

STELLARIS 3D

4 IN 1 CBCT SOLUTION
FOR ADVANCED DIAGNOSTICS





FONA
CLOSER TO YOU



FONA

Stellaris 3D



STELLARIS 3D

4 IN 1 CBCT SOLUTION FOR ADVANCED DIAGNOSTICS

Stellaris 3D is a complete and compact, fully upgradeable 3D CBCT for a patient, Panoramic and Cephalometric system with multiple fields of view of 8 sizes with HD and low dose ECO modes.

WHY 3D CBCT?

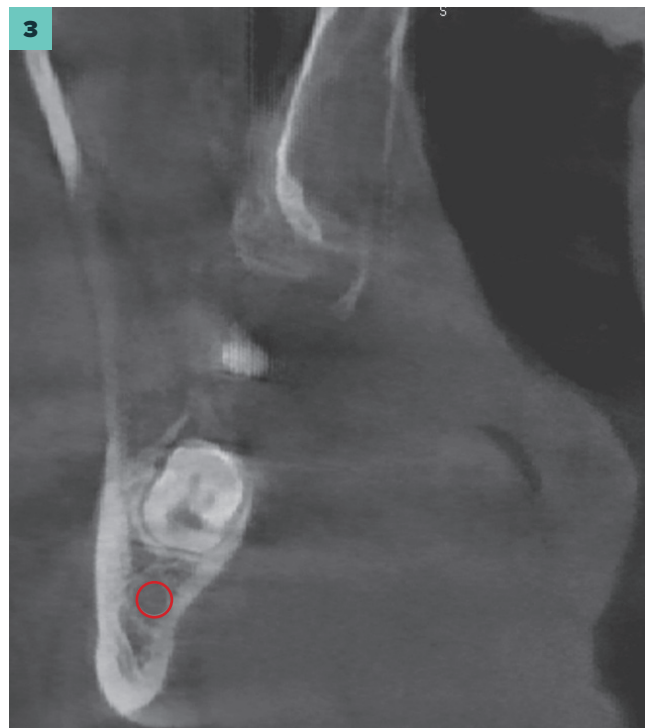
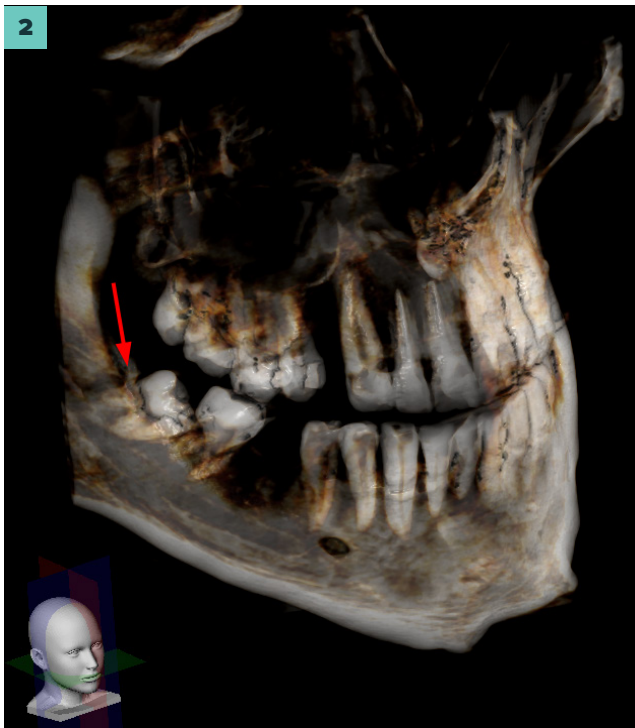
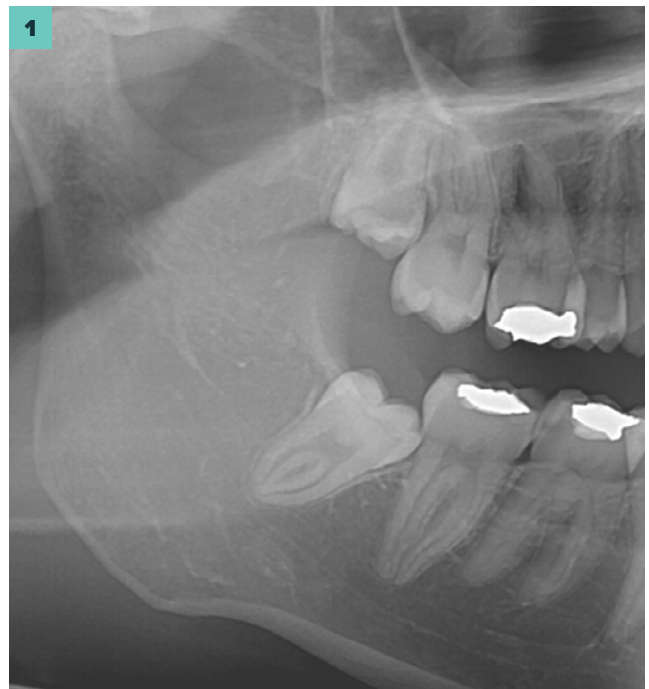
The 3-dimensional view allows to reveal the complexity of jaw bone, teeth and root canal structures. This is particularly important for safe and reliable treatment. 3D visualizations allow to communicate more easily with the patient and help decide the next steps in their therapy.



01

In the panoramic image the 3rd dimension reflecting the morphology is missing. By nature, it is the 2D projection of a 3D object.

3D images can reveal exact position of the tooth and mandibular canal and help to determine the approach for the extraction of impacted tooth. A case can be evaluated from various angles and views.



1 Adult panoramic image with impacted tooth.

2 Stellaris 3D image of similar situation

3 Cross section revealing mutual position of tooth and mandibular nerve canal

Complicated extractions or navigated implantology is subject of safety focus. Cone beam CT also helps specialists examining TMJ's, maxillary sinuses, performing other applications like bone grafting or scanning of models and impressions for capturing 3D shape of

soft tissues. In re-endo cases, a 3D view of the complexity of root canals and apex determines the success. Appreciated indication is the evaluation of the stage of periodontal disease and periimplantitis.

WHAT 3D CBCT CAN DO FOR YOU?

3D has many practical applications in the daily work of every dentist. It quickly has become an asset for every dental practice.



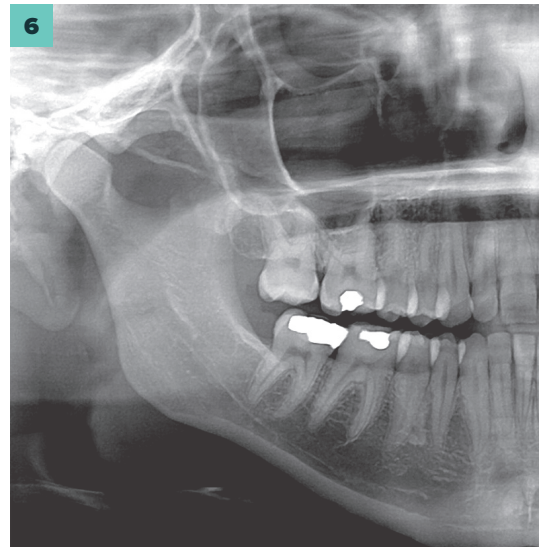
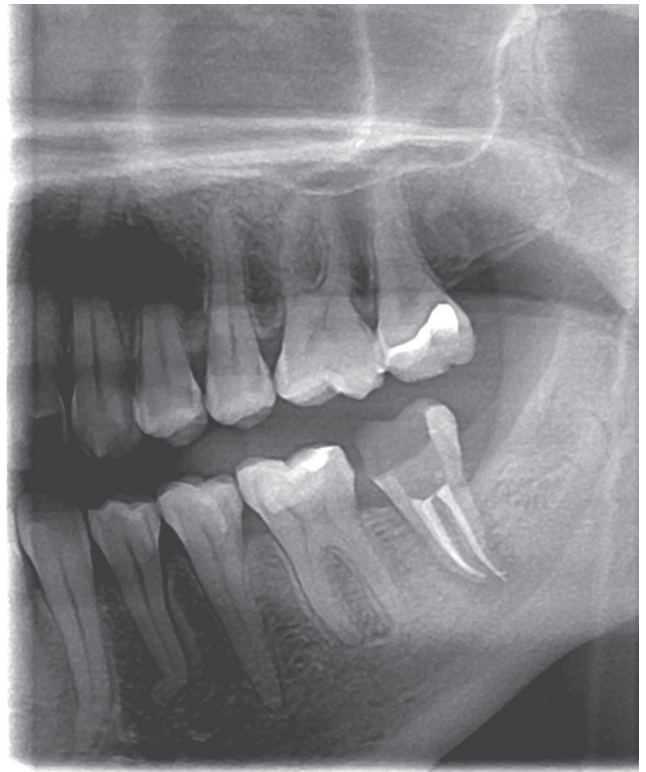
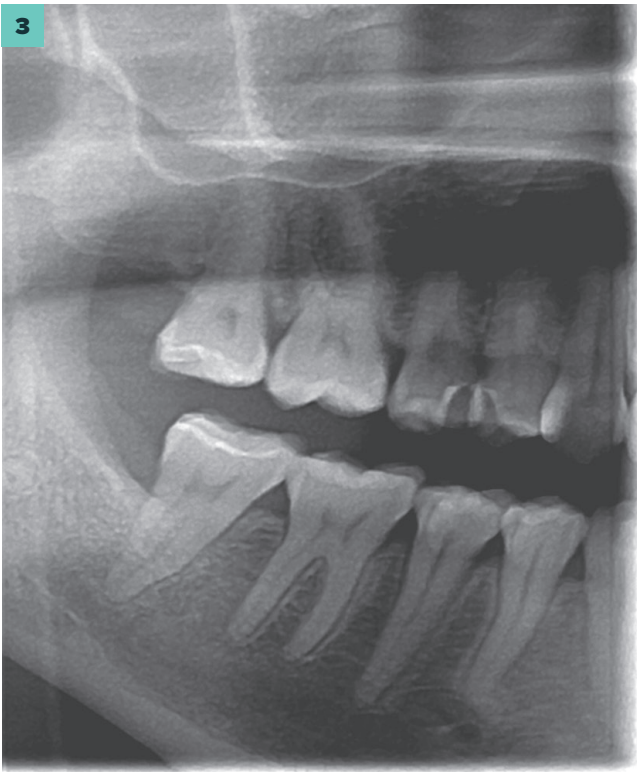
02

PANORAMIC PROGRAMS



1 Most common adult panoramic image acquired by Stellaris 3D

2 Child panoramic image acquired by Stellaris 3D, with lower dose and shorter exposure time



3 Bitewing panoramic image

4 Partial exposure Left

5 Partial exposure Right

6 Partial exposure Anterior

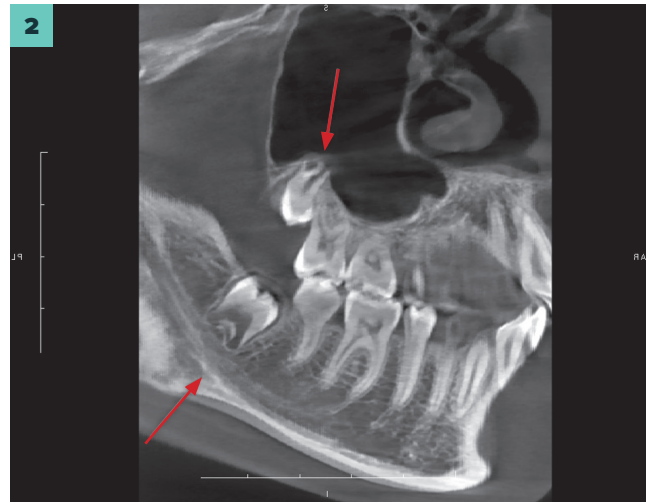
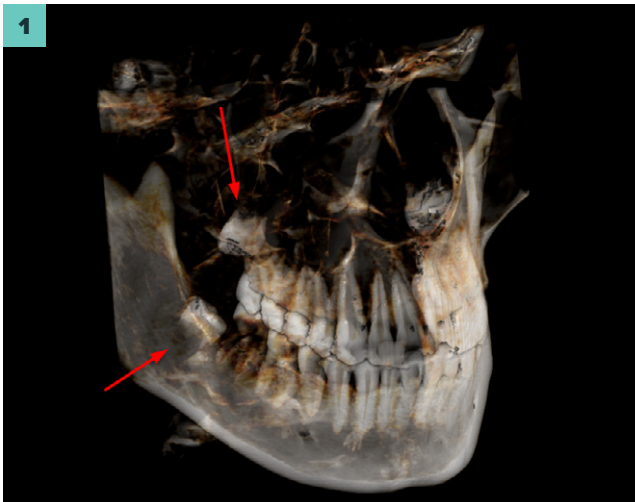
Panoramic images are already standard for patient regular check-ups. The native Panoramic technology of Stellaris 3D delivers panoramic images without

compromise. ECO dose-saving programs are available as well as children programs, panoramic bitewings or partial exposures.

CLINICAL APPLICATIONS

3D OF IMPACTED TOOTH

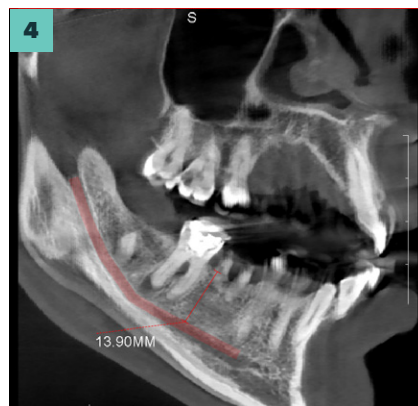
Stellaris 3D, with its ability to capture 3rd molars, allows the evaluation of the teeth's position to precisely determine and measure the distance from other critical structures. Multi-planar views with rotating cross allow the obtaining of a 3-dimensional assessment of the case and help plan the correct approach to extraction.



- 1 3D visualization of impacted tooth
- 2 Multiplanar view — position of nerve versus tooth roots
- 3 3D visualization of planned implant
- 4 Views along axis of future implant

3D FOR IMPLANT PLANNING

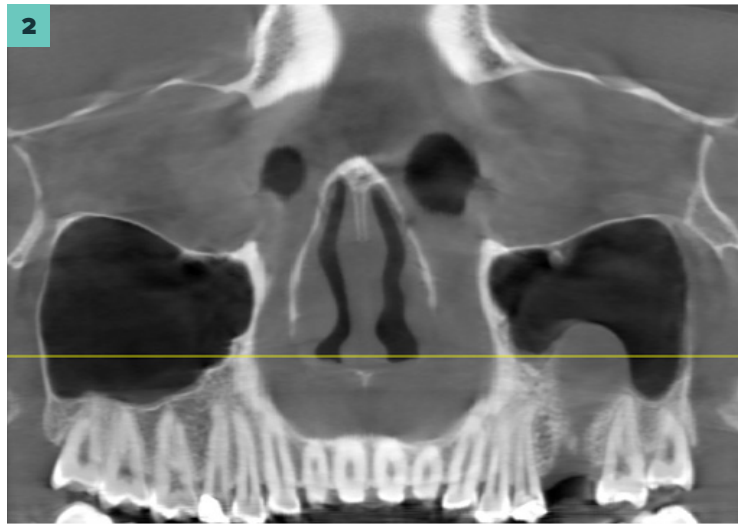
Stellaris 3D provides high quality 3D images for implant planning as well as for regular implant check-ups. In both indications, the bone structure, shape and quality assessment are essential. The scan can be exported in DICOM format for further sharing to design surgical drill guides for navigated implantology. It is also possible to conduct a 3D scan of dentures.



CLINICAL APPLICATIONS

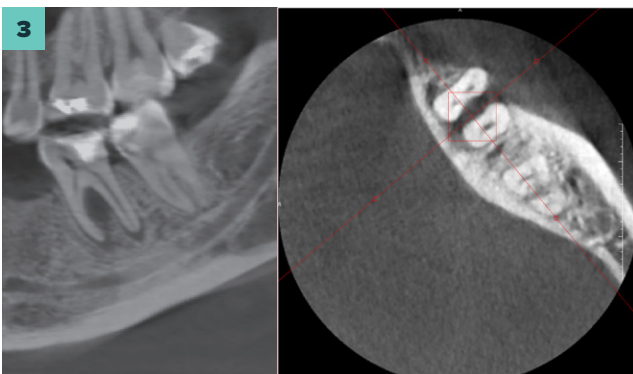
3D OF MAXILLARY SINUSES AND SINUS LIFT AUGMENTATION

Stellaris 3D provides superior clarity on maxillary and nasal sinuses, their morphology, and presence of eventual septae. In cases of bone augmentation, a pre-op assessment is essential. A post-op scan can then confirm the final shape for successful implant planning. Visualization of soft tissue can also reveal pathologies of mucosa, such as polyps or inflammations.



1 3D visualization of maxillary sinuses

2 Cross section visualization of sinus pathology



3 3D visualization of periapical lesion

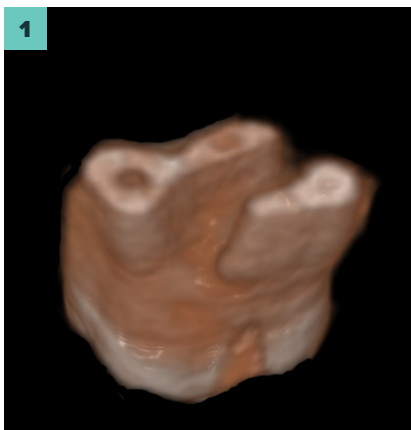
3D OF PERIAPICAL LESION

Revealing the size and range of the inflammation in the bone can contribute to deciding the next steps of treatment. Stellaris 3D HD endo programs allow to visualize and recognize bone tissue changes, density and presence of borders, while at the same time revealing the root cause of the pathology — e.g. accessory root canal and its shape.

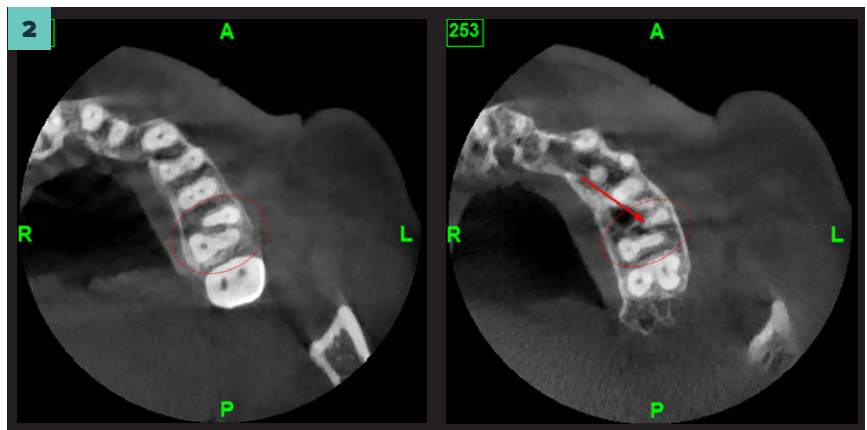
CLINICAL APPLICATIONS

3D OF ENDO TOOTH WITH COMPLEX ROOT CANAL SYSTEM

When used prior to endodontic treatment or for re-endo, Stellaris 3D, with its small field of view HD endo programs, helps to see the canal system in three dimensions and minimize the risk of leaving some canals or accessory branches untreated. The assessment of the tooth prognosis is faster and more precise.



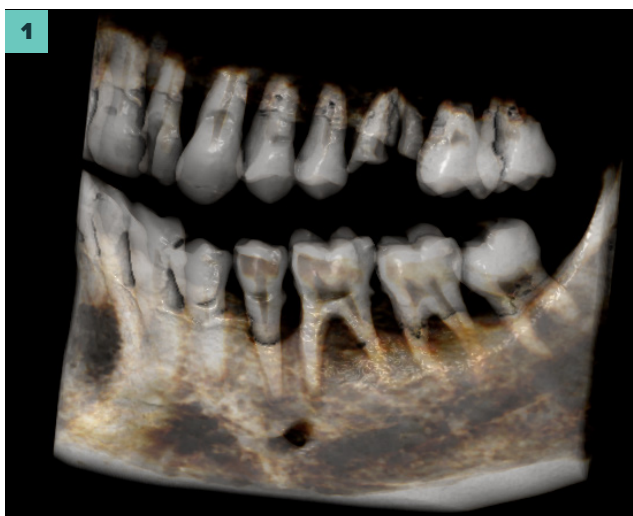
1 3D visualization of tooth roots



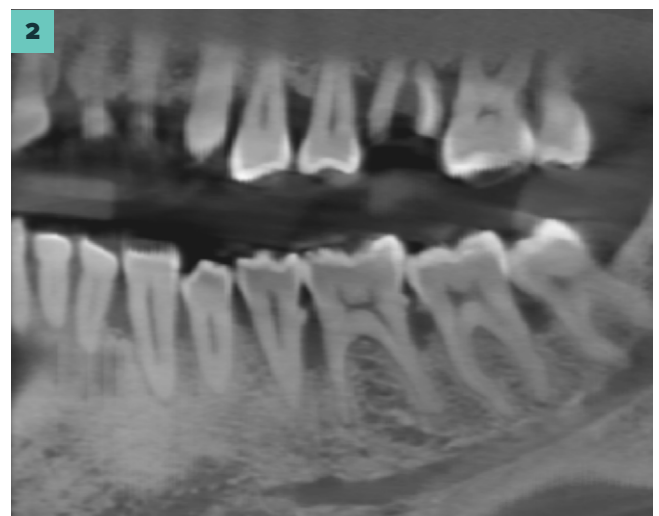
2 Views along the axis of the tooth showing additional root canal.

3D OF PERIODONTAL DISEASE

With Stellaris 3D Standard programs the progress of periodontal disease can be evaluated along both upper and lower jaw arcs. One single scan can reveal furcation and help determine options for further therapy.



1 3D visualization of periodontal resorption

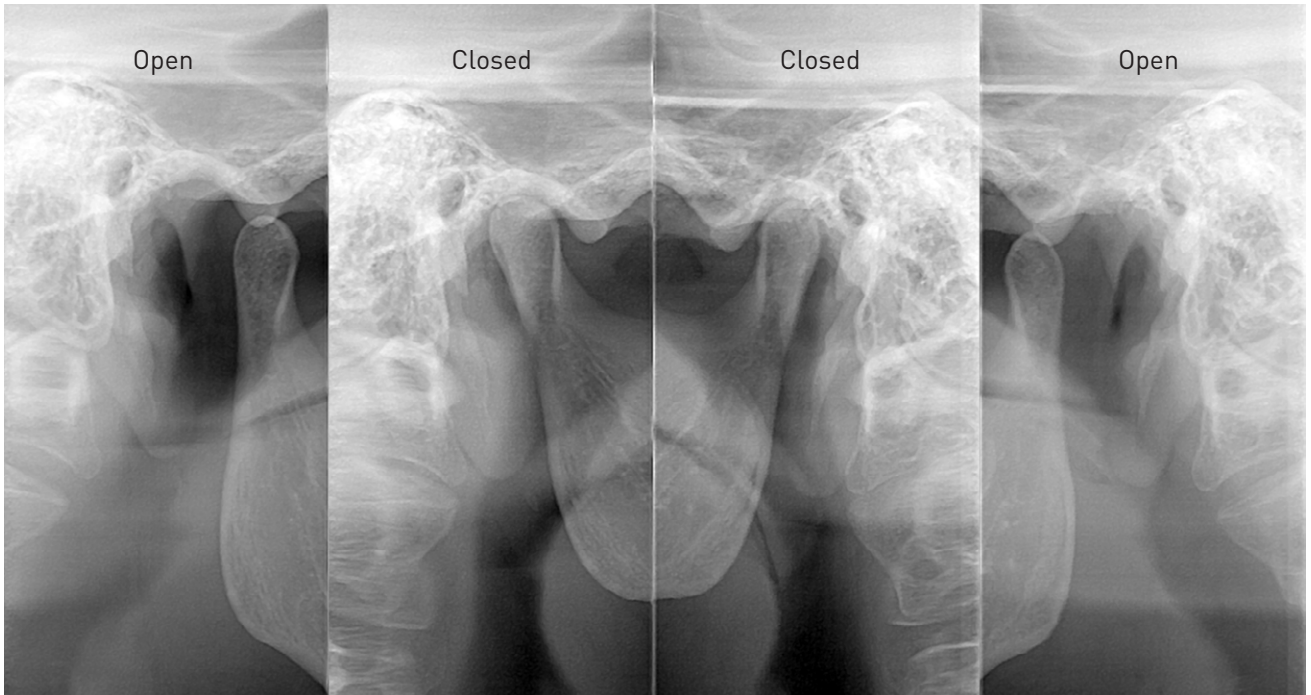


2 Cross section along the jaw with visible bone level

CLINICAL APPLICATIONS

PANORAMIC IMAGE OF TMJs

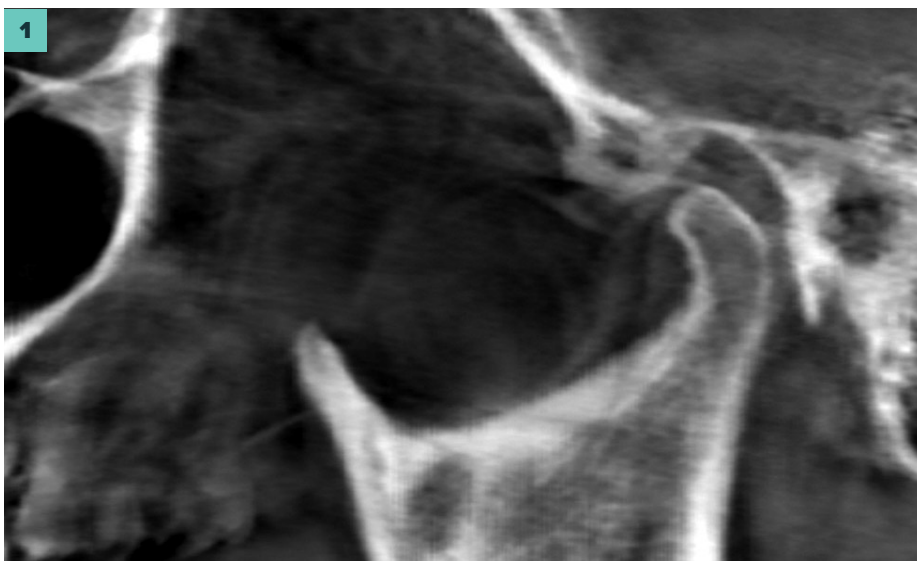
Dedicated 2D programs show open and closed mouth status of TMJs. The functional pathology of condyles can be revealed and assessed for therapy considerations.



Combined image of open and closed mouth TMJ.

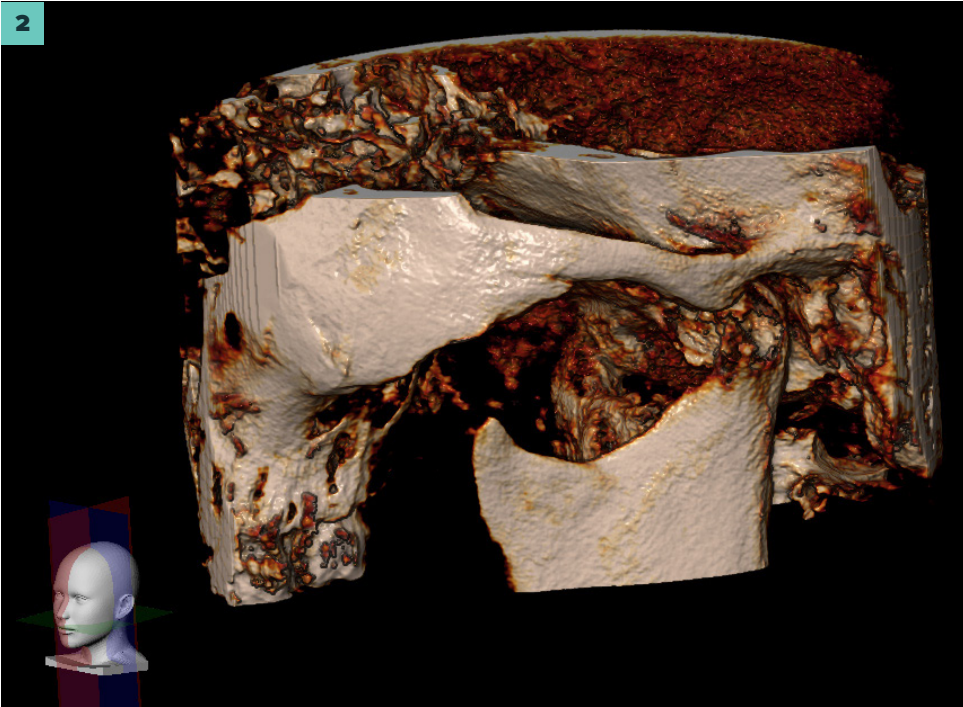
3D OF TMJs

A 3D scan of the TMJ provides a view allowing to diagnose the condyle, its bone quality and the visualization of the position of the condyle and mandibular fossa.



1 Cross section along the desired curve

2

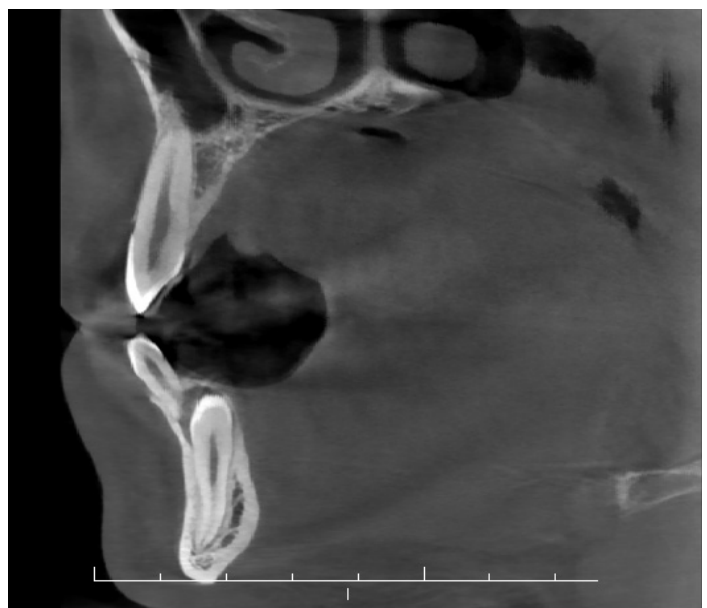


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3D visualization of TMJ area

3D OF SUPERNUMERARY TOOTH

Exact position of the supernumerary tooth can determine the approach for extraction or entirely change the approach for further steps. 3D semitransparent visualization can help understand of relations with other anatomical structures.

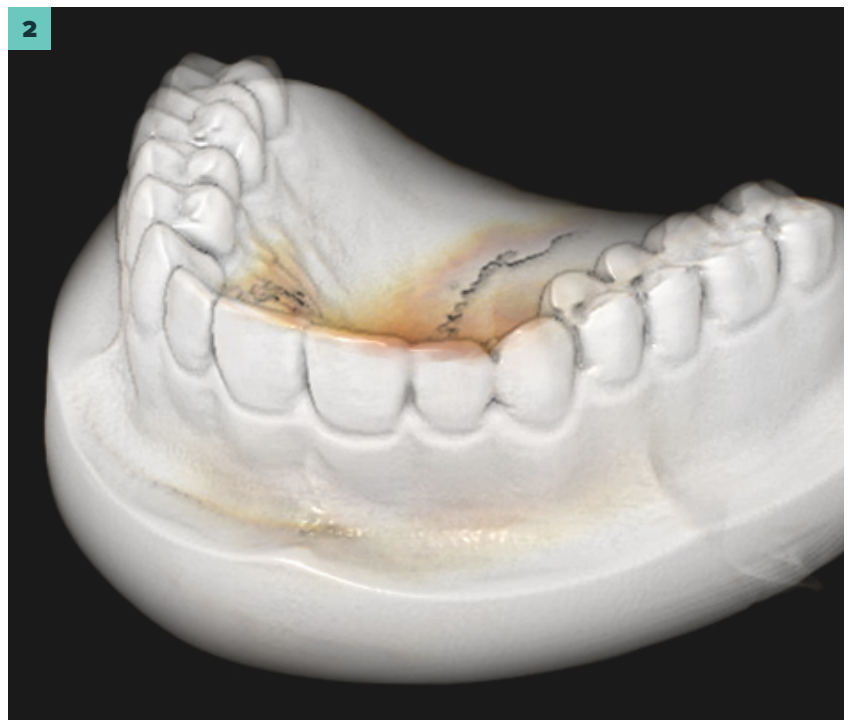
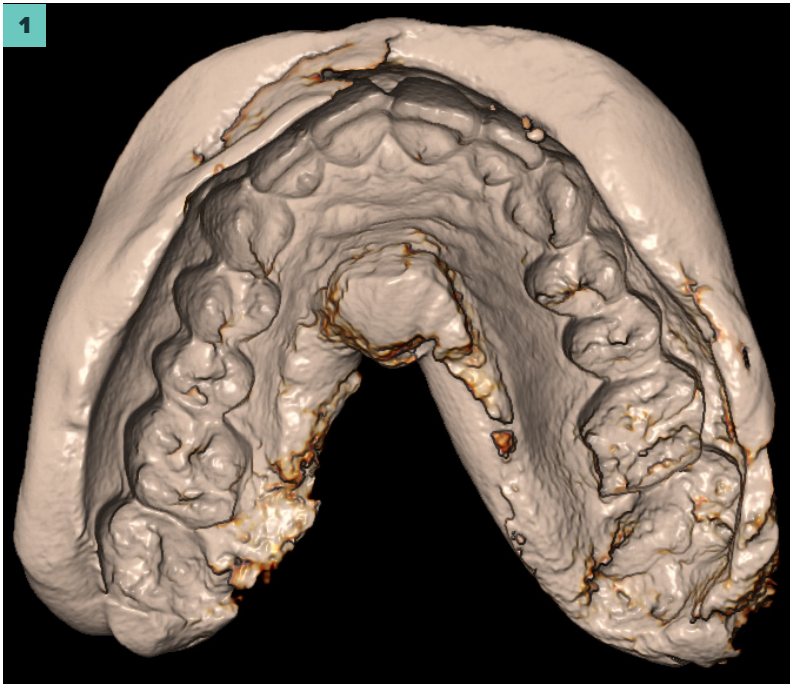


3D semitransparent visualization of supernumerary tooth position and cross section

CLINICAL APPLICATIONS

STONE OR IMPRESSION SCAN

The impression or stone model including the modeling of the future tooth allows for implant planning starting from prosthetic backward towards surgery. 3D X-ray scan of patient and of model even with a future tooth can be fused to determine optimal implant angulation and submersion for aesthetic results. Optional scanning chamber is available as accessory.



1 3D scan of impression

2 3D scan of stone model

ONE SHOT CEPH

The most commonly used latero-lateral view is easy to get with Stellaris 3D OneShot Ceph technology, available are also other projections. The superb visualization of the soft and hard tissue allows to find all points and teeth contours for cephalometric tracing. Images can be exported in any format suitable for cephalometric tracing software.



1 Cephalometric latero-lateral view (LL projection)

2 Carpus for evaluation of biological age

WHY STELLARIS 3D?

Stellaris 3D is a powerful solution that covers a variety of diagnostics in 2D, 3D with multiple fields of view and instantly-upgradeable for Ceph. It has been designed for easy operation.



03

It comes with an intuitive touchscreen, allowing to choose the desired program – Panoramic, Ceph or 3D.



It offers 8 different fields of view, ranging from 5x6.5 cm to the largest at 10x10 cm.

You can additionally select between ECO and HD resolution to fit the indication, including low-dose programmes for children, accessible via the touchscreen or directly from the software. HD programs are available for all volumes, even 10x10 cm, in case the extra detail is needed.



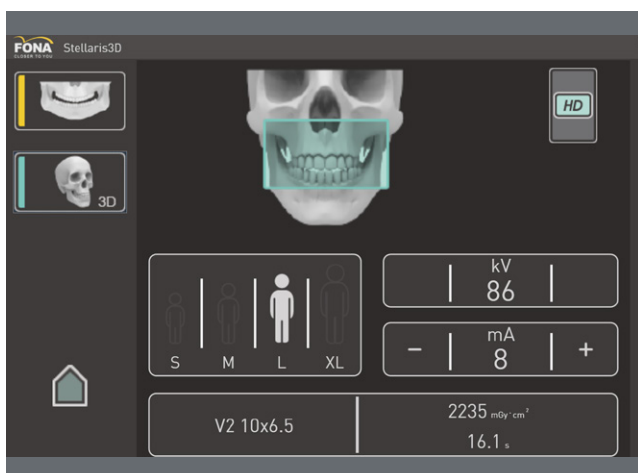
The smart backlight will indicate when the unit is ready to take the X-ray and simultaneously provide a calming atmosphere for your patient.

HIGHLIGHTS AND BENEFITS



TOUCHSCREEN NEXT TO PATIENT

Possibility to set all parameters while positioning the patient is a benefit for smooth workflow — resulting in ergonomics and speed to acquire the image and make it ready for diagnosis.



SETTINGS FROM OPERATOR PC

Remote access to the Touch panel from the PC screen allows the adjustment of settings without the need to run back and forth to the patient.



QUICK POSITIONING

Frontal mirror, laser beams and easy positioning picture guide on the touchscreen are available to ensure the patient's head is in optimal position to capture the desired region.



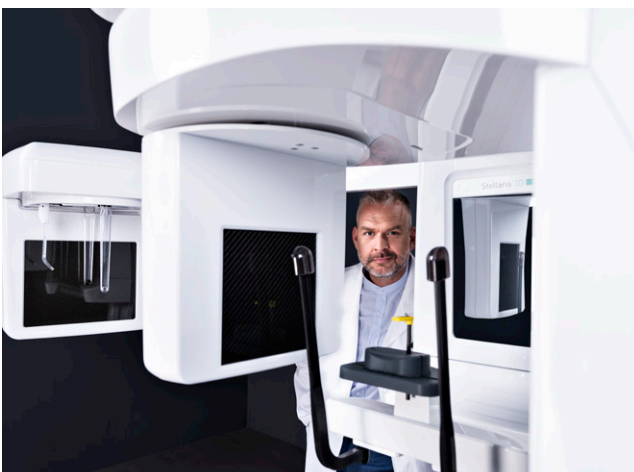
QUICK CEPHALOMETRICS

When you need to take a Cephalometric image, patient positioning is even faster. A one-shot Ceph image is acquired in 1 second, preventing patient movement and ensuring the best image quality.



SMART BACKLIGHT

The light glow not only has the aesthetics effects and calms down the patient, but also signals the unit status and informs the operator from a distance.



SAFE & EASY

Due to the automatic sensor rotation, it is not necessary to move or detach the sensor between Panoramic, 3D and Cephalometric modes. It requires zero effort, without the risk of manually handling an expensive sensor.

HIGHLIGHTS AND BENEFITS



COMFORTABLE OPERATION

Once the patient is positioned, simply hold the exposure button. The smart backlight guides you through the progress of image acquisition and automatically communicates it to the software.



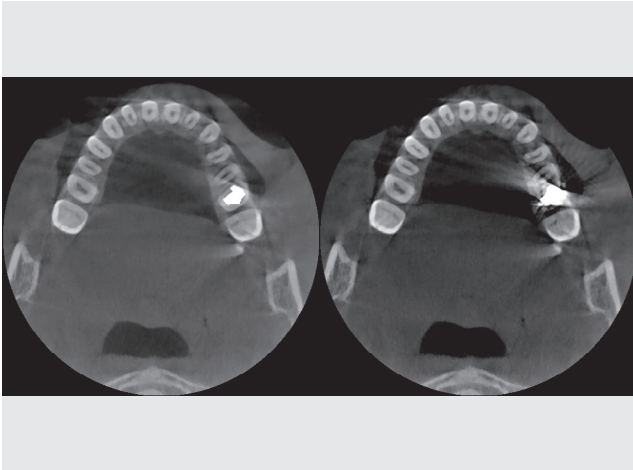
INSTANTLY UPGRADEABLE

The unit can be installed with or without OneShot ceph arm. It is ready for field upgrade for Cephalometric arm later.



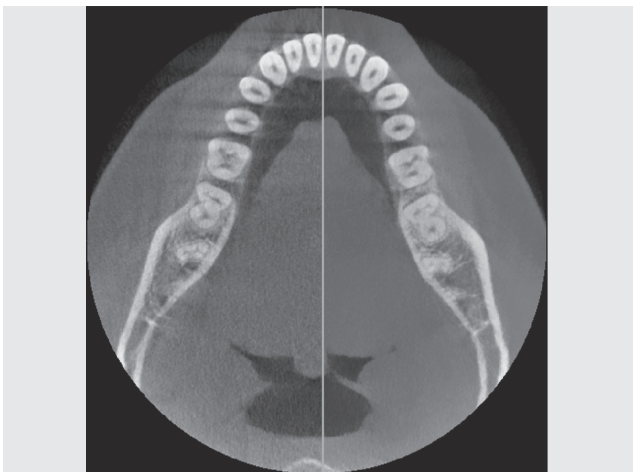
PLUG & PLAY CONCEPT

Stellaris 3D is ready to use immediately, as it comes with a pre-installed PC and latest imaging software Stellaris Pro by FONA.



AUTOMATIC METAL ARTIFACT REDUCTION AMAR

Metal artifacts distort in CBCT imaging. Stellaris 3D automatic metal detection reduces those effects to minimum.



AUTOMATIC NOISE REDUCTION ANR

The presence of noise in 3D images can disturb the visibility especially in ENDO applications. FONA ANR technology performs automatic reduction of noise.



ADVANCED TECHNOLOGY FOR BEST RESULTS

Latest sensor design, using DCS multilayer technology, has been used to achieve a high level of image detail and advanced kinematics allows smooth and quiet unit operation.

GENERAL

Features	4 in 1/3 in 1 solution: 3D CBCT jaw, 3D CBCT models (with optional scanning chamber), Panoramic 2D, 2D cephalometric OneShot (optional, upgradeable)	
3D	3D Programs	23 programs: adult full, child full, adult and child upper and lower jaw, adult and child sinuses, surgical and implant volume front, left and right, hemi-arc left and right, upper and lower, ENDO volume in 6 different positions, TMJ right and left.
	Volume size 3D	8 volumes: 5x6.5, 7x6.5, 6x10, 7x10, 8x6.5, 8x10, 10x6.5, 10x10 (in cm)
	Voxel size	80 µm, 190 µm
	Exposure time 3D	12.4 – 13 s (STD mode) 16.1 – 16.9 s (HD mode)
Panoramic	Panoramic Programs	9 programs: adult pano, child pano, dentition, Panoramic bitewing, TMJ, sinuses, half dentition left, half dentition right, anterior teeth.
	Pixel Size	99 µm
	Exposure time 2D	4.6 – 14.2 s (STD mode) 3.2 - 9.9 s (ECO mode)
Cephalometric (optional)	Ceph Programs	LL 30x24, LL 18x24, AP, PA, Carpus
	Ceph Image Size	240x300 mm, 240x180 mm
Patient Sizes	4 Sizes for Child programs (S-M-L-XL) 4 Sizes for Adult programs (S-M-L-XL)	

X-RAY GENERATOR

Generator type	Constant potential (DC)
Tube voltage	60 – 86 kV
Tube current	2.5 – 10 mA
Focal spot	0.5 IEC 60336
Inherent filtration	> 2.5 mm Al/70 kV IEC 60522

DETECTORS

Detector type	3D, panoramics: CMOS Flat Panel, OneShot Cephalometric: PFPT (Phosphor Flat Panel Technology)
Dynamic range	16 bit (65,535 grey levels)

SOFTWARE

Patient Database	Included, preinstalled
Additional viewers	Included 10 workstation licenses with optional extension
DICOM Store for PACS	
DICOM Worklist	Optional DICOM upgrade of Software license
DICOM Print	
DICOM image import / export	Included
Print for 2D images	Included
TWAIN for panoramic and cephalometric modality of Stellaris 3D line	Included
3rd party Patient management software links	Included
Import of 2D images	Included
Import of 3D cases	Included, DICOM standard
Export with viewer on USB/ CD/ DVD	Included
Export of 2D cases	Included
Export of 3D cases	Included, DICOM standard
Supported image formats	DICOM, DICOM raw image, JPG, BMP
Image size	Full panoramic image typically 7.5 MB Cephalometric image typically 15 MB 3D case typically 60 – 250 MB
Links with 3rd party implant planning softwares	– FONA 3D Implant simulation – Simplant
Other supported products	FONA Stellaris intraoral sensor FONA CDRelite intraoral sensor FONA ArtPlus / FONA ArtPlus C panoramic Any 3 rd party device via TWAIN

ERGONOMICS

Patient position	Standing or sitting
Wheelchair accessible	Yes
Positioning	against mirror, 3 aiming light beams, temporal support

DIMENSIONS & INSTALLATION

Weight	109 kg without ceph, 137 kg with ceph
Footprint	Unit without cephalometric arm 97.5 cm x 117.5 cm x 222 cm Unit with cephalometric modality 189 cm x 117.5 cm x 222 cm
Fixation	wall fixation and floor fixation with baseplate
Power supply	230 V \pm 10%, 115 V \pm 10%, 50/60 Hz
Computing system	Included, with preinstalled reconstruction and viewing software and patient database. Monitor not included
Connectivity	Unit – 2 Ethernet cables, connection to LAN, USB ports



Learn more and get demo
from our specialist!

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STELLARIS 3D WITH STELLARIS PRO IS READY FOR VARIOUS SCENARIOS OF INSTALLATION

1 dental
office with
1 dentist



Dental clinic with
multiple operatories
or reception



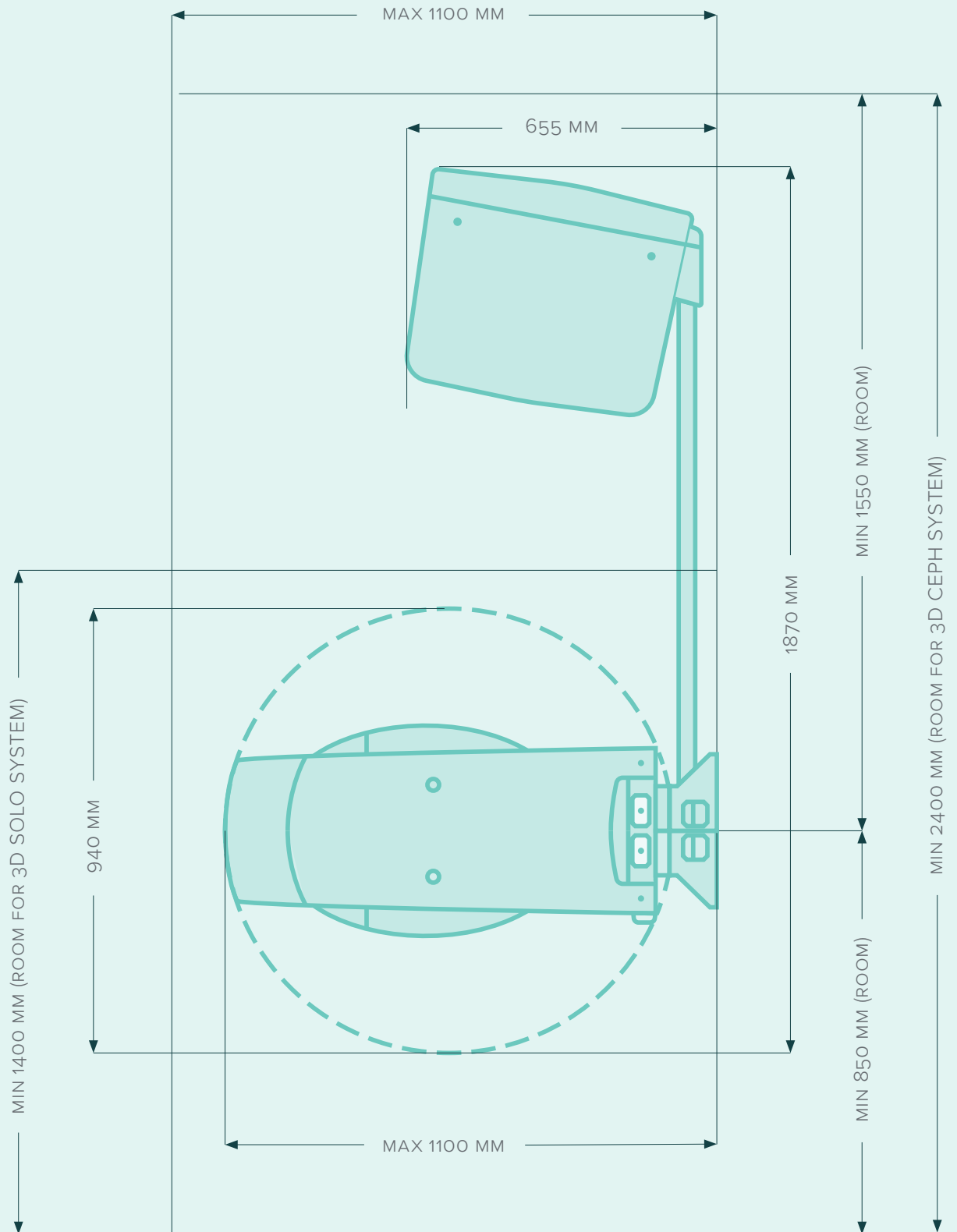
Radiographic
centers



Large hospital
with DICOM PRINT,
STORE, WORKLIST



SPACE REQUIREMENTS AND DIMENSIONS



EVERY DENTAL SOLUTION YOU NEED.

Through decades of experience and a deep understanding of the dental profession, we deliver complete, reliable and accessible solutions. Regardless of country or specialisation, every dentist can find a suitable solution in FONA today. As our knowledge and expertise grow, so does our range. Our international team is constantly on the move, meeting partners and dentists, so we can understand their needs and develop products that support and enhance their daily work.

Advanced dental technology

DIGITAL DENTISTRY

CHAIRSIDE CAD/CAM



EXTRAORAL IMAGING



INTRAORAL IMAGING



TRADITIONAL DENTISTRY

TREATMENT CENTERS



INSTRUMENTS AND LASER



HYGIENE



COUNT ON US

We are here to support you in your first steps. You can join our e-learning platform, attend our training events or call our professional tech support team.

HEADQUARTERS

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Clinical cases



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support

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