental units, one Planmeca Sovereign<sup>®</sup> dental unit along with three Planmeca ProMax<sup>®</sup> 3D imaging units, and seven digital Planmeca Intra<sup>™</sup> and Planmeca ProSensor<sup>®</sup> intraoral imaging systems.



Cince 2006, Planmeca's dental education concept has been **J**chosen by more than twenty major dental institutions across the world. The success of the concept lies in intelligent product and system features that make operation and teaching in the large university clinics predictable and efficient according to university's specific needs.

Planmeca's system for instance pre-indicates maintenance routines and incorporates a centralised suction system and amalgam separators. Moreover, the software platform supports remote consultation between the students and the faculty as X-ray images can be sent for consultation. Although dental treatment tradition in the area favors hanging tube instrument delivery, IIUM chose Planmeca's units with over-the-patient delivery arms contributing to ergonomics and a hygienic work environment.

"In the Asian market, the competitive assets of Planmeca's dental equipment are superior design and simplicity of use, both promoting efficient workflow. We are happy that young professionals become predominant users of the latest technology and familiar with Planmeca's product philosophy in the early stage of their profession. These university deliveries are a fundamental part of our business," says Mr Tuomas Lokki, Vice President of Marketing and Sales at Planmeca Oy.

The agreement with IIUM is one of the first university deliveries in South East Asia. Planmeca's local distributor Amedix has years of experience of large delivery projects and is strongly present in the area supporting Malaysian dental professionals. The installations were completed in November 2011.

## PLANMECA NEWS

## **Planmeca** introduces a new analysis tool for planning orthodontic treatments

he new Planmeca Romexis® Cephalometric Analysis module provides flexible and easy-to-use features for creating cephalometric analyses and composing superimpositions of 2D cephalometric images, facial photos and images of the dental arch.

The Planmeca Romexis Cephalometric module renders routine analyses fast and easy. An analysis can be performed in minutes and the results are displayed and shared effortlessly. During a treatment process, superimposing patient images from different time points can be used for follow-up purposes. The unique concept also offers various possibilities for customising the analysis and software properties in order to meet the needs and requirements of each dental professional.

PlanmecaProMax , M - 36

The Cephalometric Analysis module is a seamless part of the comprehensive Planmeca Romexis<sup>®</sup> software. Images are captured in Planmeca Romexis and the cephalometric analysis can be started with just one click. The mobile Planmeca iRomexis<sup>™</sup> application and Planmeca's cloud service allow sharing images and viewing results anywhere.

"We believe that with the Planmeca Romexis Cephalometric Analysis module, we can serve our orthodontics customers better than ever. Using the same system for capturing cephalometric images, CBCT images, 3D facial photos and now for creating cephalometric analyses, customers can work more efficiently towards better patient treatment", states Ms Helianna Puhlin-Nurminen, Vice President of Digital Imaging and Applications division at Planmeca Oy.

## Planmeca ProMax<sup>®</sup> SCARA2 offers an intelligent solution for basic imaging needs

The new SCARA2 model of the Planmeca ProMax<sup>®</sup> X-ray unit has a two-joint robot arm that enables movements for basic imaging needs. The unit is well suited for panoramic imaging of the dental arch, for maxillary sinus and temporomandibular joint imaging as well as for cephalometric purposes. The SCARA2 model can perform all the basic imaging programs including Standard panoramic program, Lateral and PA TMJ programs, Sinus program, Bitewing panoramic program and combined vertical and horizontal segmenting. The unit also includes a child panoramic mode, which reduces the imaging area and exposure values in all programs.

The SCARA2 model can be easily upgraded to a SCARA3 model or converted to a Planmeca ProMax<sup>®</sup> 3D or Planmeca ProMax<sup>®</sup> 3D s unit. Planmeca ProMax SCARA2 replaces Planmeca Proline XC in the company's X-ray product line.

Planmeca ProMax SCARA2 replaces Planmeca Proline XC in the company'X-ray product line.

Planmeca ProMax® 3D customers can now order Materialise Dental SurgiGuide® drill After creating an implant plan in Planmeca

guides directly from Planmeca Romexis®, with no need for separate software. This opens new perspectives for Planmeca's cone beam users, who can transfer their implant planning from Planmeca Romexis software to the patient's mouth, using the trusted technology of SurgiGuide drill guides. Romexis, the customer sends the plan and the DICOM images to Materialise Dental as a SurgiGuide order. Materialise Dental will then contact the customer to verify the implant plan. SurgiGuide options are discussed to find the optimal solution based on the specifics of each case, the surgeon's preferences and implant systems used. After production, the customer receives the SurgiGuide, ready for use in surgery.

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Planmeca Sonea is a standard head turbine. The chromium-plated surface provides a perfect grip and the compact head improves accessibility. Combined with Planmeca Sonea LED coupling, the Planmeca Sonea turbine can be swiveled through a full 360°, without tension in the wrist and without tubings becoming twisted.

## Planmeca and Materialise Dental join forces to benefit users of Planmeca ProMax<sup>®</sup> 3D devices





## PM handpiece set brings comfort to your hands

**P**lanmeca is proud to introduce the new PM handpiece set to complement the company's dental unit range. The set includes Planmeca Minea<sup>™</sup> 1:1 contra-angle, Planmeca Sonea<sup>™</sup> ML turbine handpiece and Planmeca Sonea<sup>™</sup> LED coupling.

Planmeca Minea features a non-circular profile for enhanced stability, precision and orientation. The tiny head enables access to places otherwise hard to reach.



COPY ANN KARLÉN / JOURNALEN IMAGES COURTESY OF JOURNALEN

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Welcome to Sweden's most modern training clinic – The magnificent 366 m<sup>2</sup> Karolinska Institutet: A fun place to work!



for hygiene, infection control and the environment at the Department of Deptal Medicine at Karolinska Institutet.

Ultramodern, environmentally friendly and energy-efficient, with clean surfaces, full of light and air. Karolinska Institutet's new training clinic practises what it preaches.

n just nine months, the Department of Dental Medicine of Karolinska Institutet was able to convert a former laboratory into Sweden's most modern training clinic. There are 16 workstations, a room for taking X-ray images, a sterile room, reception and a waiting room. "Both the staff and students find the new working environment pleasant," says the department's project manager Jana Johansson Huggare proudly.

#### Pressing need for more workstations

There was a pressing need for more training positions at Karolinska Institutet in Huddinge. Early 2010, Jana started as project manager for a new clinic. The financing was already in place with a budget and an empty location on floor 7. In February, a project group was formed and consultants were contacted. Good practices from the clinic on floor 6 were adopted and efforts were made to improve things that worked less well.



The patient chair's green upholstery is made of thick viscoelastic memory foam.

### Tougher environmental requirements

"Naturally, we will make the new location as environmentally-friendly as possible", thought Jana, who is involved in environmental work at the department. She presented the idea to environmentallycertified Akademiska Hus and it was well received.

The result was the decision to go one step further. For example, building components were subject to environmental assessment. Also. Jana read an article about a clinic in Valbo that had invested in a suction system that saved on both energy and resources. This inspired careful requirement specifications for the equipment.

Renovation and purchasing go hand in hand

The starting point was an unfinished surface. Mr Göran Johansson at KI Properties came along with the brilliant idea of building a raised floor so that hosing and wires could be hidden under the floor. This also meant that other activities in the building were not disturbed by dust, vibrations, etc.

"This is very important when you have a sterilisation centre with sensitive equipment on the floor below."

The most important criterion during purchasing of equipment and furnishings was flexible delivery, so that the delivery time could be adjusted to meet the construction schedule. Direct on-site delivery is absolutely critical when there is no storage room available. In addition, great emphasis was put on ergonomics and the environment.

Dental nurses as interior designers

A group of dental nurses came up with suggestions and ideas for the décor and color-scheme together with the architect.

The plum color on the patient chairs is an elegant addition to the oak in the furnishings and was selected with KI's 200-year anniversary in mind (it matches the logotype of Karolinska Institutet). The two Planmeca Sovereign units are lime green. They are intended for patients with back pain and who have trouble lying down. These chairs have a slightly thicker viscoelastic memory foam.

### Environment and ergonomics in focus

With 16 workstations at the training clinic, there was a risk of high heat generation, which is energy-consuming and creates a need for increased ventilation. Therefore, LEDs were selected for the ceiling lights and operating lights, as well as for the dental curing lights.







In addition, because the students practise taking X-ray images, the X-ray equipment was placed in a separate room to minimise risks of radiation exposure.

Also, great emphasis was put on ergonomics and proper working postures, especially because several users are left-handed.

The operating equipment was assigned as little space as possible, yet meeting the current environmental and energy requirements in terms of care, operations and maintenance. Smooth surfaces and durable, anti-wear material is important in a training clinic, as is safe equipment that prevents injuries.

Finally, equipment for wet suction systems was selected. Instead of built-in amalgam separators in each unit, the separation process is centralised, which saves energy and is more hygienic. The clinic estimates energy savings of up to 75%. The system also reduces the cost of equipment per workstation. Further savings are achieved on maintenance and service resources.

The clinic also wants the cleaning system to be as automated as possible so that students can handle the routines quickly and effectively. The ultramodern equipment acquaints the students with current state-ofthe-art working conditions.

#### Each workstation has a number

The number on each workstation allows the students to connect their computer to the central network in the building, and to reserve time with a teacher when they need help with their studies or want to conduct a treatment that is part of the training. The low-radiation computer screens save energy.



Planmeca's cleaning system only needs to be run for 2 minutes for thorough cleaning, which is more efficient than simply rinsing out the hoses.

#### Infection control in theory and practice

Outside each workstation is a workbench with custom-sized Corian washbasins with countertops and storage. For storage, the clinic prefers drawers instead of cabinets. Here you will find disposable items, such as cups and napkins, as well as gloves, masks and plastic aprons. There are waste baskets for sorting recyclable waste.

The final year dental students have a good theoretical understanding of infection control and the environment. In the first semester, they learn basic procedures (protection, hand disinfection, safety, prick injuries, eye douching, etc.) In the fourth semester, they get in-depth information about infection control, the environment and safety procedures. In addition, they learn various procedures, such as how to report an injury and how to clean the treatment area. A test on infection control is then given. During the seventh semester, the students receive training on environmental issues and sustainable development.

## New possibilities with IT

Thanks to Clinic Management software, the procedures at workstations can be monitored. Maintenance and operations are handled by the department's medical technicians, and the head dental nurse supervises the cleaning functions that extend the life of the equipment. The dental unit recognises which user logs in and "disconnects" instruments that the particular user is not allowed to use (e.g. the micromotor). The Clinic Management software has many options that can be of help during teaching. The units are also equipped with intraoral

cameras for acquiring images.

### Better awareness of infection control and environment for future dentists

"In December 2009, the Department of Dental Medicine was the first department at Karolinska Institutet to receive environmental certification. We are the only department providing patient care in addition to training and research," explains Jana.





Image processing (Planmeca Romexis) is calibrated with the rest of the building and functions perfectly.

"The goal is total energy savings of 10% per year and we focus on three things: lower energy consumption, educating students about sustainable development, and reducing and phasing out environmentally dangerous chemicals."

"There is a strong belief that if we put a lot of energy into environmental education, our students will take this environmental awareness with them into their working life."

# FROM VISION TO EXCELLENCE - ALSO IN THE FUTURE

The product development of our advanced imaging equipment continues to strive for improved image quality for a variety of diagnostic needs, yet remaining highly dedicated to our ALARA principle of reducing radiation dose."

Vice President, X-ray

Timo Müller

Our after sales services – the timely installations, extensive training, as well as both on-site and online customer service – guarantee that you can concentrate on your profession and get all the benefits from your innovative product."

After Sales Manager

Our product development is dedicated to making the workflow of dental clinics smooth and efficient. The key to this is seamless integration of all equipment in order to obtain the best possible clinical data for the patient and thus ensure successful dental operations."

Vice President, Digital Imaging and Applications Helianna Puhlin-Nurminen

We are dedicated to finding the best suppliers for each component. We keep manufacturing largely in our own hands so that we can also control the quality."

We continuously explore new technologies to find new solutions that make our equipment more ergonomic, and easier to use – and benefit our customers."

> Vice President, Research and Technology Arto Virta







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We continue to create and strengthen *partnerships with our customers* worldwide. The best practises and advances in dentistry are further distributed throughout our network of institutional customers."

> Director, Export Sales Jouko Nykänen

We observe and learn from our customers so that our dental units continue to support and improve the workflow of the dental clinic in the future. We continuously bring new innovations to market – always ergonomic, hygienic, and pleasing to the eye."

> Vice President, Dental Care Units and Marketing & Sales Tuomas Lokki

## SVRadiology chooses Planmeca ProMax<sup>®</sup> 3D Mid as total solution

**C**t Vincent's Dental Centre (SVDC) is a private dental practice Olocated at St Vincent's Hospital in Melbourne. In addition to the centre's private patients, SVDC provides special needs dental consultation to several large hospitals in the East Melbourne area. In that capacity, Dr Harris Schlen, the principal of St Vincent's Dental Centre, and his CBVT purchasing team at SVRadiology have accumulated substantial experience in utilising advanced pathology and radiology services and have been referring patients for CTs for many years to aid in investigation of pathology and medical conditions, and more recently in treatment planning for dental implants.

They initially utilised medical CTs from the radiology services within the hospital but as cone-beam CTs which were better suited to dental applications became available, progressed to referring to radiology groups with CBCTs. However, Dr Schlen says they had become frustrated with the variability of the quality.

"We tried referring to various providers utilising different types of equipment, and soon found which were the most reliable but we never consistently achieved the results we were looking for. We also noted that medical image reporting commonly lacked an understanding of dentistry."

They determined that they needed their own CBVT to achieve the outcomes that they wanted. Together with a group of dentists and radiologists, they set up SVRadiology at St Vincent's to provide specialist head and neck imaging with a dental perspective.

"We were well aware of the pitfalls of setting up such a service. We didn't want to create a service that would leave us with the same compromises that we were already exposed to which would leave us with a major financial commitment and no real advantage."

Armed with a basic knowledge of CBVTs and a wish list that they had developed, they approached the major players in the market both in Australia and overseas and presented their wish list.

## The wish list for a CBVT

#### Image Quality / Dose of Radiation

While image quality is paramount, it is critical to achieve the required image with the smallest dose of radiation possible. "Whenever you look at a CT brochure, everyone shows you magnificent images. However, what they don't tell you is the relationship between radiation dosage and image quality in the specific images they show you. You need to be able to produce consistently good images while administering the lowest possible dosage of radiation to patients."

#### Versatility

"We wanted to be able to take both 2D and 3D images. We wanted both a 2D sensor and a 3D sensor."

#### **Workstation Software**

The value of being able to look not only at pathology but also at implant planning from different perspectives cannot be understated.

"We had become accustomed to using medical CTs with that extended functionality which enabled us to create views within the three dimensional volume from any angle so we wanted that functionality. Further, implant placement is a major part of our practice so implant planning software with incorporated implant libraries was also high on our list of priorities."

#### **Viewer Software**

Viewer software is the software incorporated onto exported DVDs. To make SVRadiology a viable business and to give it a point of difference to other radiology providers, the SVRadiology team wanted to be able to produce DVD's with fully licensed viewer software that had all of the functionality of the workstation software, including implant planning software.

#### **Reliability and Support**

"When you are paying major dollars for equipment, and when you are dependent on it, you can't afford to have any downtime." It was a priority that the equipment has a history of reliability and the agent must be able to demonstrate the ability to support the equipment.

"This support must include the ability to work with the software initially to train you and subsequently to resolve inevitable issues that come up. Secondly, technicians need to be on the ground to get you back into action quickly if the worst scenario eventuates and you find your equipment out of action."

#### Accessibility

Instant access to images and portable access are important. The SVRadiology team determined that they wanted portable access (iPad / tablet for use in theatres) and web access, if possible, to view the images and reports.

"We have a team of medical radiologists and dental professionals who use the unit for a wide variety of investigations. From a dental perspective, they include implant planning, investigating TMJ dysfunction, and identification of many different types of pathology. We also have a Planmeca Dimax 4 2D sensor to take OPGs and various 2D images, and a full range of Planmeca ProSensors to take intraoral images. From a medical perspective, we use the unit to investigate airway and sinus pathology, and airway volume in sleep apnea studies."

the images taken.

very satisfactory outcome.

our referrers."





a CBVT is not a difficult task but selecting the right one is. When you buy a car, you take it for a test drive. The same cannot be done when buying a new CBVT since there is no way to "test drive" the machine. So how do you decide which one is right for you?

Making the decision to buy

## REFERENCES

## The solution: Planmeca

"After evaluating all of the possible choices, Planmeca was the only unit that ticked all the boxes and in truth, nothing else even came close."

Ten months after making the decision to go with Planmeca, SVRadiology are extremely pleased with their choice.

We get the images that we want, the way we want them, when we want them."

Because Planmeca provides an iPad application, clinicians are able to view key images on their iPads and iPhones directly. This allows them to take the images into theatre. SVRadiology also provides direct web access to all images via their Visage Thin

Client web access. All images are viewable online within minutes of the patient having

Dr Schlen sums up the SVRadiology experience as a

"We get the images that we want, the way we want them, when we want them and so do







The Merli Dental Practice was established in 1952. In October 2008 the clinic moved to a new, larger and more functional facility, now called Clinica Merli.

The founder, Dr. Mario Merli, dedicated to his profession, has expressed his passion and integrity through continuing education and research in areas related to dentistry. In his quest to evolve with the times, he was particularly inspired by a colleague Dr. Augustus Biaggi, founder of a school for young dentists and an association called "Amici di Brugg". As a result, Mario started the Annual Meeting of the "Amici di Brugg" in Rimini, which has since become the permanent venue for this, one of the most attended events in the Italian dentist community.

The Merli Clinic is fully equipped with state-of-the-art diagnostic tools and medical devices that allow the medical and auxiliary staff to perform various services/treatments. Each of the four floors houses separate areas dedicated to the various specialist disciplines. The most recent is an innovative department dedicated to prophylaxis and lifestyles. There is also an area dedicated exclusively to children, a library, an Internet Point, and a conference room equipped for video conferencing and closed-circuit transmissions directly from the operating rooms. Educational videos are shown throughout the waiting rooms. The entire building complies with current regulations on architectural barriers for the disabled.

## Our philosophy: 'Sani per sorridere' - A healthy smile, a happy smile

"For over 50 years, we have been dedicated to oral health. Our philosophy is 'Sani per sorridere' - A healthy smile, a happy smile. Our aim is to care for our patients providing professional services with our highly qualified staff.

Our mission is to achieve operational standards of excellence through advanced technology, such as computed tomography which provides us with the in-depth data allowing us to propose the most appropriate and time/cost efficient treatment plan. The use of these state-of-the-art tools also facilitates clear communication and interactive health counselling - our patients are actively involved in making treatment choices.



Our interdisciplinary approach aims to provide not only quality and excellence in oral health, but also in aesthetics of the smile and face. Each of the disciplines is followed by a specialised medical and auxiliary staff. Once a week a multidisciplinary meeting is held, including not only the medical personnel, but also dental technicians, the IT specialist, a member of the secretarial pool, as well as visiting experts, to discuss complex cases that foresee treatment plans involving several branches of oral health and rehabilitation.

The clinic also offers outpatient services. Our patients frequently require care that necessitates day hospital facilities. We are affiliated with Nuova Ricerca Day Hospital and laboratory, conveniently located next door to our practice and connected through closed-circuit cables.

#### Research to support the multidisciplinary approach

Research has become an important part of our activities. Clinical trials are performed and reported in principal scientific publications worldwide. Continuing education is a major activity held weekly with in-house and visiting lecturers covering, once again, a multidisciplinary approach to oral rehabilitation from both a theoretical and practical perspective.

Our objective is to convey operational protocols that are applied in our daily clinical practice and share our experience acquired for further development in the vast field of oral medicine.

Dr. Mauro Merli has recently published a book: "Implant Therapy: The Integrated Treatment Plan". (Terapia Implantare: il piano di trattamento integrato)



The disciplines of Clinica Merli: Conservative Endodontics • Esthetics Prostheses 
 Orthodontics Paediatric • Dentistry • Oral Surgery • Implant • Therapy • Periodontics • Prevention • Dental Hygiene • Fluoride Treatment • Tooth

Whitening • Lifestyles • Diagnostic Imaging • Private Emergency Dental

### Equipment in line with the philosophy

The most important feature of Planmeca equipment can be appreciated from a clinician's perspective as well as that of the patient: its design. Both aesthetically and mechanically, it is simple, practical and ergonomic, making it comfortable and viable, contributing to the overall atmosphere of professional care.

Also, our IT, chairside assistants and dentists have found Planmeca's after sales service to be excellent: punctual, friendly, efficient.



Mr Mauro Merli, Mr Heikki Kyöstilä, and Mr Aldo Merli at the inauguration of the new Clinica Merli in May 2011.

#### Keeping a keen eye on the future

**Prophylaxis:** With the addition of a new floor dedicated to Prevention and Lifestyles, we have expressed what we feel is the future in oral health care. Keeping prevention in mind, this division dedicates attention to control of risk factors stemming from lifestyle choices (oral hygiene, balanced diet, physical activity, smoking and substance abuse) that are correlated to periodontal disease.

**Digital:** Looking to the near future, we strongly believe in digital dentistry and what it offers even now. Not only in diagnostics, but also in guided surgery, prosthetics, orthodontics as well orthognathic procedures.

3D: 3D videos offer students and researchers astounding images and insight into surgical techniques and anatomical details.

**R&D:** With continuing investment in research and development, we have set goals for further publications and application of clinical trials in novel surgical approaches and prosthetic solutions."

## PLANMECA NEWS



## Prestigious award to Professor David Coleman Sc.D.

The Dublin Dental University Hospital announced the award of an Sc.D. to Professor David Coleman in October. This is only the third time in fifty years that this award has been made in the Dental School.

"The Sc.D. is one of the most prestigious higher degrees to be awarded in Trinity College Dublin. Sc.D. is a "higher doctorate" awarded in recognition of a substantial and sustained contribution to scientific knowledge, significantly beyond what is required for a Ph.D. Individuals are awarded an Sc.D. on the basis of a corpus of published works and are recognised as being of international standing

in their field(s), their contributions have led to major innovations or major new additions to knowledge in their discipline and have resulted in seminal publications that have led to developments by others.

Since joining the Dublin Dental University Hospital in 1988, Professor Coleman has made significant and sustained contributions to scientific knowledge in several fields of Microbiology including oral Candida biology, MRSA research and applied and translational research on biofilm control in large water distribution networks in hospitals and other healthcare facilities."

Original press release: www.dentalschool.ie/ prestigious-award-to-a-dental-scientist/

## Yet another Townie Choice Award for Planmeca's X-ray units

Planmeca's digital panoramic and cephalometric X-ray units Planmeca ProMax<sup>®</sup> and Planmeca ProOne<sup>®</sup>, have won the Townie Choice Award granted by an interactive dental community.

Townie Choice Awards is an independent survey developed and run by Dentaltown.com, Inc., an online community

for dental professionals. Townie Choice Awards were started in 2003 to assist dentists in making purchasing decisions, and it is the only award in dentistry determined exclusively by clinicians. Yearly, the voting is open to tens of thousands of registered members of the Dentaltown interactive community and readers of Dentaltown Magazine.

View results and read more about Townie Choice Awards: www.dentaltown.com



Supporting volunteer dental care teams

Instead of sending out Season's Greetings 2011, Planmeca Group donated dental equipment to support volunteering dental teams in their valuable work.

Helping to improve oral health in developing countries, Planmeca donated a Planmeca ProMax\* panoramic imaging unit equipped with a cephalostat to the Jamaican School of Oral Health Sciences and a portable Mini-dent dental unit to the new free mobile dental clinic of Policlinico Emmanuel in Peru.

With these donations Planmeca wants to contribute to making dental care accessible for the less privileged members of the communities.

The School of Oral Health Sciences at the University of Technology, Jamaica, was founded in August 2010 as the first Dental School in Jamaica. The School's educational philosophy is to train all categories of oral health professionals to world standards.

The School also has a strong co to community work and charity. Staff and students volunteer to work in poor and verv challenged nunities (inner cities and in rural communities) Also, the School provides comprehensive dental care for mentally and physically challenged individuals free of cost. The Peruvian non-commercial clinic Policlinico Emmanuel operates an orphanage and also gives pediatric care in its region. The clinic will set up a free mobile dental clinic to treat the residents in the region. The donation is facilitated by the organisation Fe y alegria.



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