Planmeca ProMax CBCT with CAD/CAM technology: the perfect combination

_CBCT imaging is becoming_ the new standard of care for complete patient information. These images provide multi-faceted views of teeth and everything below the gum line, including the mandibular nerve canal, making them an invaluable tool for planning implant cases and other restorative treatments.

Now, consider combining this detailed information below the gum line with images from an intraoral scan, capable of capturing the highest resolution of data above the gum line. This combination of CBCT and STL data from CAD/CAM sources gives doctors the ability to provide the required information and tissue leveling for a crown down to an implant plan.

In most cases, the STL data can also be utilized by the lab to create the final surgical guide for placing the implant with unparalleled accuracy and speed. Temporary and final restorative crowns can be milled in-office in a matter of minutes or milled by a lab in as little as 24 hours. Planmeca’s imaging and CAD/CAM technology have captured this concept with the ProMax 3-D family of imaging units and the PlanScan/PlanMill systems, offering doctors the ability to acquire a data set with more detail than ever.

_Streaming the digital workflow_

Digital dentistry is streamlining virtually every aspect of the restorative workflow. Traditionally, doctors submit a physical impression to the lab with
the prescription and instructions written out on paper. This is gradually ceding ground to an entirely
digital process where the patient’s information and
doctor’s instructions are sent to the lab electronically
via a digital impression system.

Planmeca PlanScan Restorations can be delivered
mere days after the laboratory receives the patient’s
intraoral scans, while the Planmeca PlanMill 40
in-office milling unit is making same-day dentistry
a reality. The restorations produced by the PlanScan
restorative system, along with the combining of
the digital impression with CBCT scans, reduce the
costs and treatment time associated with replacing
a tooth, increasing the demand for digital dentistry
exponentially.

For those who want to continue to work with their
labs, all of the patient information needed to produce
a model-less restoration can be submitted digitally
to a dental laboratory. At the same time, clinicians
enter the patient’s information and prescription data
into their digital impression system’s software prior
to submitting each case. Because the Planmeca Plan-
Scan system is an open system and the dental team
can send the file in a standard DICOM format, ex-
changing patient data is easy between most systems
through Planmeca Romexis software.

Bringing today’s dental practice up to
speed with Planmeca Romexis software
and cloud service

While digital impression systems are realizing
a data standardization solution, the digital X-ray,
practice management, cone-beam computed to-
mography (CBCT) and digital treatment-planning
systems found in today’s dental practice require the
same sort of attention. Because these systems lack
interoperability, they are unable to efficiently com-
municate patient data and reach their true potential.

To truly maximize the efficiencies and cost savings
offered by these technologies, interoperability is im-
perative among these dental systems that are becom-
ing increasingly common in today’s dental practice.
As clinicians demand data standardization, the trans-
fer of the patient’s information, X-rays, CBCT scans,
digital impressions and prescription data between the
dental office and the dental lab with the simple push
of a button is now possible with Planmeca Romexis
software and Planmeca Romexis Cloud.

Maximizing practice profitability
with open architecture

Data standardization is essential to driving down
costs for patients, doctors and laboratories alike
by establishing interoperability between intraoral
scanners, CAD/CAM software and other dental
systems. Ultimately, having a common standard
that allows the disparate systems used in dental
care to function as plug-and-play devices rather
than requiring pricy IT solutions will reduce the
costs of integrating these new technologies into
dental practices and maximize the ROI of the
equipment.

Planmeca’s CBCT and CAD/CAM imaging sys-
tems, along with Planmeca Romexis digital treat-
ment planning software, are using this idea to
improve the efficiency, predictability and cost-
effectiveness of dental restorations, making chair-
side dentistry a lucrative investment for dentists
who wish to grow their practice and offer patients
the latest in same-day technology.

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**Fig. 3**
The ProOne features
an easy-to-use color graphic
user interface (GUI) with touch
magnification for image verification.

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