CASTELLINI

MAKING
SPACE
FOR
EXCELLENCE

EOS compact

THE BEAUTY
OF TECHNOLOGY

EOS Compact is a new dental imaging solution developed to meet two key requirements: user-friendliness and ultra-high-resolution imaging, characterised by excellent detail, fast scans and low X-ray doses.

EOS Compact

EOS Compact has modern, refined design and maximises flexibility to meet all diagnostic needs. In addition to multiple 2D, 3D and CEPH configurations - to be selected at the time of purchase - the system can be updated with further functions and performance, even after installation.

Comprehensive, user-friendly NeoWise software helps you process and manage the captured images. It also makes diagnosis more effective and streamlines real-time communication with the patient.

OPERATE AT FULL POTENTIAL

A comprehensive array of functions and tools lets dentists exploit the full potential of their system,
with every last detail meticulously designed to deliver an improved operating experience.

7" FULL TOUCH CONTROL PANEL

Tilt-adjustable and mobile to meet every need: a user-friendly interface helps you position the patient and select the accessories to be used, allowing you to set up the examinations directly on board the machine.


VIRTUAL CONTROL PANEL

Every stage of the examination can be followed step by step via the graphic interface on the virtual control panel.
From selection of the investigation type to the start of the scan, users can access all device functions at all times.

AUDIOVISUAL SYSTEM

A camera installed under the mirror and a dentist-patient intercom allow a reassuring dialogue. They also let you check for proper positioning and allow monitoring throughout the exam.
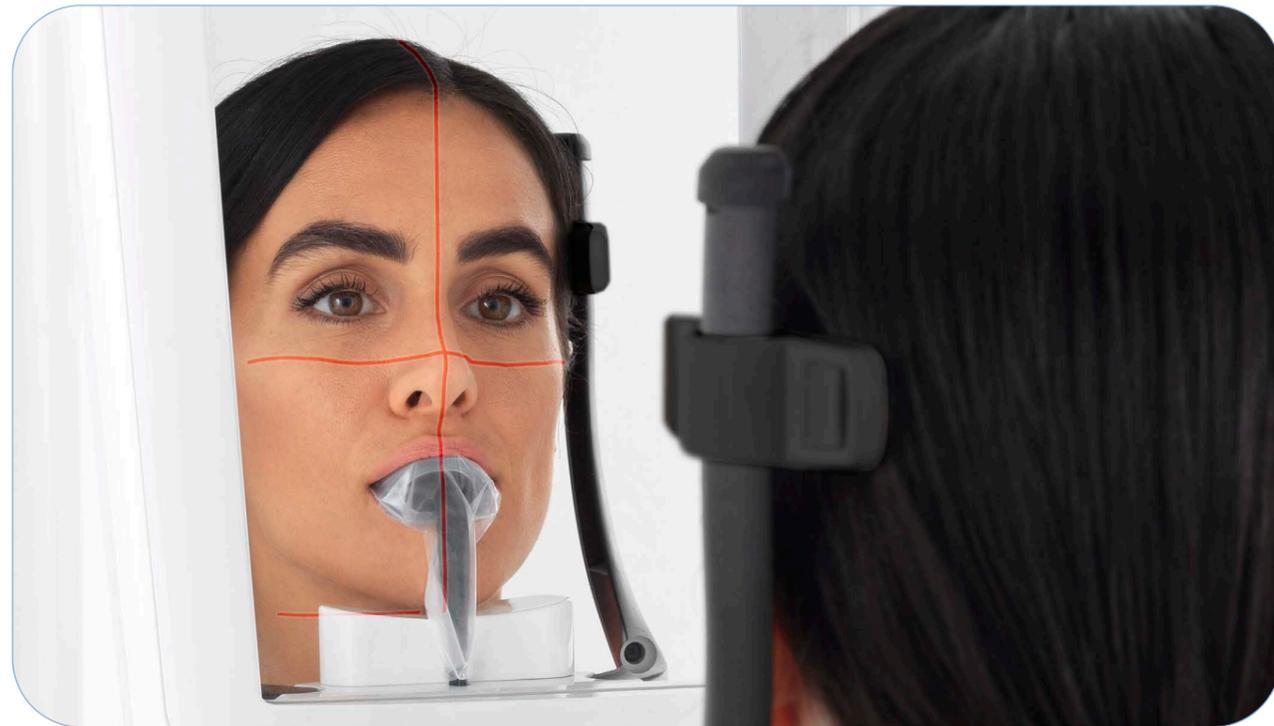
STABILITY AND CLINICAL ERGONOMICS

Patient stability during examinations is ensured by several carefully designed features.

The head support adapts to the anatomical shape of the skull; together with the two supplied bites, it allows correct positioning, even with partially/totally edentulous and paediatric patients.

Three integrated laser guides ensure correct patient alignment and reduce the risk of having to repeat the exam.

Lastly, two dedicated sub-nasal supports are available for maxillary sinus and TMJ exams, as well as a head support and sub-nasal support designed for proper patient positioning during execution of the "15x11 DENT" scan.
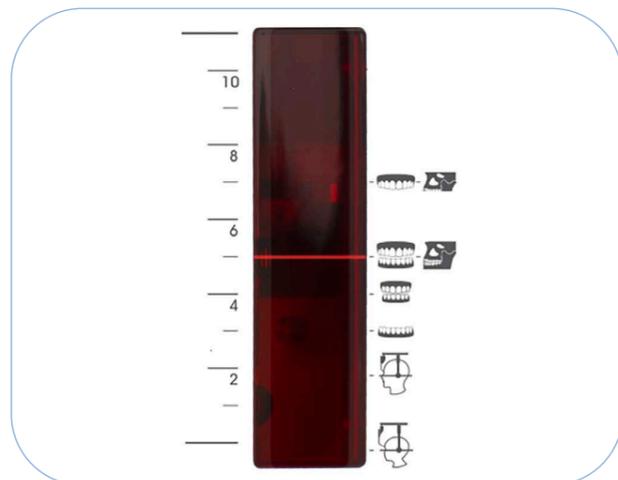
LASER GUIDE

A useful visual reference is provided on the generator side. This allows correct positioning of the horizontal laser according to the type of examination, ensuring maximum diagnostic accuracy for 2D, 3D and CEPH images.

INTEGRATED COOLING

When you need to perform a large number of examinations in one day, this accessory lets you maximise device performance without slowing down the productivity of the practice.

"PATIENT FOOT POSITIONING" LASER

Installed under the central arm of the device, the laser makes it easier to position the patient's feet and aids proper body posture: this safeguards image quality and prevents the introduction of any artifacts.

MADE-TO-MEASURE SAFETY PROTOCOLS

A series of special protocols helps dentists take a principled approach to their role so that patients always receive an X-ray dose that matches the effective clinical purpose, always with uncompromising image sharpness and accuracy.

QUICK SCAN

SPEED SCAN - SPEED PAN - SPEED CEPH PROTOCOLS

Available for 2D and 3D exams, these protocols have lower doses than routine scans. Ideal for obtaining precise images for post-op checks or identifying macro-structures such as impacted teeth or agenesis. In paediatric CEPH exams, the relative protocol involves the use of elongated ear pads to shield the thyroid and minimize patient exposure to X-rays.
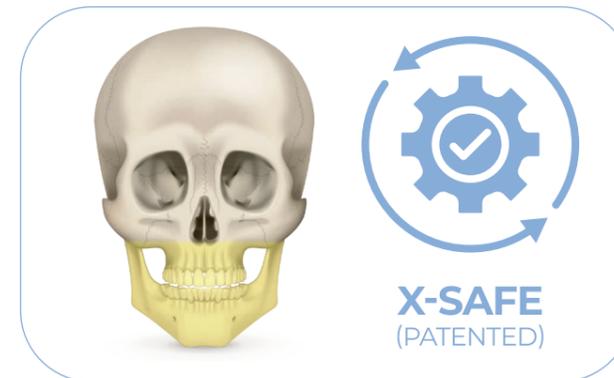
X-SAFE
(PATENTED)

X-SAFE TECHNOLOGY

Automatically calibrates emissions to match the patient's morphology and build, delivering the lowest possible X-ray dose without affecting image sharpness or uniformity.

DOSE SAVER

DOSE SAVER 80 AND 100

Thanks to two pre-settable configurations, dentists can comply with specific local regulations by reducing X-ray doses for Standard PAN examinations while maintaining excellent diagnostic performance.

LIMITLESS PERFORMANCE

EOS Compact provides a wide range of volumetric exams, each designed for specific needs. Dedicated FOVs, special filters, optimised protocols and Scout View allow dentists to get the most from their equipment and enjoy ever-better performance.
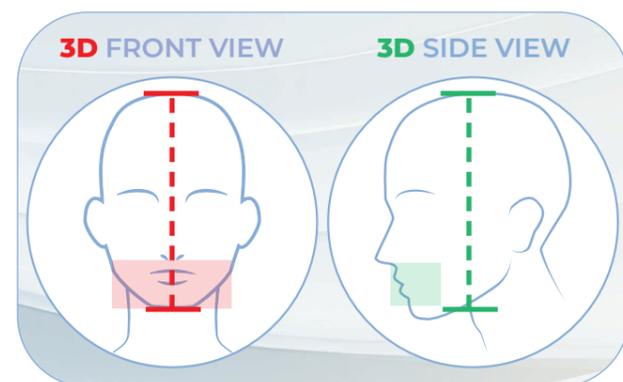
A SOLUTION FOR EVERY NEED

FlexiFOV functionality lets dentists adapt the field of view to the patient's morphology and diagnostic needs, ensuring only the area of interest is irradiated. The 'Standard' package mainly allows assessment of dental anatomy, while the optional 'TMJ' package allows for analysis of both TMJs on adult patients.
In addition to these, there is the optional "15x11 DENT" FOV which extends analysis to representation of both dental arches and part of the temporomandibular joint on adult patients.

OPTIMISED 3D PROTOCOLS

Each FOV has three scan modes (Speed, Standard and Ultra) to suit different clinical needs. In this way, examinations can be performed in keeping with actual needs, for everything from surgical follow-ups to analysis of micro-structures.

3D MAR (METAL ARTIFACT REDUCTION) FILTERS

These detect metal artifacts. Using software to generate an additional set of images, the filters minimise their impact and aid planning of specialised treatments that require segmentation of anatomical structures.

3D DENT EXAMS

SCOUT VIEW

Lets users obtain two ultra-low-dose images - lateral and frontal - so they can align the scan area precisely directly from their workstation while the patient remains comfortably on the machine.
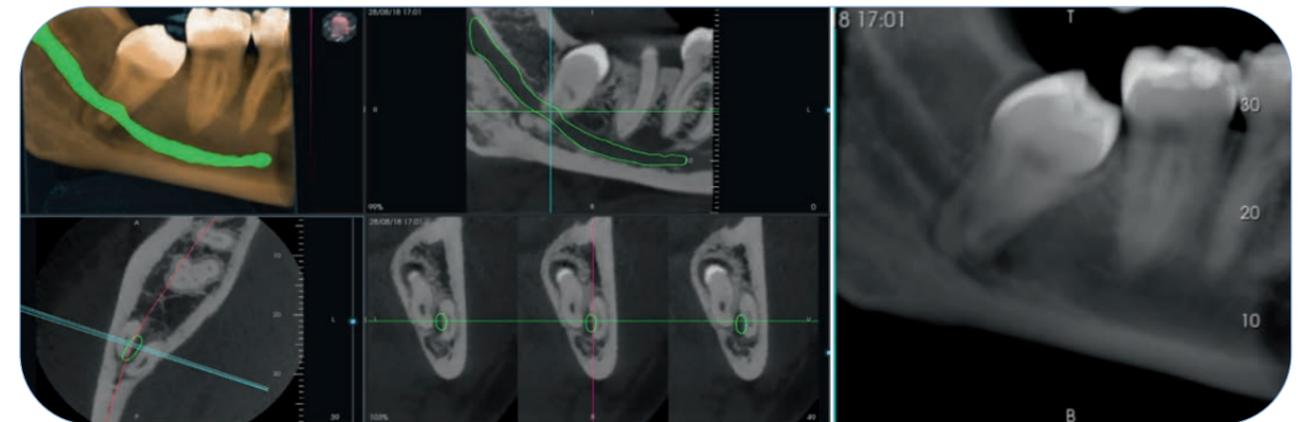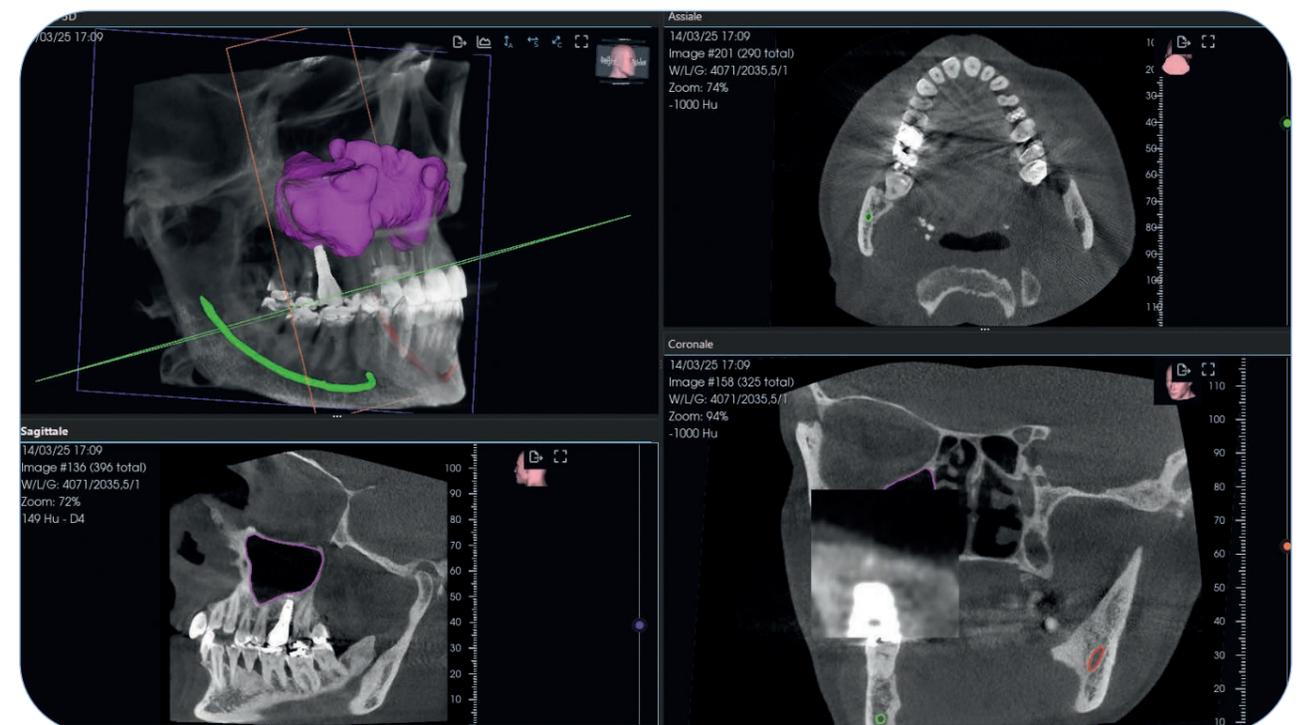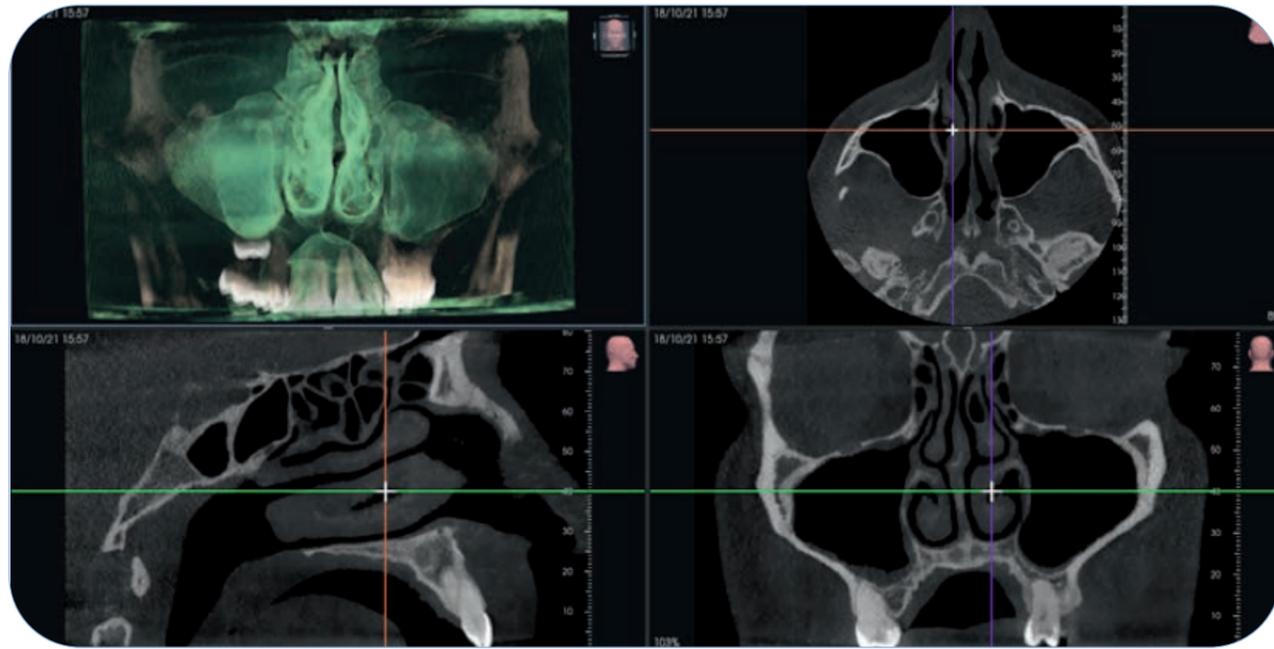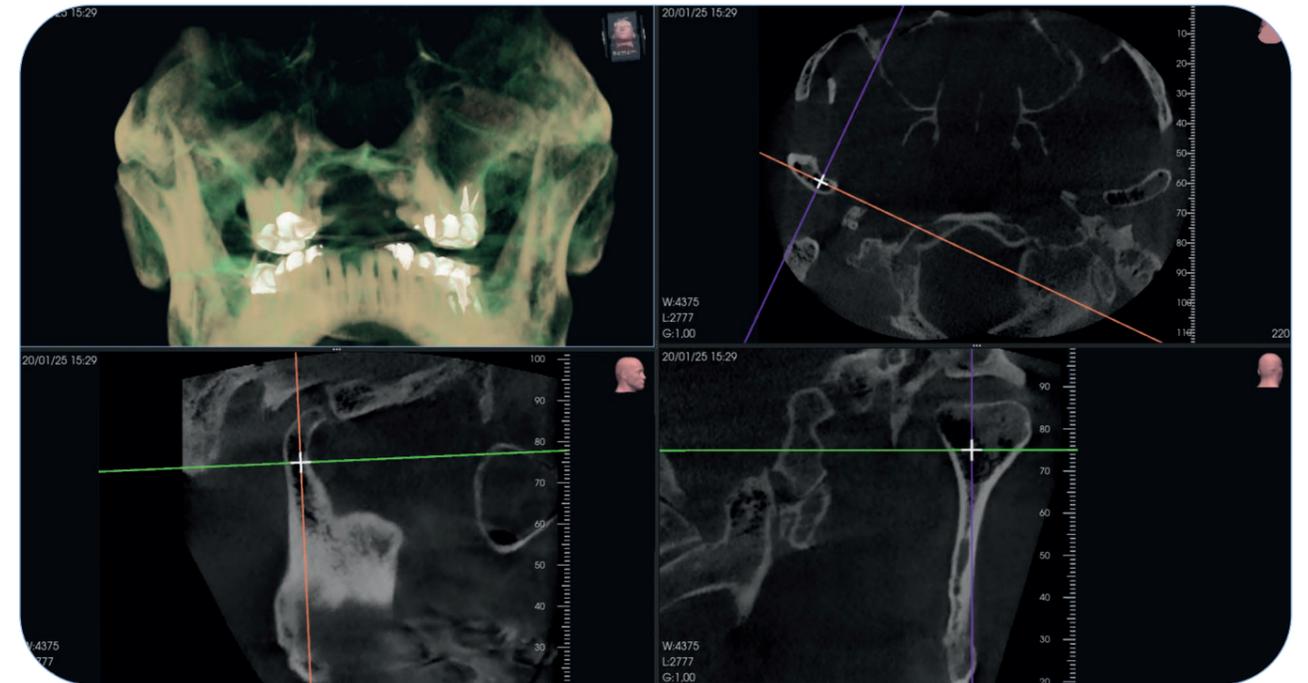
MODEL SCANNING

A specific support and protocol are available for fast scanning of prostheses, radiological templates, models and impressions.
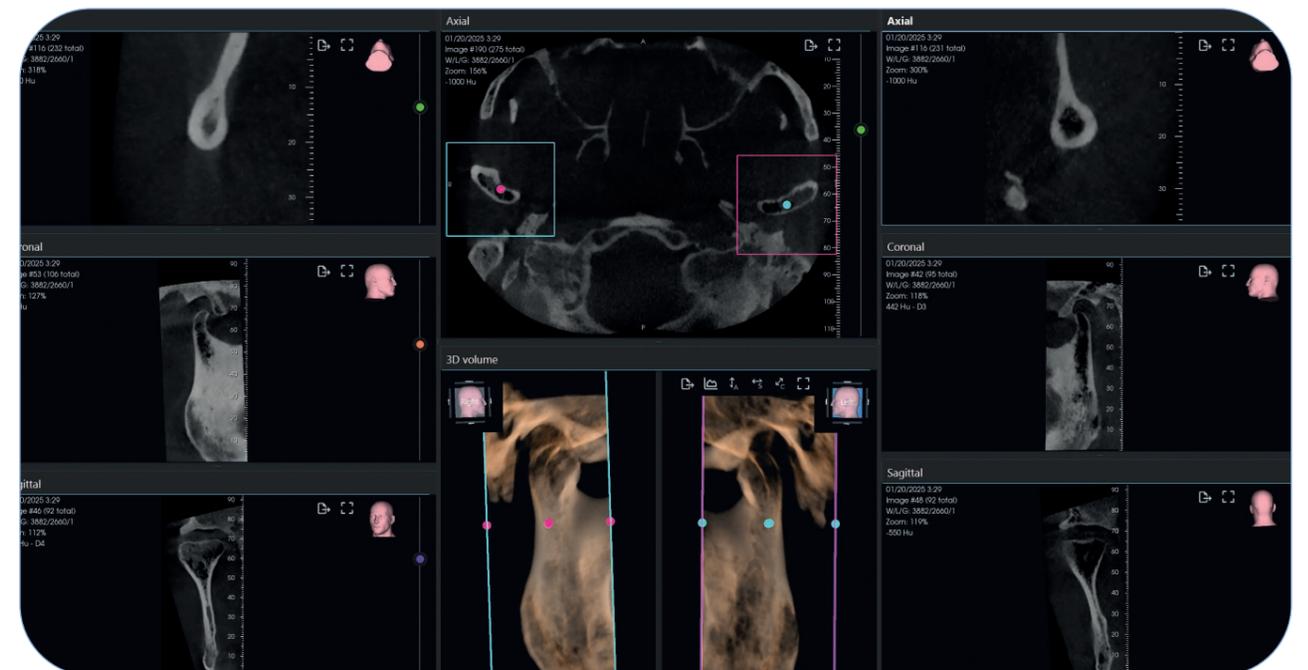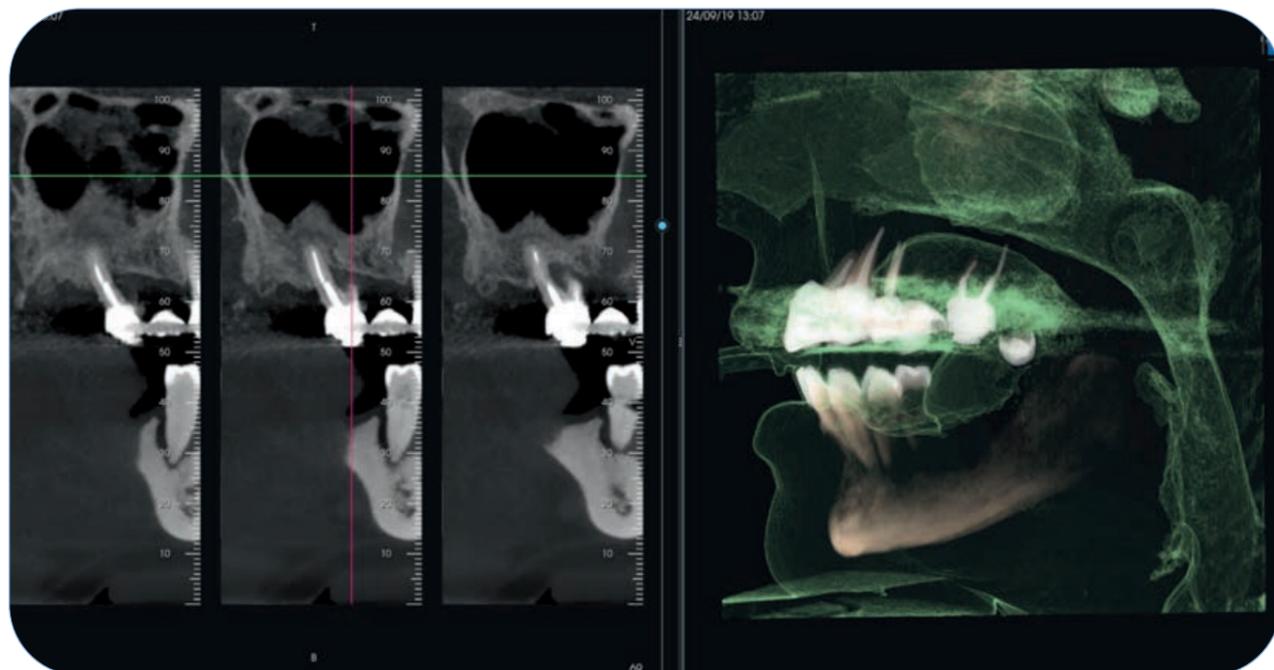
3D SIN EXAMS

3D TMJ EXAMS

VERSATILITY AND ATTENTION TO DETAIL

Featuring highly flexible advanced solutions, EOS Compact lets dentists investigate even the most complex morphologies, capture even the smallest anatomical details and correct potential patient positioning errors.
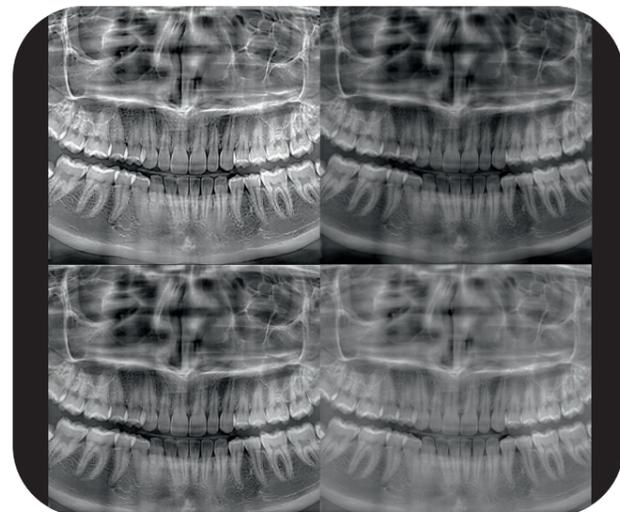
STANDARD PANORAMIC IMAGE

Includes dental arches, the base of the maxillary sinuses and the temporomandibular joints.

MULTIPAN VIEW

Acquires 5 layers - each of which has a different focus - with a single scan and a dose equal to that of a traditional panoramic. The user can then select the view that offers the best diagnostic detail, even where anatomies are complex.
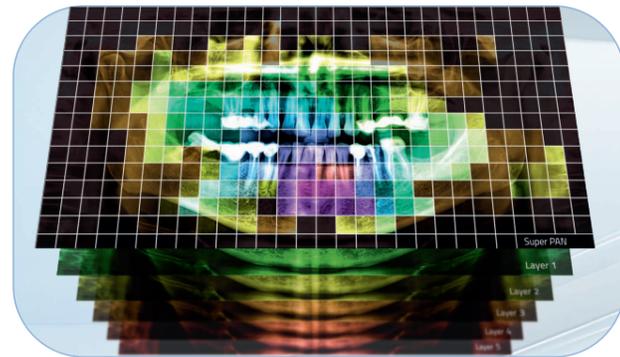
SUPERPAN FUNCTION

Creates a single panoramic image by stitching together the most in-focus portions of the MultiPAN view layers. This optimises resolution and contrast, aiding clinical diagnosis and helping define the treatment plan.

ORTHOGONAL PANORAMIC IMAGE

Highlights interproximal gaps and the entire root structure, as well as reducing dental crown overlap.

iES (IMAGE ENHANCEMENT SYSTEM) FILTERS

These automatically optimise each layer captured with the MultiPAN function by acting on the sharpness and detail of the different anatomical areas as per user-applied settings.
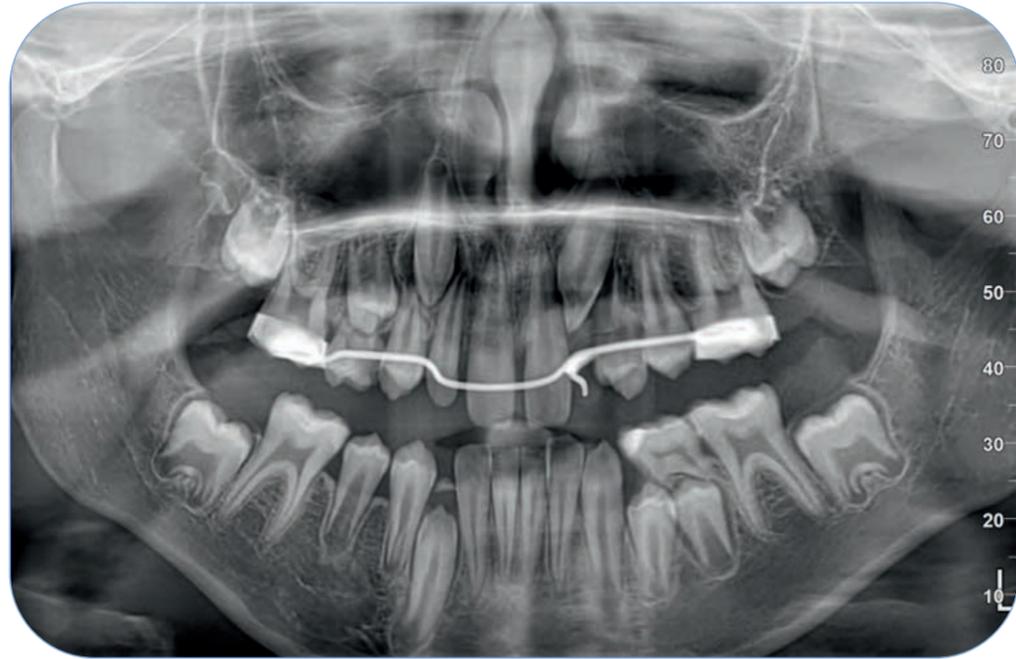
PAEDIATRIC PANORAMIC IMAGE

Field of view and exposure are adapted to the characteristics of paediatric patients.

DENTITION

Analysis of the dentition, entire or partial, with a level of orthogonality and definition that's perfect for periodontal assessments.

BITEWING

An alternative to intraoral bitewings, this examination involves a procedure that is less invasive and more comfortable.
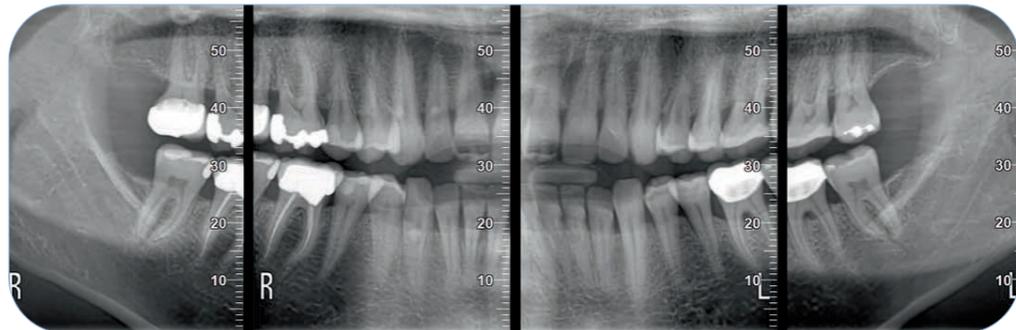
MAXILLARY SINUSES

Assessment of the health of the frontal and lateral maxillary sinuses.

TEMPOROMANDIBULAR JOINTS

Four projections with a single scan: two lateral and two postero-anterior, with mouth open or closed.

ALL-ROUND FLEXIBILITY

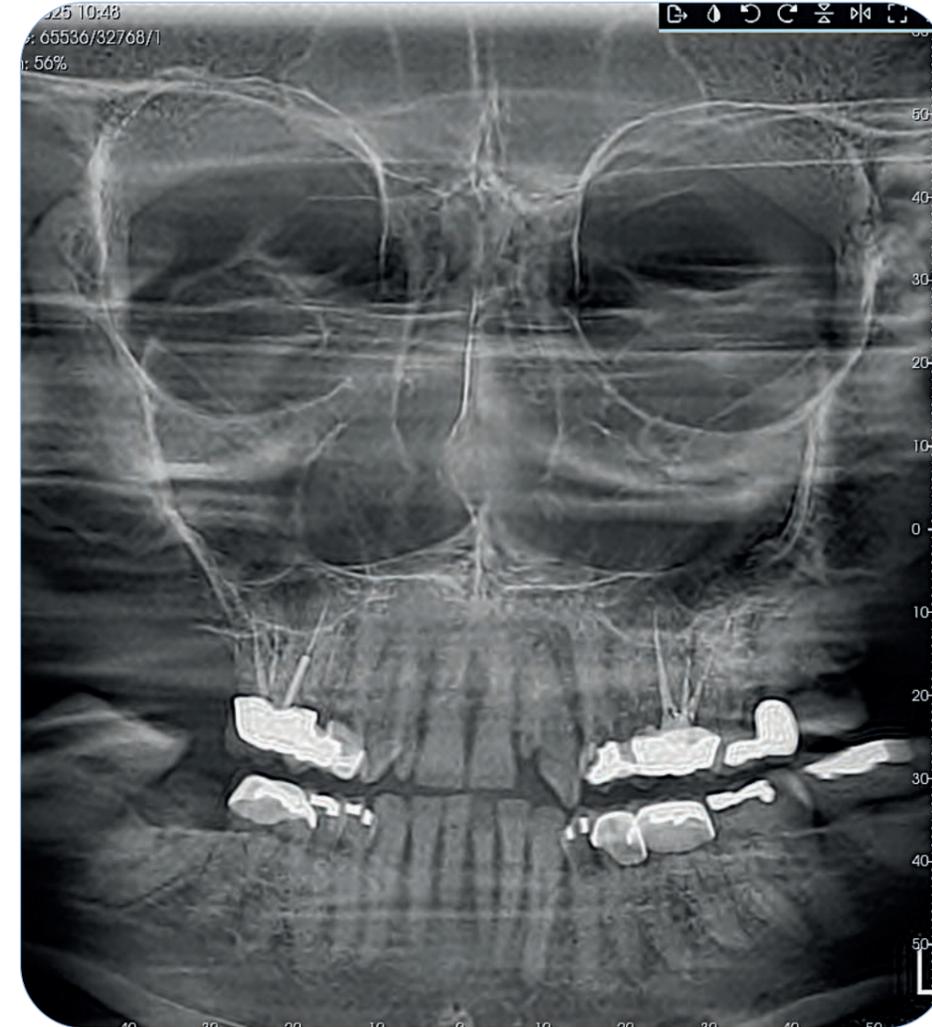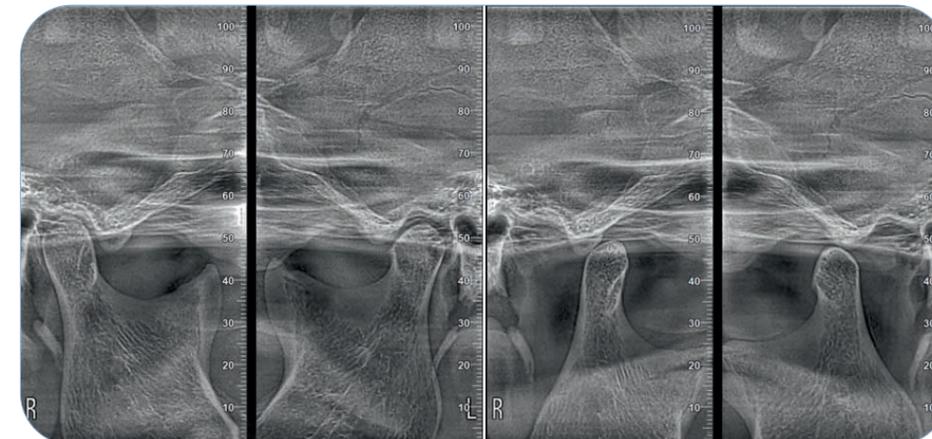Thanks to the intrinsic modularity of EOS Compact, the cephalometric arm can be included at the time of purchase or added later to CEPH-ready configurations. You can opt for integration on the right or left of the device, allowing greater versatility and flexibility during installation.

CEPHALOMETRIC ARM

Designed to ensure comfort and stability for all patients: the head support has a height-adjustable frontal support and length-adjustable side rods to adapt to the needs of adults and children.

REPOSITIONABLE 2D PAN-CEPH SENSOR

The repositionable 2D sensor makes it possible to perform panoramic and cephalometric examinations simply by moving the sensor from one housing to another (available on sensor-ready models).
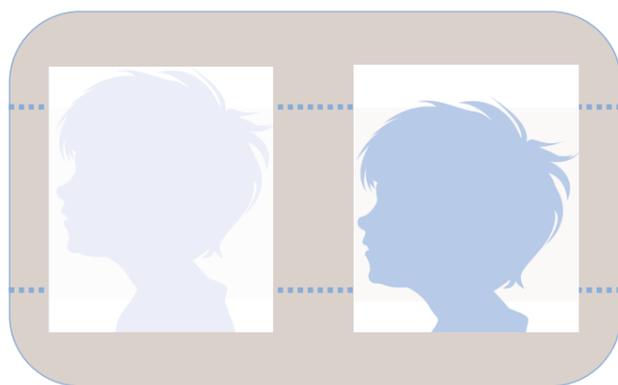

LL CEPH (FULL STANDARD)

Latero-lateral view of the skull that provides richly detailed images of the analysed bone and soft tissues.

AP-PA CEPH

Frontal view of the maxillofacial area to investigate any asymmetries or malocclusions.

TOP CEPH POSITIONING

For paediatric patients, TOP CEPH positioning reduces thyroid exposure, prevents the sensor from coming into contact with the shoulders and allows, when possible, inclusion of the skullcap.

CARPUS SUPPORT

This accessory allows assessment of residual bone growth - especially useful with paediatric patients - via radiological analysis of the carpus.

LL CEPH (FULL LONG)

Extensive field of view to include the temporal bone, occipital bone and the upper area of the skullcap.

CARPUS

Assessment of residual bone growth in comparison with that of the maxillary and mandibular bones.

ESSENTIAL DESIGN, VERSATILE CONFIGURABILITY

Stylish and small, EOS Compact offers different configurations for 2D, 3D and CEPH scans. Depending on the available space and/or the dentist's operating style, it can be installed with the CEPH arm on the right or left; it also allows reversibility of the rotating arch, laser guides and the touch-sensitive keypads.

ADVANCED ERGONOMICS

The outstanding ergonomics of the system ensures user-friendly execution of examinations, allowing comfortable patient positioning while minimising bulk.

COMFORT LIGHTING

The lighting system enhances the design and makes the practice more welcoming. Customised colours and adjustable intensity help patients feel safe and relaxed at every stage of positioning and scanning.

SMART MIRROR

The large mirror facilitates patient positioning. The backlit version indicates device status using colour-coded lights: on, ready, emitting rays, error and reset.

TOUCH-SENSITIVE KEYPADS

These allow easy control of the column, laser guides, machine reset and, where present, the cephalometric arm. Positionable to the right or left of the device, their backlit touch-sensitive keys emit a beep to confirm the received command.

OUTSTANDING DIGITAL SUPPORT

NeoWise imaging software is designed around you and your patients. It allows you to manage/process 2D and 3D images in order to make accurate diagnoses and streamline communication with the patient. Simple and effective, with advanced diagnosis/planning tools and filters.
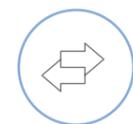

Optimised workflow
Automating processes such as image segmentation and classification will cut operating time, making your practice more efficient.

Smooth dentist-patient communication
Advanced diagnostic tools make it easier to explain treatment plans to patients, improving their understanding and their level of engagement.

User-friendly interface
Designed to improve the user experience and reduce learning times. Using the various functions has never been easier or more personalised.

Multi-image support
The software lets you view and compare 2D and 3D images simultaneously, making it easier to compare clinical information and improve diagnostic capacity.

Real-time 3D rendering
Advanced rendering algorithms allow real-time display and management of 3D images for consistently detailed diagnosis.

Simulation of clinical analyses and treatments
This function can be used to view the expected outcomes of practices such as implant positioning; for example, it allows assessment of the insertion angle and can predict aesthetic results with dental crowns.

Centralised image management
Access all patient scans quickly via a single interface to simplify consultation and streamline cooperation between teams from different departments.

Guaranteed compatibility
Key communication protocols such as DICOM, RIS/PACS and TWAIN are supported, ensuring secure transmission and storage of medical images.
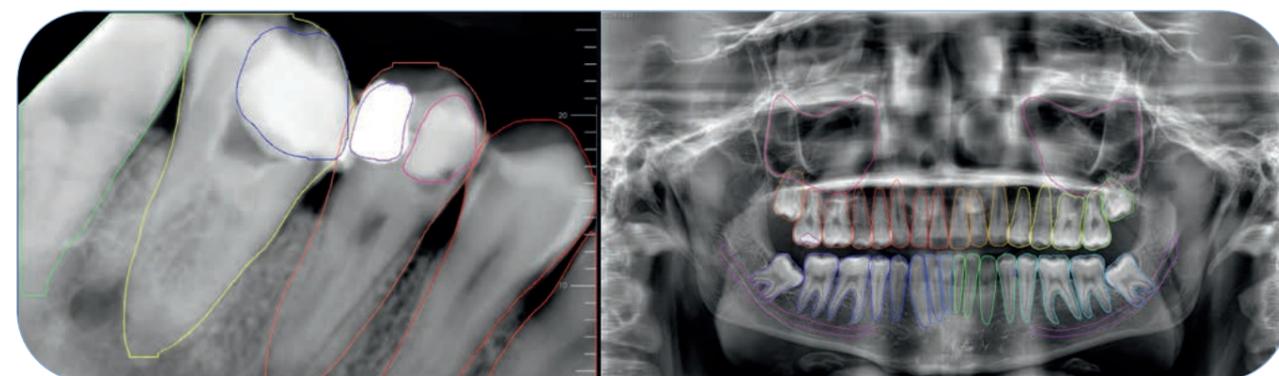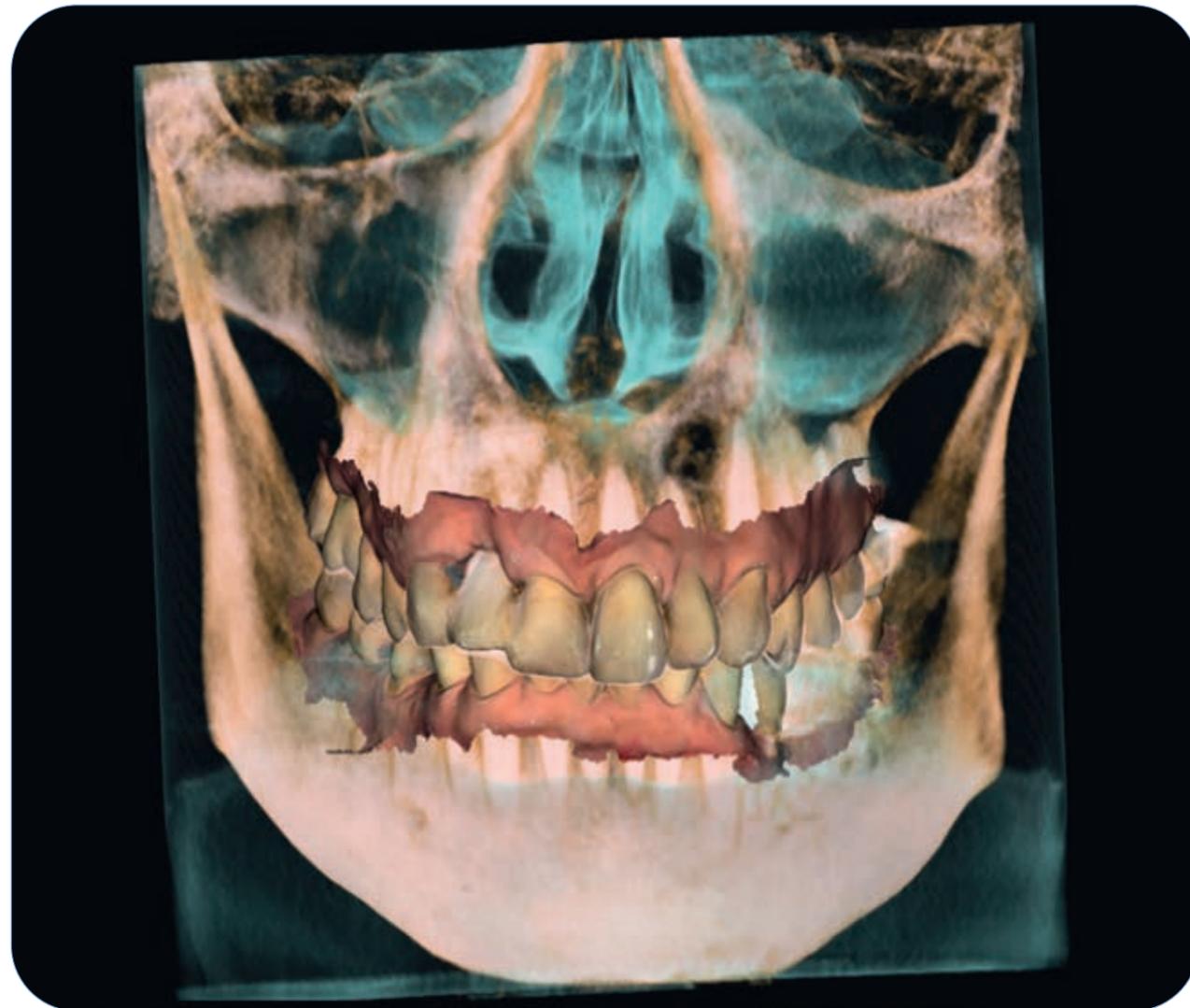
STATE-OF-THE-ART CLINICAL FEATURES

NeoWise integrates automated AI-powered features that improve diagnoses, raise operational efficiency and make treatment more personalised for each patient, making your work more precise and finely targeted than ever.
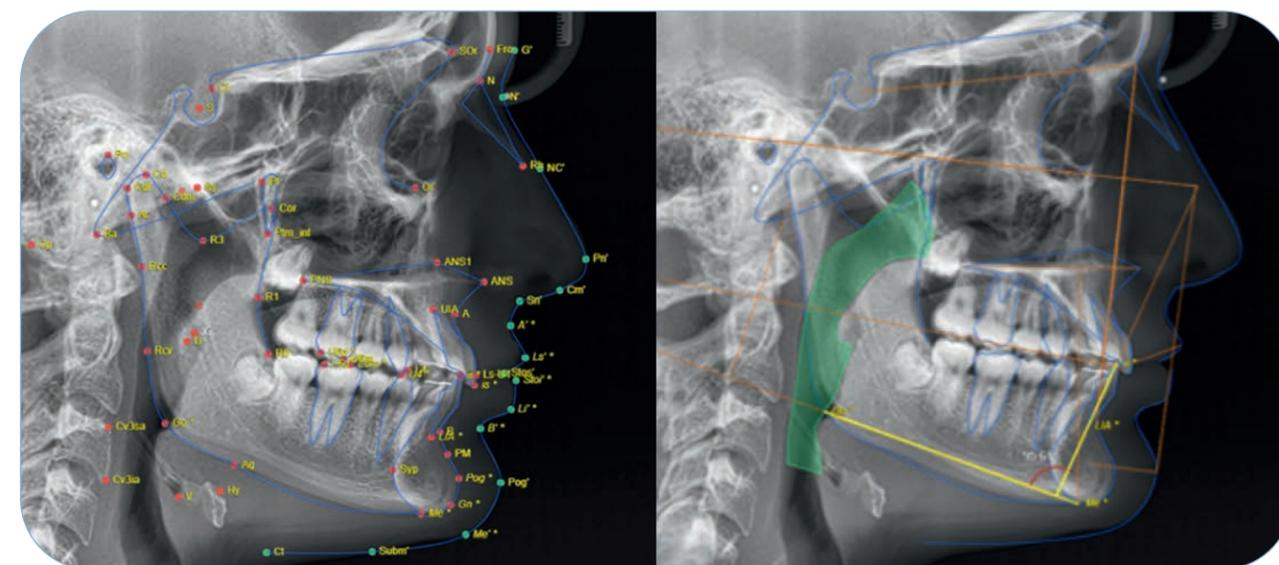
- Detection of panoramic curves on CBCT scans
- Identification of inferior alveolar nerve in volumetric scans
- Alignment of latero-lateral teleradiography with photo of patient
- Smile Design module to simulate aesthetic treatments in frontal sectors
- Alignment and combination of CBCT scans with optical impressions
- 2D and 3D Data Classification
- Segmentation of 3D anatomical structures
- Anatomical and pathological analysis for 2D intraoral and panoramic scans
- Detection of cephalometric points and creation of tracings
- Airway identification in cephalometry for the diagnosis of OSAS pathologies

OPTIMISED WORKFLOWS

01
Data import
Automatically import examinations and images from iRYS and the other main dental imaging software tools.

02
Database management
Create patient records with the utmost ease and security to ensure clear, accessible consultation at all times.

03
User profiling
Customise permissions and functions according to the role and preferences of the various users in your practice.

04
Device configuration
View and configure all devices registered and enabled on your workstation according to your needs.

05
Image processing
Maximise the user experience thanks to the user-friendly tools menu and a range of views designed to match your clinical needs.

06
Treatment sharing
Create personalised reports on the patient's health and illustrate the treatment plan clearly.

NEWWISE

TECHNICAL SPECIFICATIONS

IMAGES	2D	3D
Type	Pan (adult, child, ortho), QuickPAN, MultiPAN, Dent, Bitewing, Sin (front, L, R), TMJ (front, lat, both), CEPH (LL, AP- PA, Carpus)	Dent, Sin, TMJ, Model Examinations limited to region of interest
(Maximum) theoretical resolution on the patient plane	PAN: 5.7 lp/mm (pixel 78 µm) BW: 6.6 lp/mm (pixel 77 µm) CEPH: 5.7 lp/mm (pixel 88 µm)	PAN: 5.1 lp/mm (pixel 77 µm) BW: 6.6 lp/mm (pixel 75 µm) CEPH: 5.7 lp/mm (pixel 88 µm) CBCT: 6.25 lp/mm (voxel 80 µm)
Fields of view on patient (adult and child) (L) x (H) in cm	PAN STD: 27x15.2 PAN CHILD: 23.5x15.2 DENT (Full): 26.48x15.2 BITEWING: 22.98x15.2 CEPH LL (full skull): 29.98x22.72	DENT: 6x6, 8x6, 8x8, 11x6, 11x8, 11x11, (15x11 optional) SIN: 8x8, 11x8, 11x11 TMJ: 11x6, 11x11, (13x6*, 13x10*, 15x6*, 15x11* optional) MODEL: 8x8, 11x6, 11x8, 11x11
Scan time	PAN: 13.7 s (Ortho) - 12.3 s (Standard): 6.8 s (Quick); 3.2 s (Sin R/L) CEPH LL: 9.9 s (Standard) 3.8 s (Quick)	Super HD: 16.8 s (Best Quality - single scan) Standard: 9.6 s (Regular- single scan) QuickScan: 6.4 s (Low Dose- single scan)

INSTALLATION		
Weight (kg)	2D basic machine: 51 kg 3D basic machine: 56 kg CEPH arm with sensor: 21 kg	

X-RAY GENERATOR	2D	3D
Generator type	Constant potential DC	Constant potential DC
Anode voltage and current	2D: 60-90 kV (continuous emission); 4 – 15 mA	2D PAN: 70 kV (continuous emission); 4 – 15 mA 2D: 60-90 kV (continuous emission); 4 – 15 mA 3D: 90 kV (continuous emission); 2 – 16 mA
Focal spot	0.5 mm (IEC 60336)	0.6 mm (IEC 60336)

POWER SUPPLY	2D	3D
Voltage and frequency	115 – 240 V Single phase 50 / 60 Hz	115 – 240 V Single phase 50 / 60 Hz
Maximum current absorbed in working conditions	20 A at 115 V; 12 A at 240 V	20 A at 115 V; 12 A at 240 V
Current absorption in standby mode	1 A at 115 V; 0,5 A at 240 V	1 A at 115 V; 0,5 A at 240 V
Adjustment method	Automatic voltage/frequency adaptation	Automatic voltage/frequency adaptation

DETECTOR	2D PAN & CEPH	3D/PAN
Detector type	CMOS (CsI)	IGZO

ERGONOMICS		
Patient positioning	Suggestion from virtual control panel - Servo-assisted alignment, 3 laser guides (Class 1 - IEC 60825-1) - 3D Scout View	

(*) Specific examinations of the temporomandibular joint (may not include the entire dentition).

CASTELLINI
PASSION FOR DENTISTRY

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