

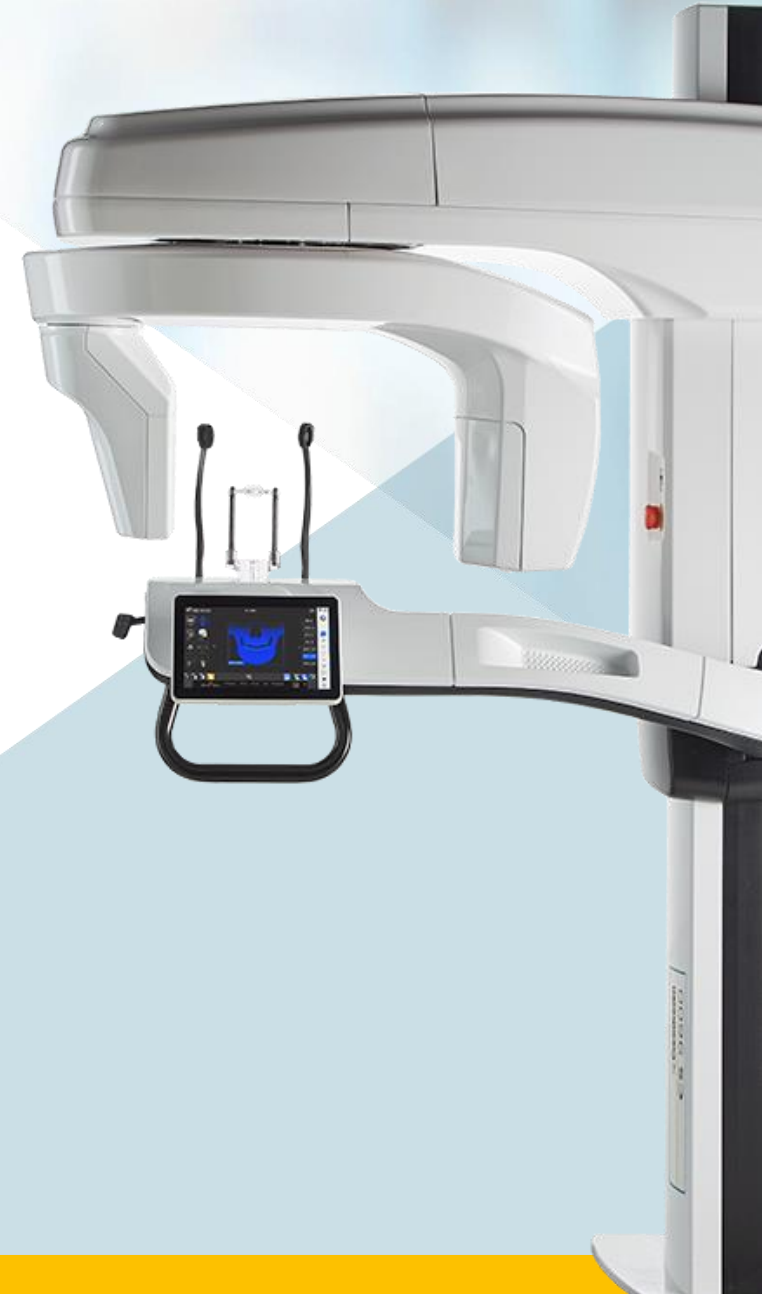
# CS 9600 FAMILY

So Smart, Yet So Simple



# CS 9600

- ▶ Highly intelligent and innovative, the CS 9600 delivers outstanding precision on every exam, for every user. Its customizable and scalable design provides the flexibility necessary to meet all of your clinical needs today, and to grow with your practice in the future.



# A simply brilliant 5-in-1 extraoral imaging solution



## OUTSTANDING IMAGES

Latest technologies and unique MAR feature delivers optimal detail and accuracy

## SMART INNOVATIONS

Breakthrough innovations drive precision at every exam

## FIRST-TIME-RIGHT IMAGING

Designed to deliver more accurate scans on the first capture

## VERSATILE AND ADAPTABLE

Up to 14 FOV and versatile programs adapt to all needs

## SCALABLE DESIGN

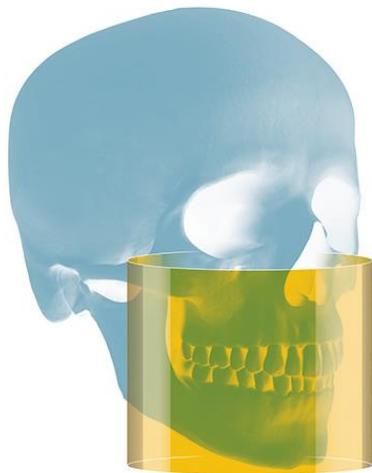
Scalable, 5-in-1 scanner designed to grow with your practice



# One platform, three upgradable editions

## WHICH CS 9600 IS RIGHT FOR YOU?

### ▶ 12X10 EDITION



UPGRADABLE

### ▶ 16X10 EDITION



UPGRADABLE

### ▶ 16X17 EDITION



**FOV**  
4 cm x 4cm to 12 cm x 10 cm

**General Practice**  
Implantology  
Periodontics  
Oral Surgery

**FOV**  
4 cm x 4cm to 16 cm x 10 cm

**Implantology**  
Periodontics  
Oral and Maxillofacial Surgery

**FOV**  
4 cm x 4cm to 16 cm x 17 cm

**Oral and Maxillofacial Surgery**  
Orthodontics  
Radiology  
ENT



# Innovation drives precision

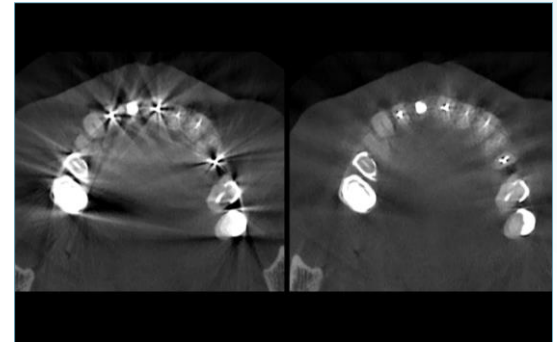
## ▶ LIVE POSITIONING ASSISTANT



## ▶ SMARTPAD



## ▶ CS MAR LIVE COMPARISON FEATURE



## ▶ CS FACE SCAN



## ▶ 120 KV OPTION



## ▶ INTERACTIVE ACCESSORIES



# Unique Workflow Drives Precision on Every Exam



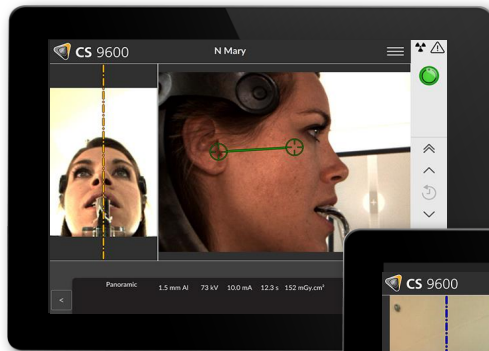
# Designed for first-time-right imaging

- The CS 9600 brings a new level of automation and simplicity to CBCT imaging
- Combines three innovative technologies to produce accurate scans on the first capture
  - Live Positioning Assistant
  - SmartAuto technology\*
  - SmartPad

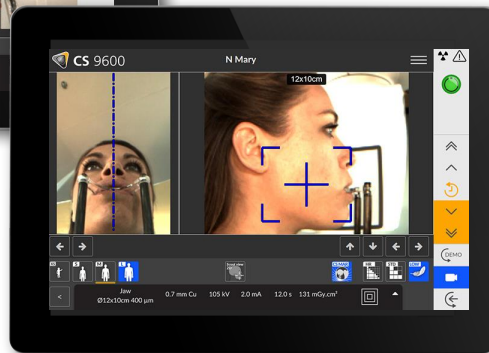


# Unique Live Positioning Assistant

- Patients are positioned using video cameras
- Live patient views are displayed on the SmartPad touch-screen for easy and exact positioning
- Eliminates need for positioning lasers
- Improves outcomes and reduces retakes



**PANORAMIC EXAMS**



**3D EXAMS**

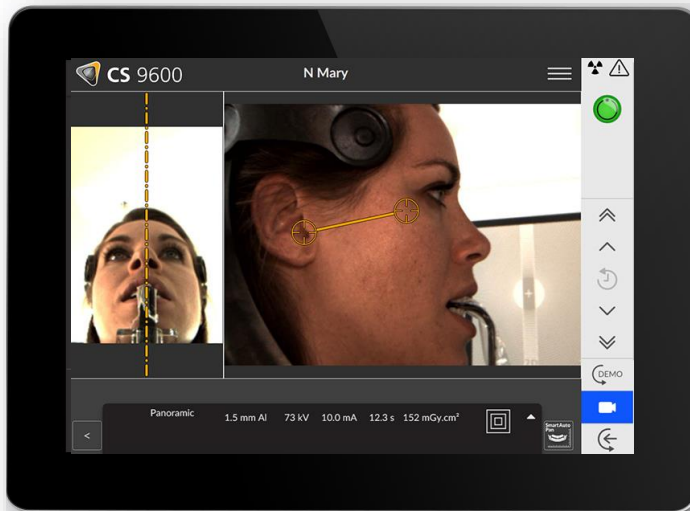




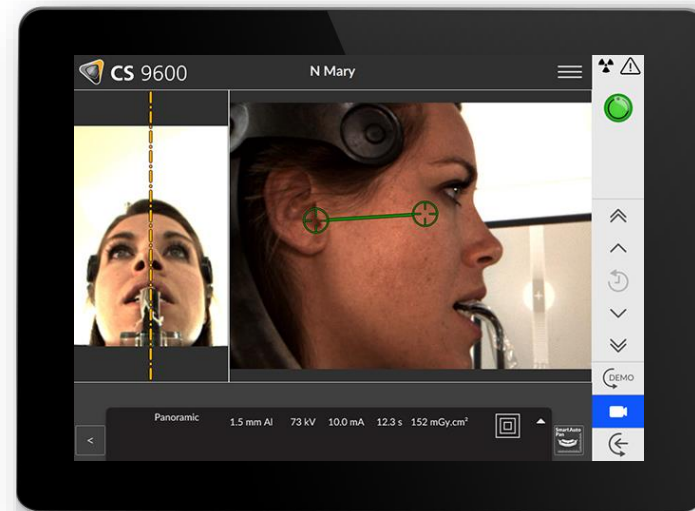
# Live Positioning Assistant

## PANORAMIC IMAGING

- Interactive tool allows user to properly position patient using virtual landmarks and real-time video feedback



An interactive color-coded line represents the Frankfort plane and indicates when the patient is properly positioned



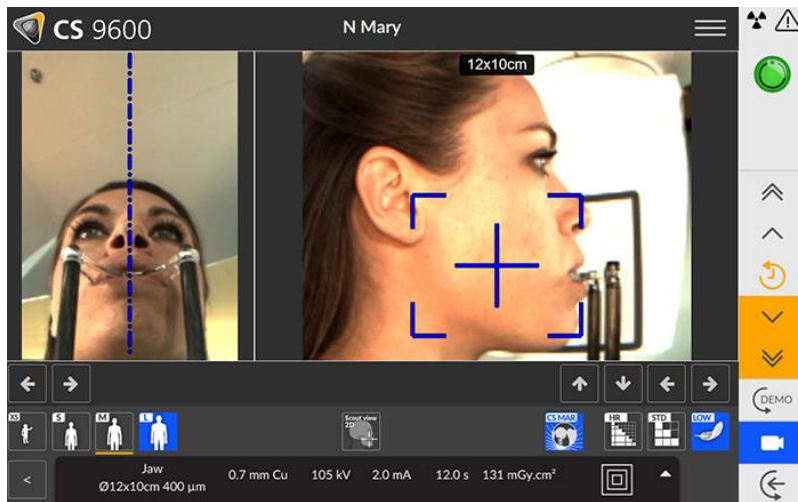
As patient becomes aligned, the Frankfort plane indicator changes from Yellow to Green



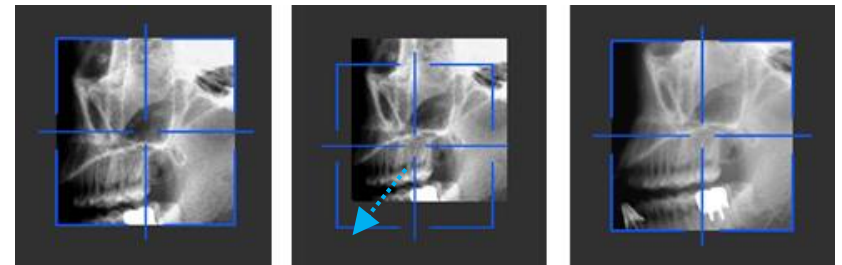
# Live Positioning Assistant

## 3D IMAGING

- User can visualize and adjust the FOV position virtually on the patient
- Optional scout view (very low dose) verifies the desired area is acquired, avoiding unnecessary retakes
- Scout view is an ideal solution for precise positioning of focused field of view scans



**1** The volume is visualized on the patient's live view and its position can be adjusted via the SmartPad



**2** If needed, the FOV position can be adjusted directly on the scout image



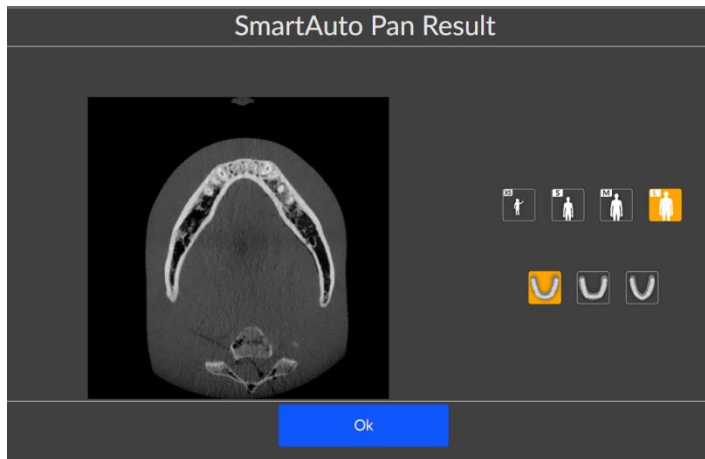
# SmartAuto Technology



## ▶ PANORAMIC EXAM



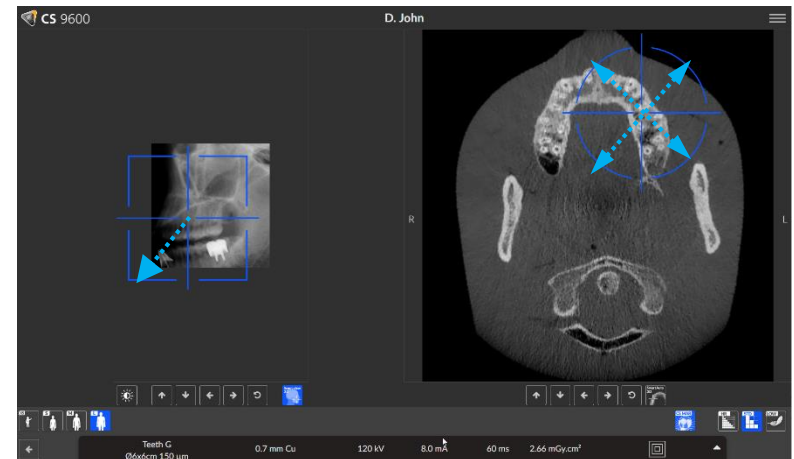
- A low dose scout view captures the patient's jaw shape and position in three dimensions
- Software automatically calculates the correct exposure settings and trajectory
- The result: consistent high-quality panoramic images for all users



## ▶ CBCT EXAM



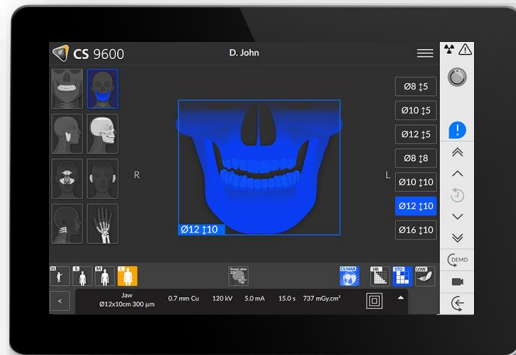
- Enables users to precisely define the field-of-view position on a low dose scout view, virtually eliminating the risk of incorrect positioning
- Software automatically calculates the correct exposure settings according to the patient's morphology



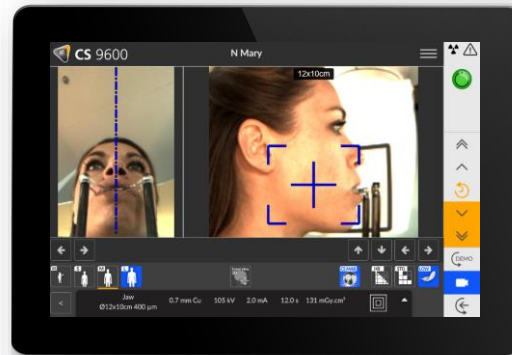
# Intuitive SmartPad

## WORK MORE EFFECTIVELY WITH SMARTPAD

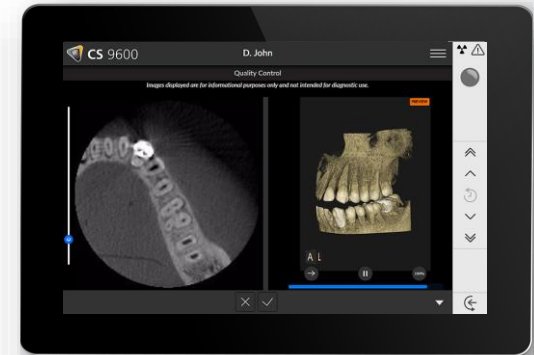
- Modern, high-resolution touchscreen
- User friendly interface simplifies exam setup, patient positioning and image quality control



**1** EXAM SET UP



**2** PATIENT POSITIONING



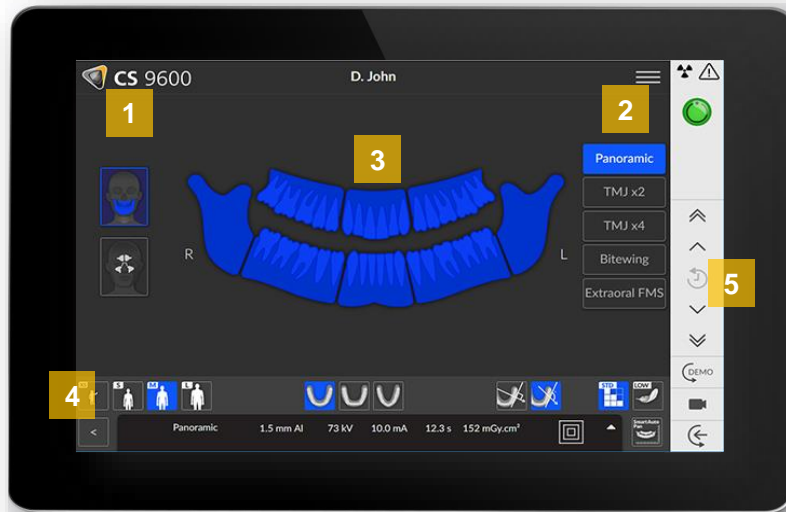
**3** IMAGE QUALITY CONTROL



# Work more effectively with SmartPad

## 1. EXAM SETUP

- Clear user interface guides the operator through the exam
- All parameters are available on one screen
- Pre-set programs minimize setup time and risk of errors

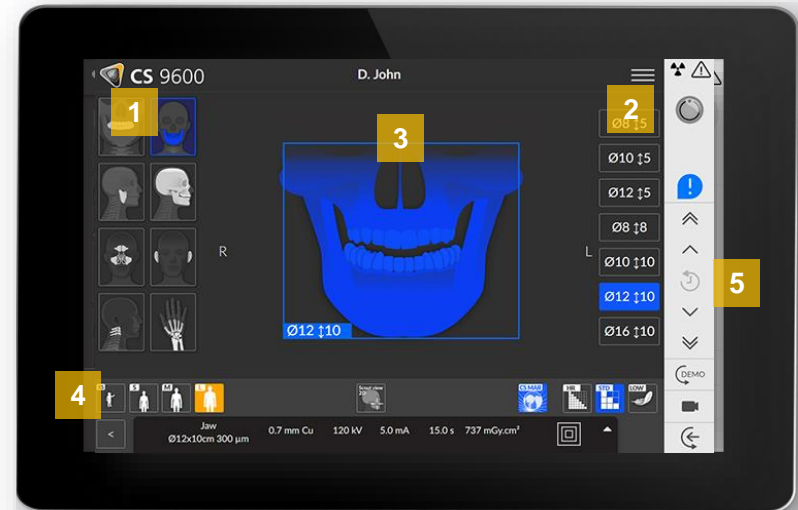


1 MODALITY SELECTION

3 REGION OF INTEREST SELECTION

2 PROGRAM SELECTION

4 SCANNING OPTIONS



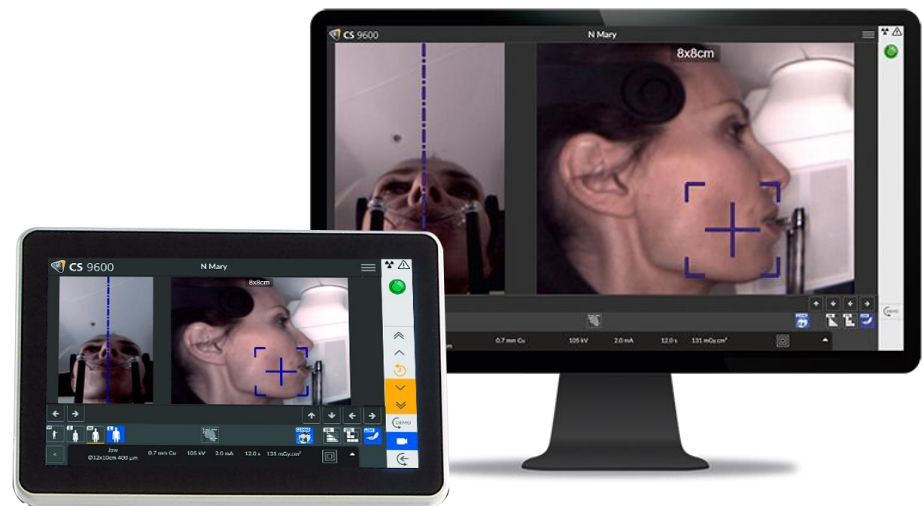
5 COLUMN AND CAMERA CONTROL



# Work more effectively with SmartPad

## 2. PATIENT POSITIONING

- User interface is mirrored on the SmartPad and your computer to fit your workflow
- Manage the entire exam workflow from the SmartPad and get more face time with your patient
- Quality control tools enable user to immediately verify the image on the SmartPad or acquisition computer



SMARTPAD

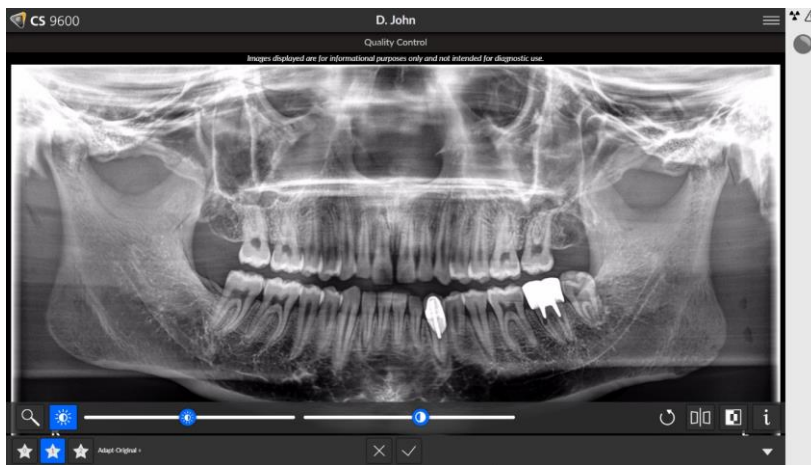
ACQUISITION COMPUTER



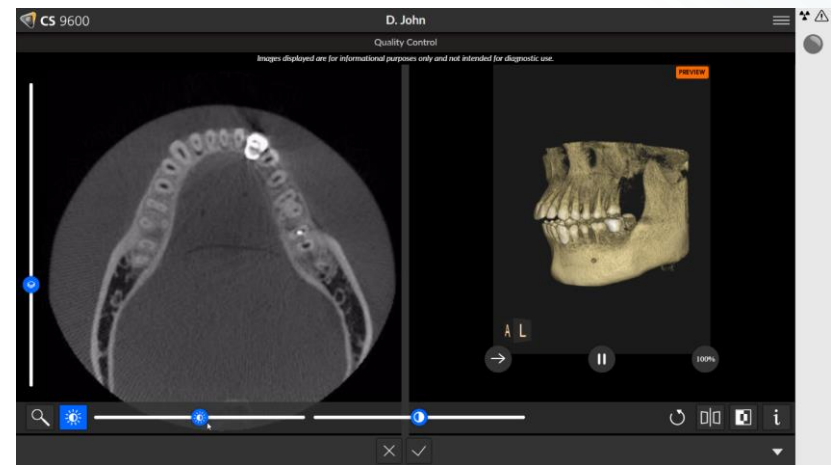
# Work more effectively with SmartPad

## 3. QUALITY CONTROL

- Check images immediately after acquisition on the SmartPad or acquisition computer
- Reason for rejection is recorded and saved for every image



**PANORAMIC EXAMS:** Adjust brightness/contrast, CS Adapt filters, zoom, reverse Right/Left



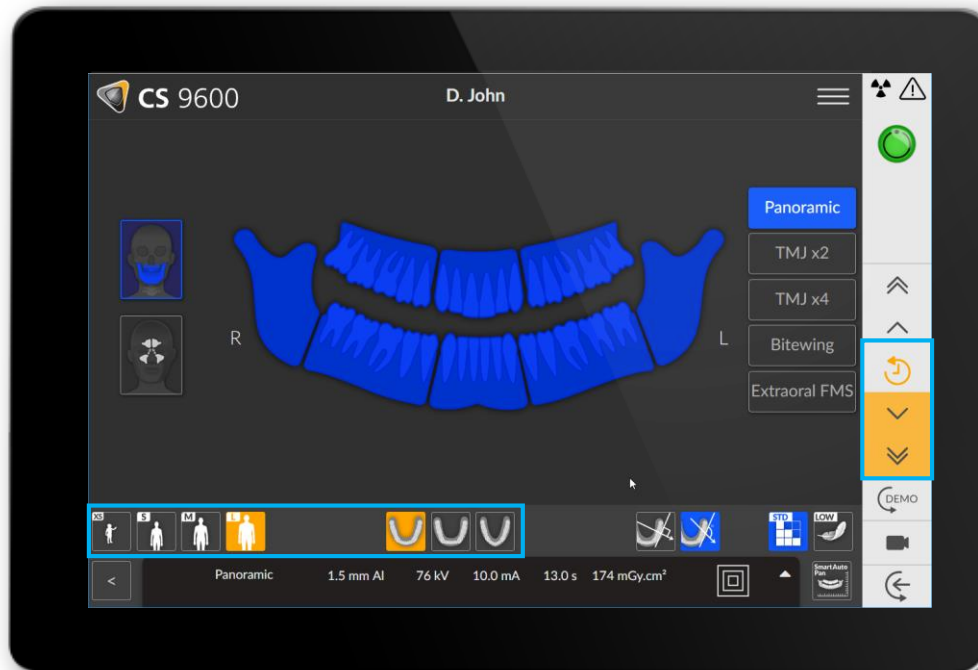
**3D EXAMS:** Browse axial slices, preview the 3D rendering to verify if the targeted anatomy is properly captured



# Repeatable procedures with a single touch

## PATIENT HISTORY RECORD

- Parameters for each patient exam are automatically recorded
- With the touch of a button, user can recall the parameters for the patient's next exam
- Streamlined workflow for repeatable procedures
- Consistent and comparable images for follow-up exams



**REUSE PARAMETERS AND COLUMN HEIGHT OF THE PREVIOUS EXAM**

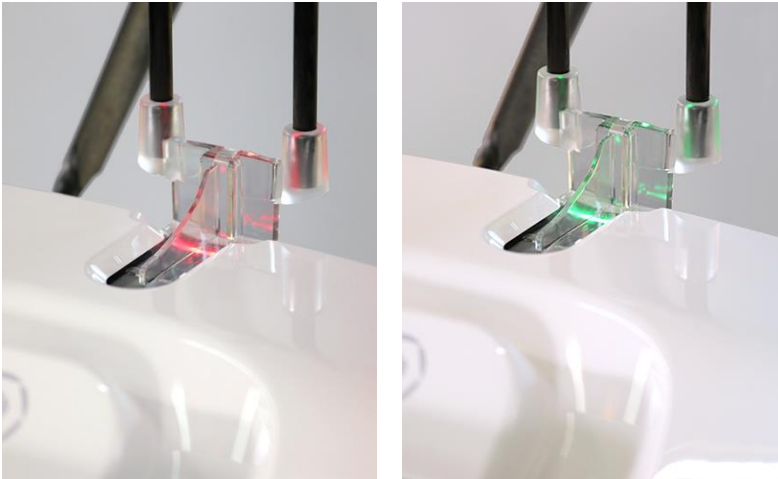




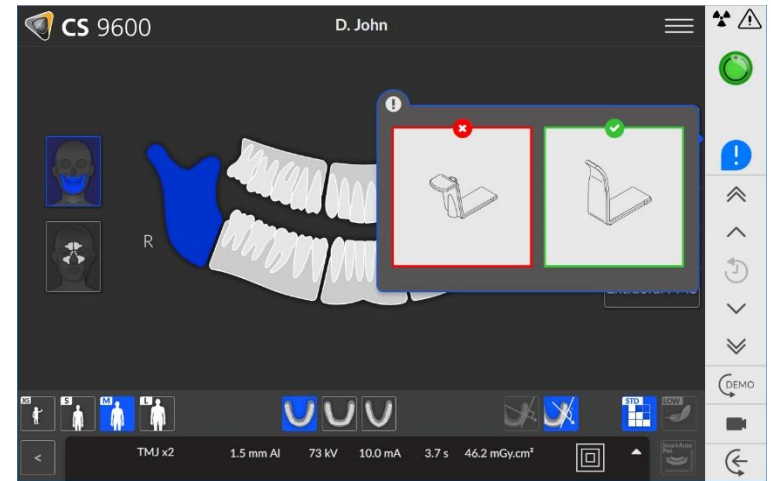
# Smart accessories, real changes

## INTERACTIVE POSITIONING ACCESSORIES

- The CS 9600 detects and visually indicates if the wrong accessory is inserted for the selected procedure and recommends the appropriate one
- Significantly reduces risk of positioning mistakes and unnecessary retakes



**RED LIGHT: WRONG ACCESSORY IS INSERTED**  
**GREEN LIGHT: CORRECT ACCESSORY IS INSERTED**



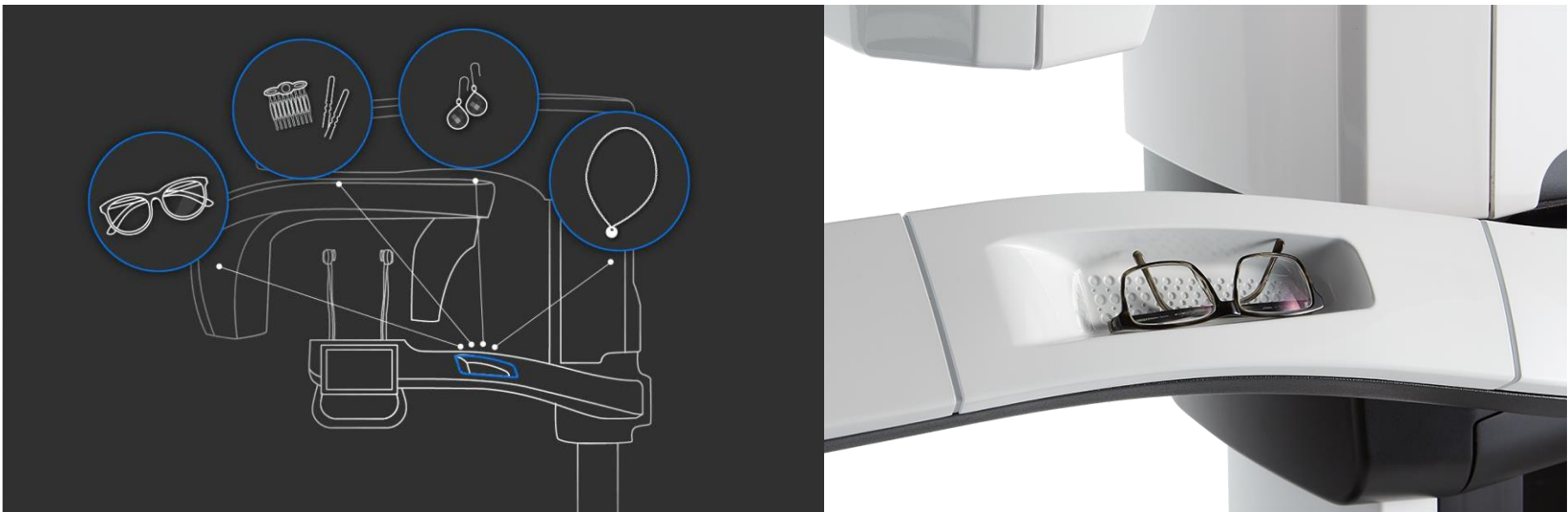
**AUTOMATICALLY RECOMMENDS  
THE APPROPRIATE ACCESSORY TO USE**



# Smart accessories, real changes

## JEWELRY TRAY

- A dedicated tray for patient jewelry and glasses reduces the risk that they are forgotten during or after the examination



# Versatile Imaging Drives Precision in All Fields



# Do more in your practice

## VERSATILE MULTIFUNCTIONAL SYSTEM



CBCT IMAGING



PANORAMIC IMAGING



CEPHALOMETRIC IMAGING\*



3D FACIAL SCANNING\*

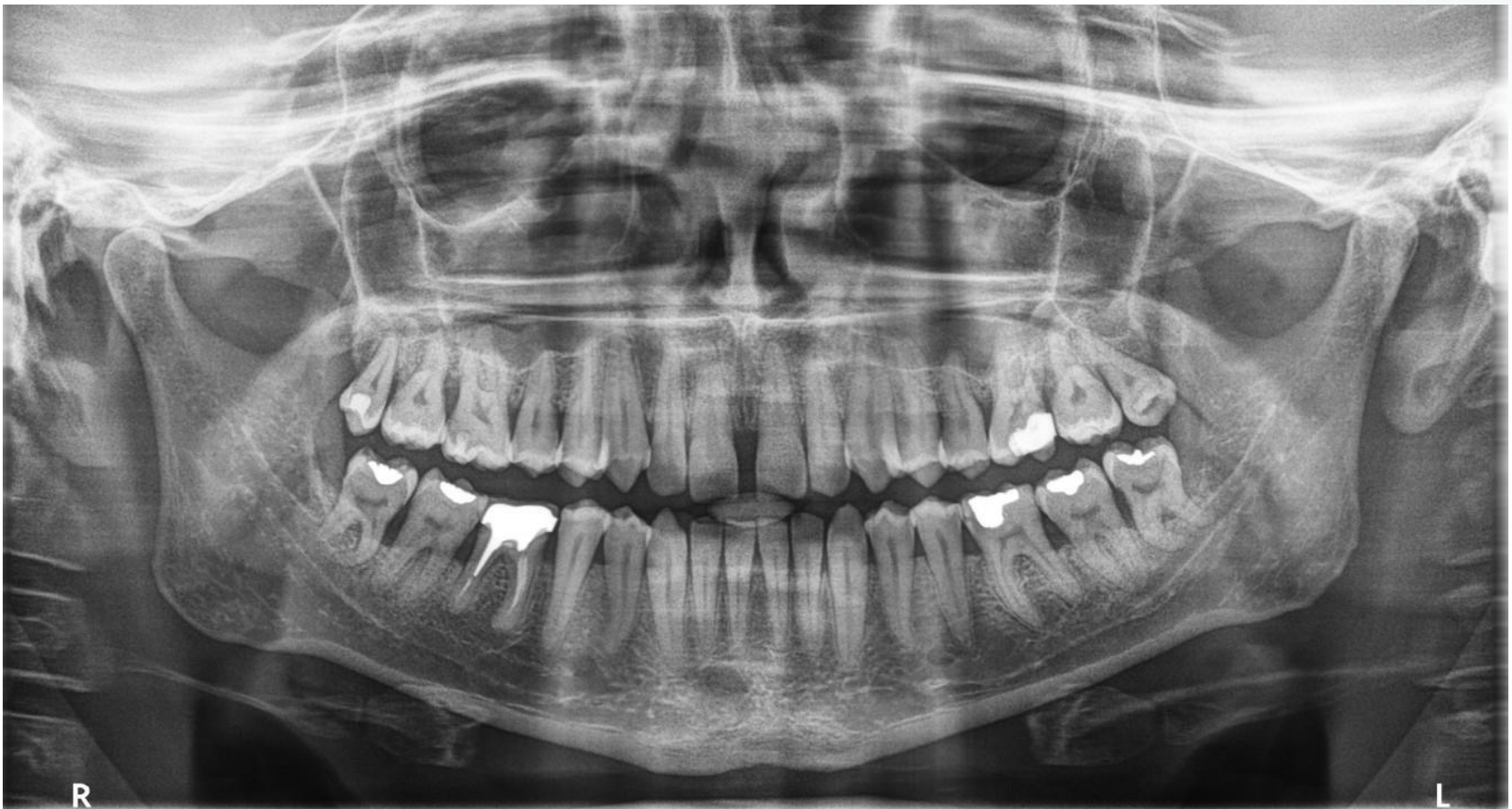


CBCT OBJECT SCANNING\*



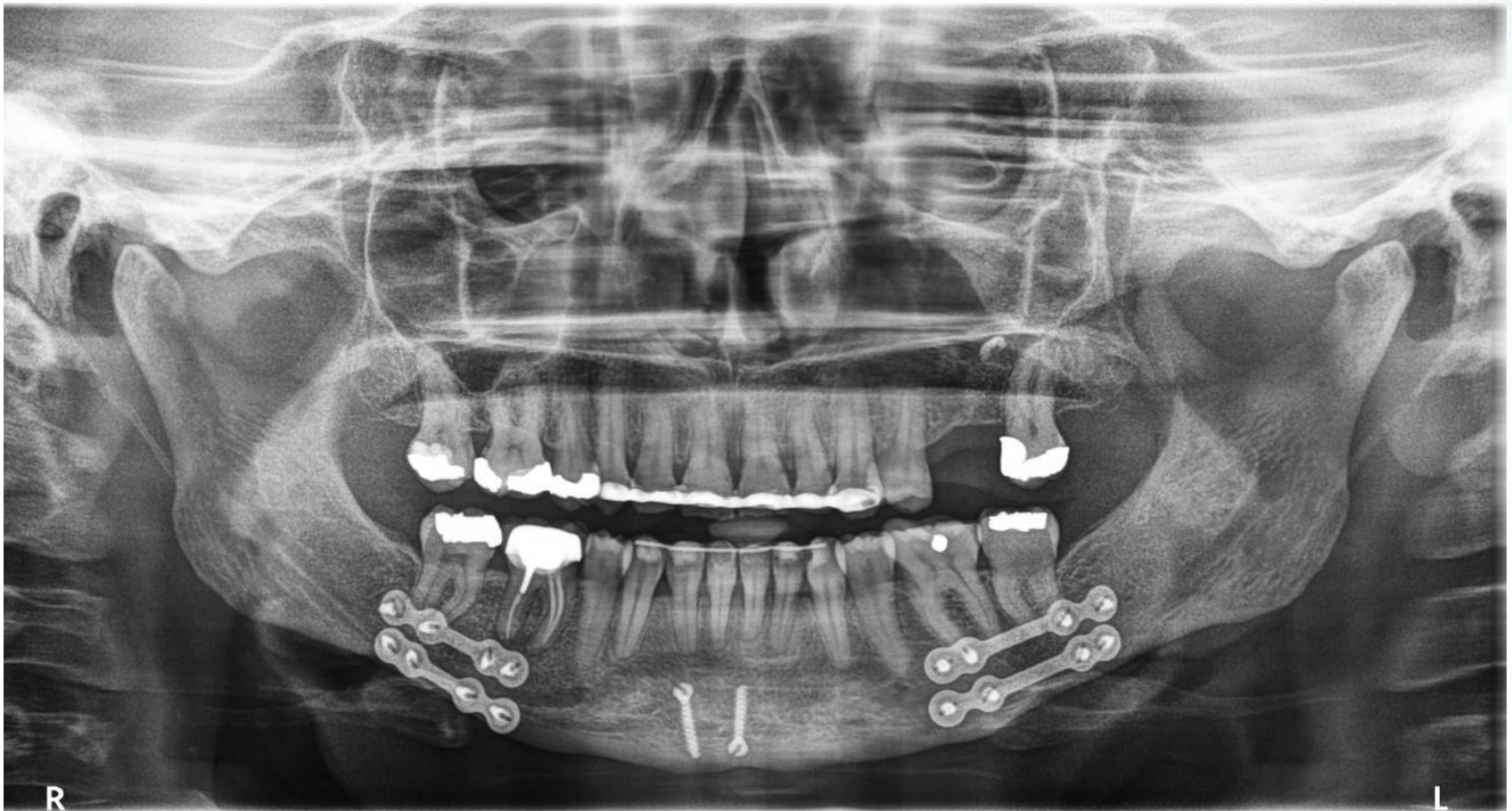
# State of the art 2D imaging

The CS 9600 generates superb panoramic images in a few seconds and covers all routine diagnostic needs



# Clinical Results

Low dose 2D panoramic program available ideal for pediatric or follow-up exams

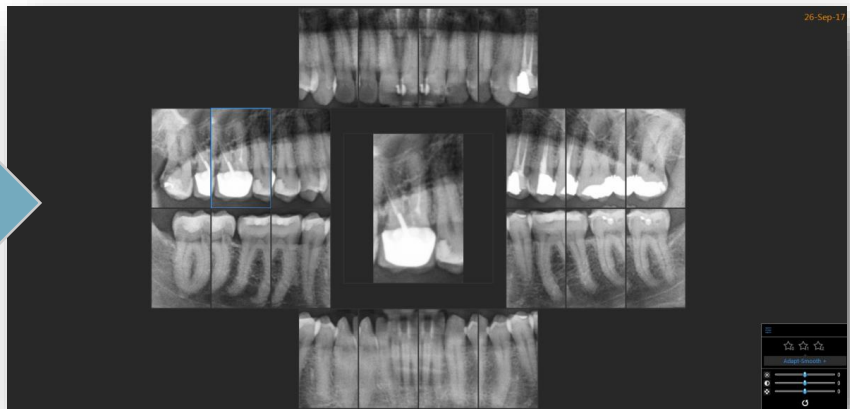
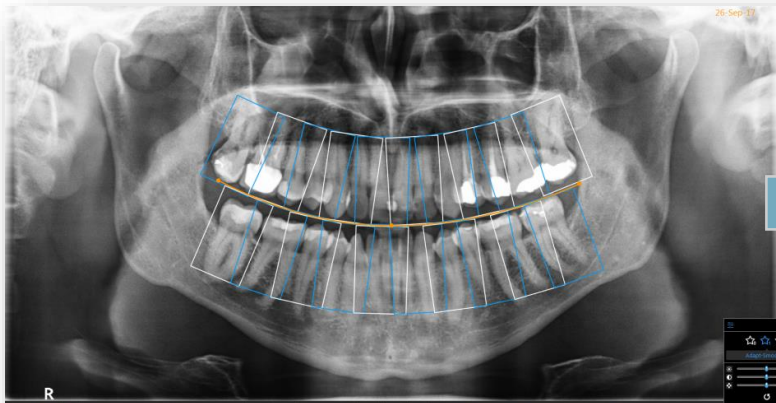




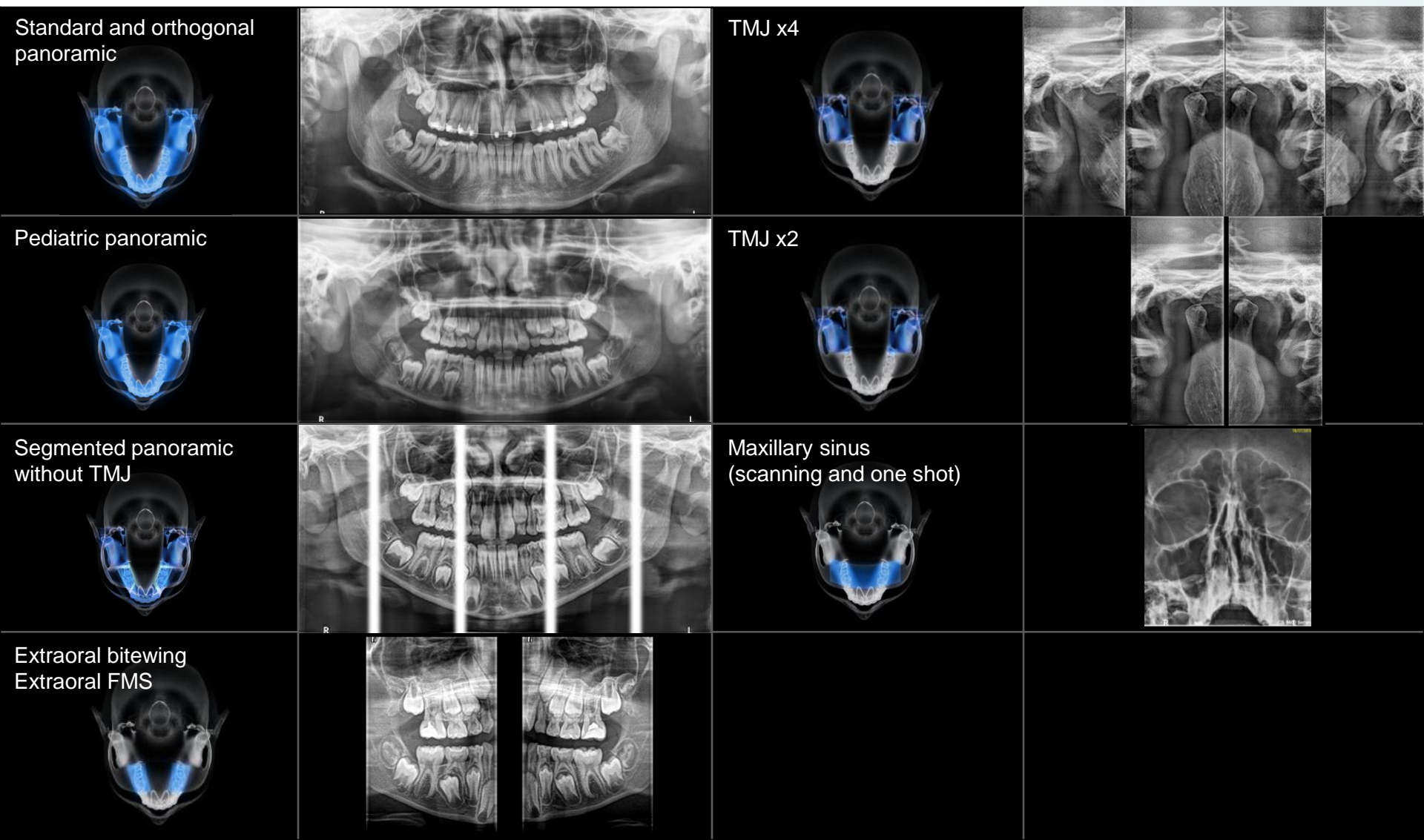
# State of the art 2D imaging

## EXTRAORAL FMS

- Automatically generates full mouth series (FMS) images from a 2D panoramic image in less than a minute
- Uses a specific trajectory to reduce teeth overlap
- Ideal solution when an intraoral X-ray cannot be performed
- Takes less time than traditional FMS
- Improves patient comfort



# State of the art 2D imaging





# Flexible fields of view for every need

## ▶ 12X10 / 16X10 / 16X17 EDITIONS



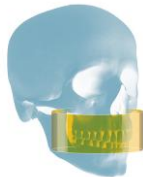
### TOOTH / TEETH

4 cm x 4 cm, 5 cm x 5 cm, 6 cm x 6 cm  
Voxel size: 75µm, 150µm, 300µm



### TOOTH / TEETH

5 cm x 8 cm  
Voxel size: 75µm, 150µm, 300µm



### SINGLE JAW

8 cm x 5 cm, 10 cm x 5 cm  
Voxel size: 75µm, 150µm, 300µm  
12 cm x 5 cm  
Voxel size: 150µm, 300µm, 400µm



### DUAL JAW

8 cm x 8 cm, 10 cm x 10 cm  
Voxel size: 75µm, 150µm, 300µm



### DUAL JAW

12 cm x 10 cm  
Voxel size: 150µm, 300µm, 400µm

## ▶ 16X10 / 16X17 EDITIONS



### DUAL TMJ

16 cm x 6 cm  
Voxel size: 150µm, 300µm, 400µm



### MAXILLOFACIAL / SINUS

16 cm x 10 cm  
Voxel size: 150µm, 300µm, 400µm

## ▶ 16X17 EDITION



### MAXILLOFACIAL / SINUS

16 cm x 12 cm  
Voxel size: 150µm, 300µm, 400µm



### MAXILLOFACIAL / SINUS

16 cm x 17 cm  
Voxel size: 150µm, 300µm, 400µm

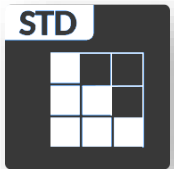


# Selectable resolution adapts to clinical needs



## HR MODE

- Voxel size 75  $\mu\text{m}$  or 150  $\mu\text{m}$
- The highest detailed images, ideal for endodontics and any case requiring the highest resolution possible
- 75 $\mu$  resolution available on all FOV ranging from 4 cm x 4 cm to 10 cm x 10 cm
- 150  $\mu\text{m}$  resolution available on all FOV up to 16 cm x 17 cm



## STANDARD RESOLUTION MODE

- Voxel size 150  $\mu\text{m}$  or 300  $\mu\text{m}$
- For most indications requiring high quality images and shorter exposure times

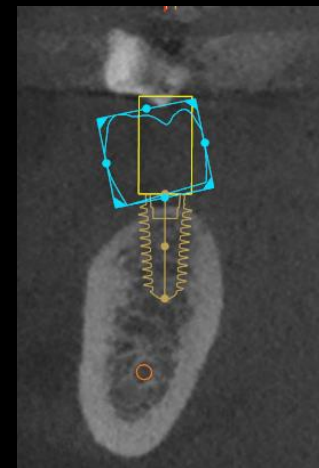
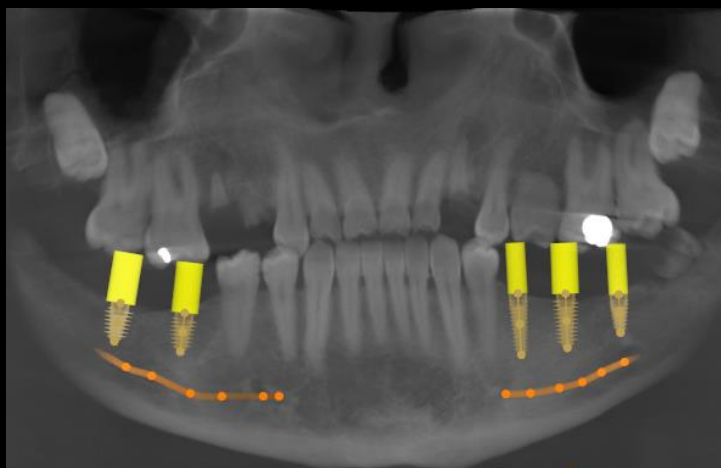
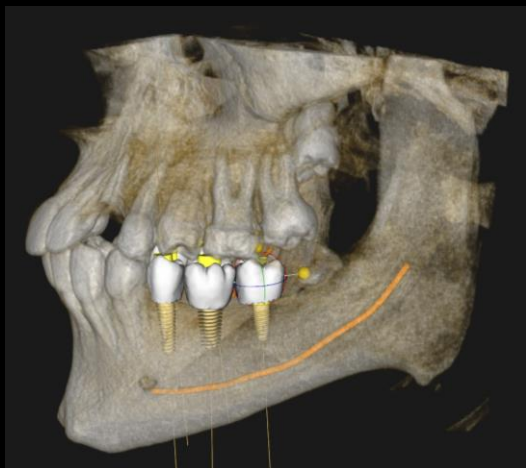


## LOW DOSE MODE

- Voxel size 300  $\mu\text{m}$  or 400  $\mu\text{m}$
- The lowest effective dose
- For sensitive cases requiring low dose, such as pediatric or follow up examinations



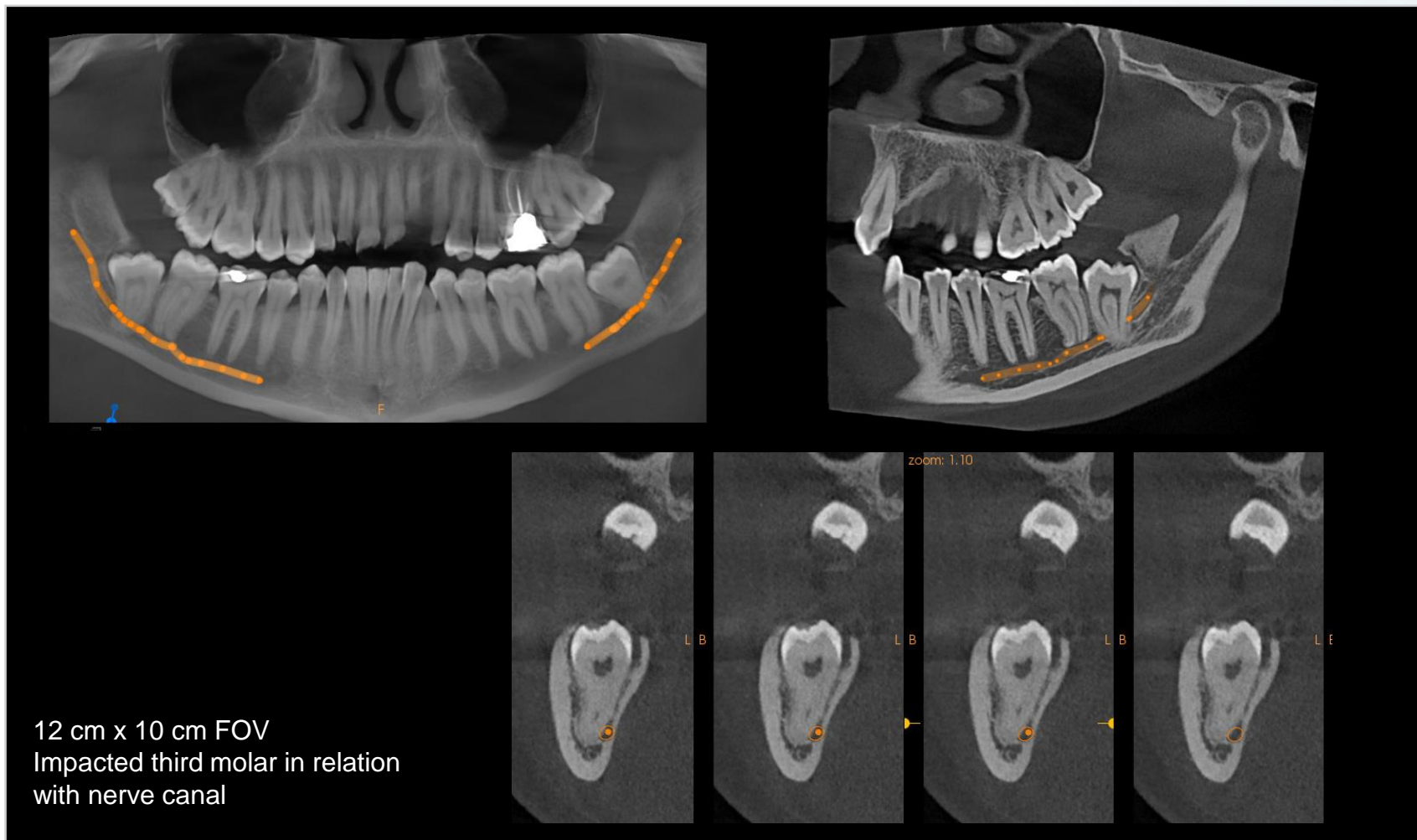
# Implant planning



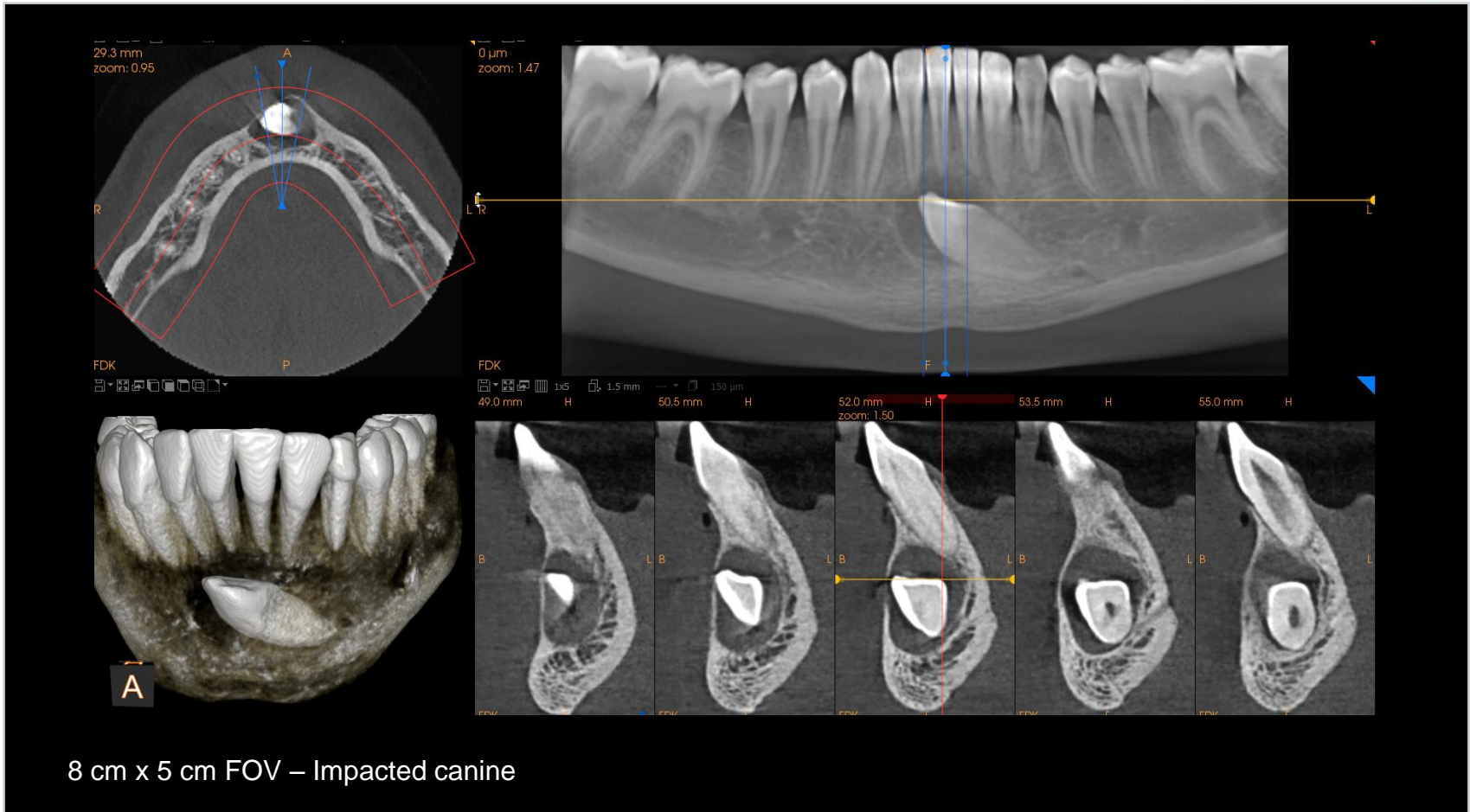
12 cm x 10 cm FOV



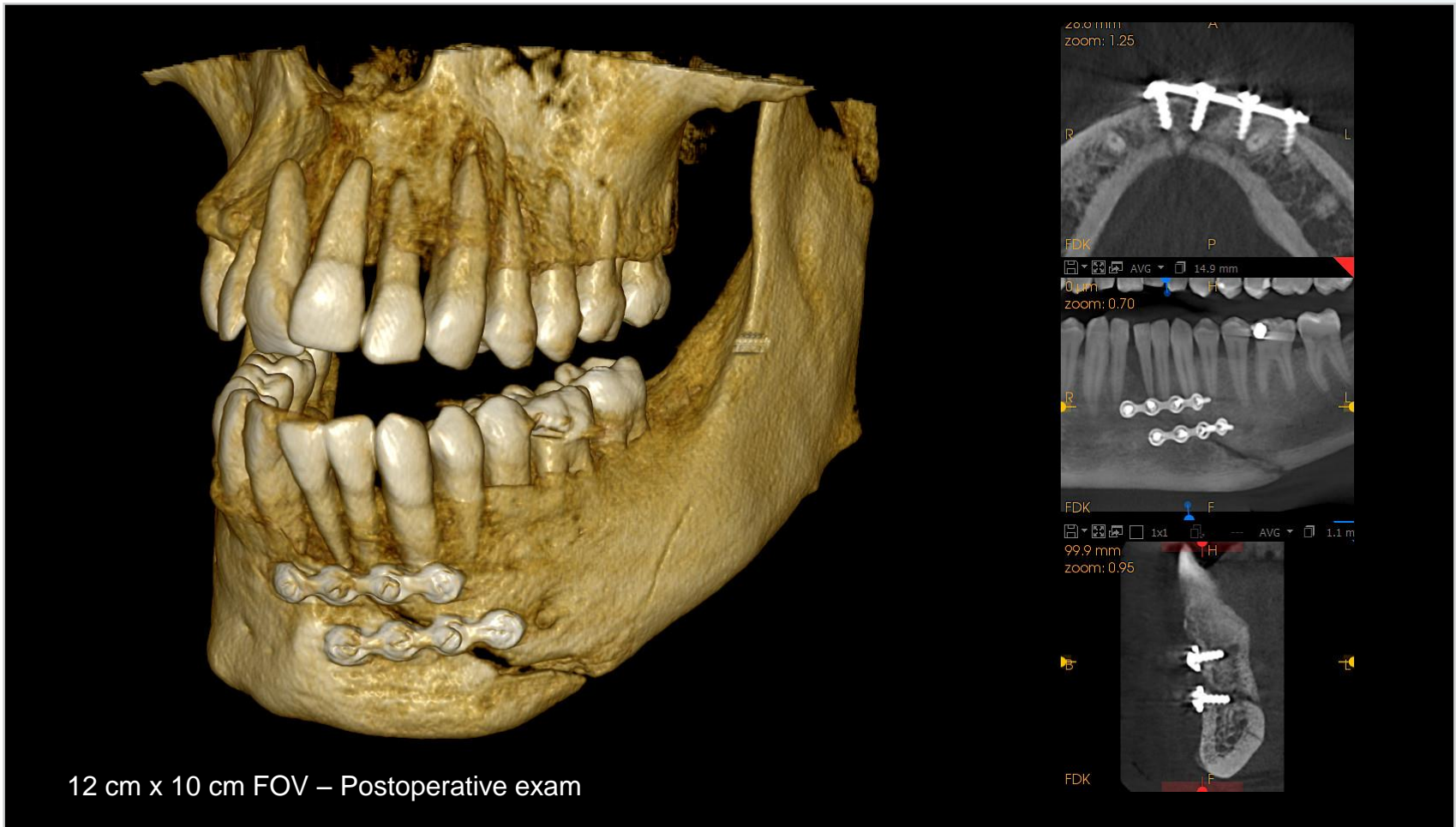
# Oral surgery



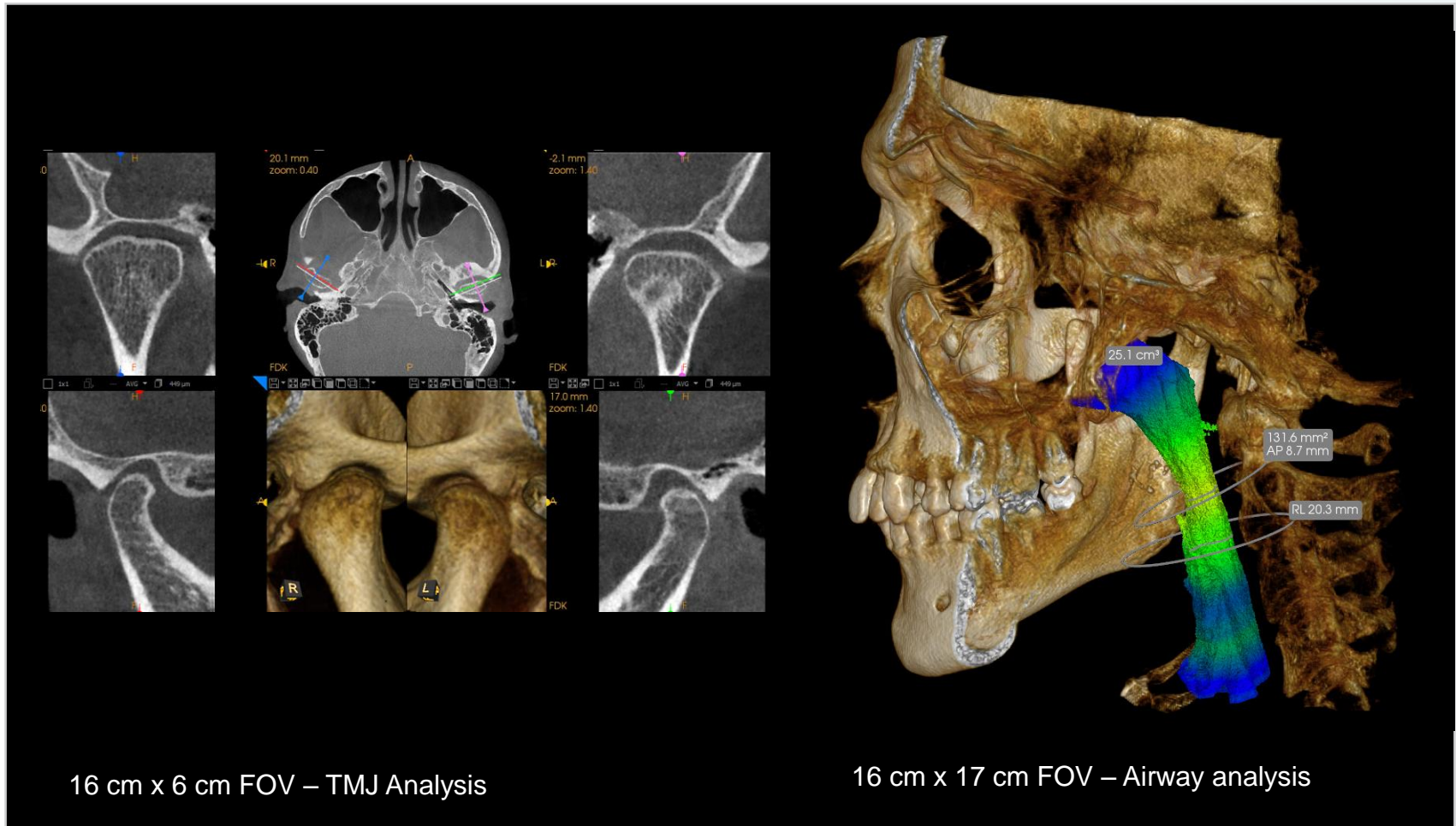
# Oral surgery



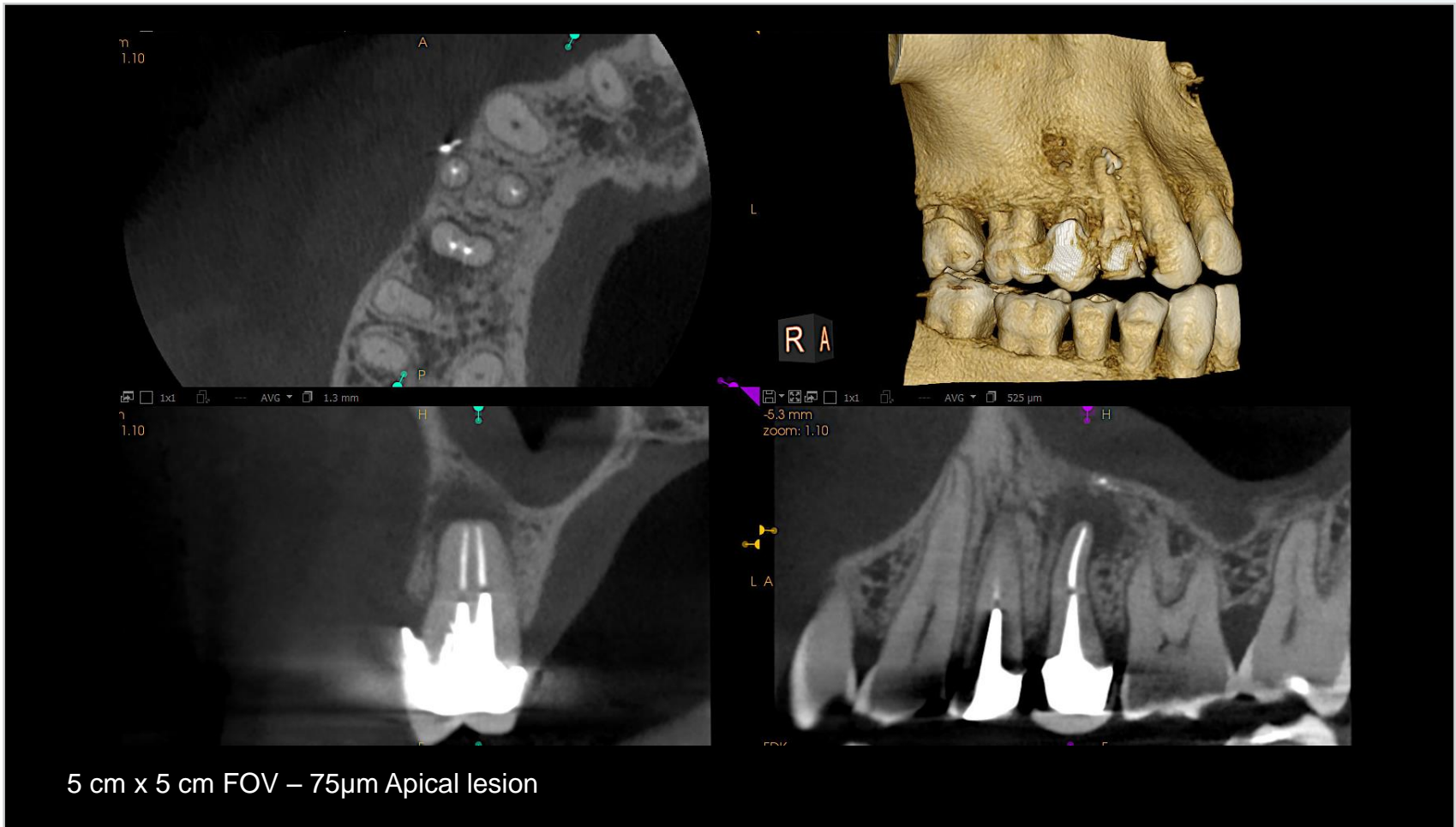
# Maxillofacial surgery



# TMJ and Airway Analysis

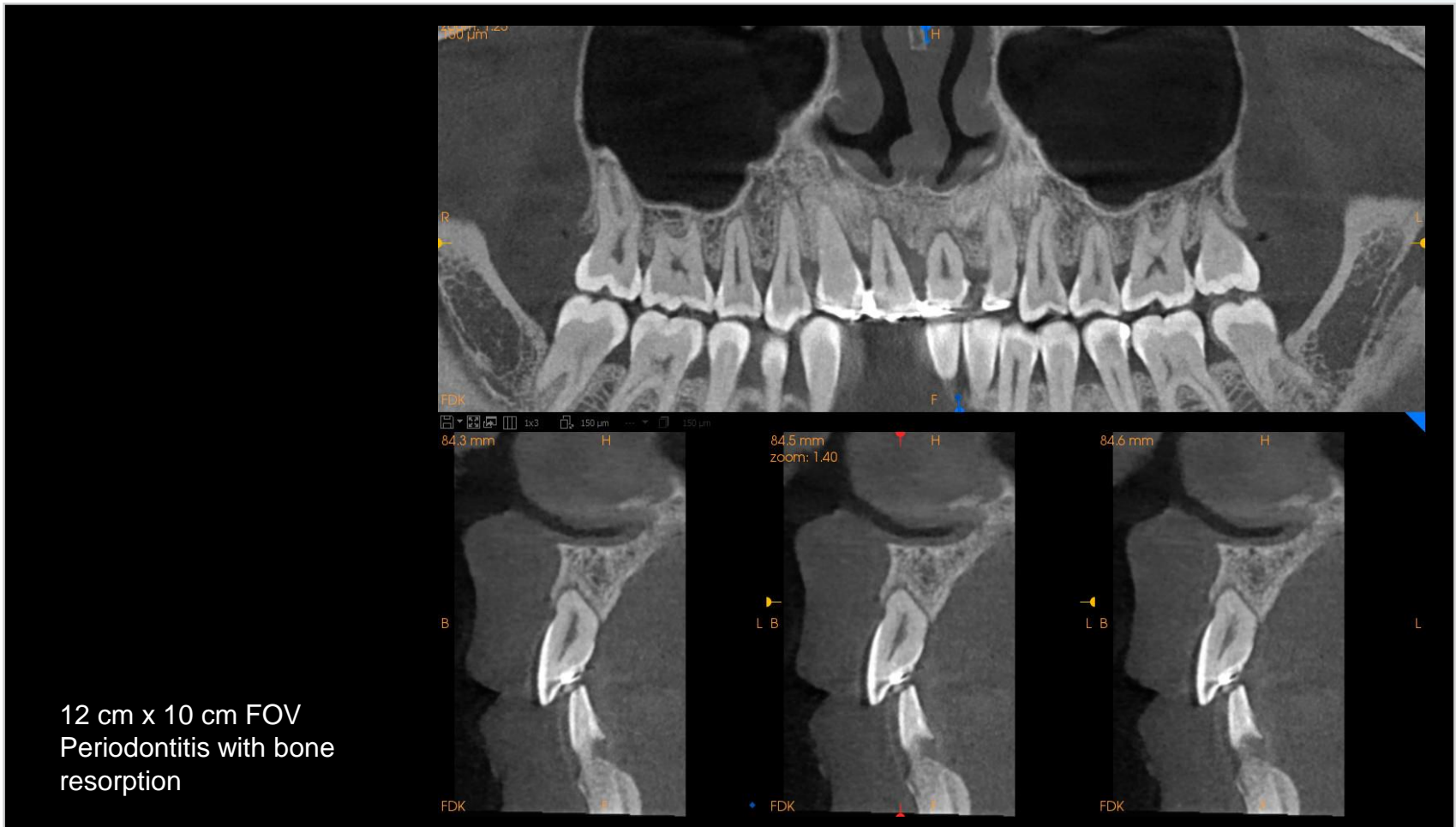


# Endodontics





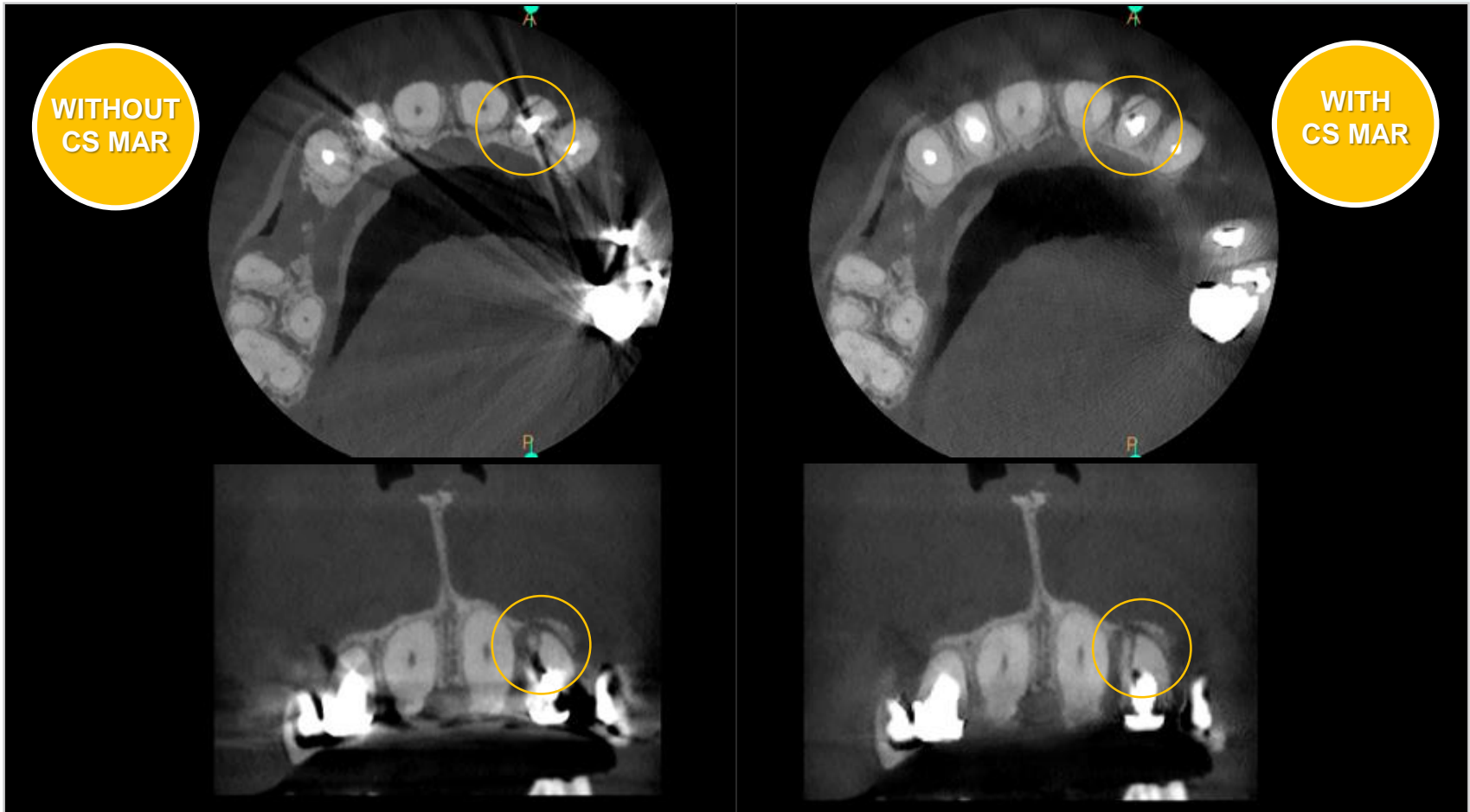
# Periodontics



# Exclusive Metal Artifact Reduction technology

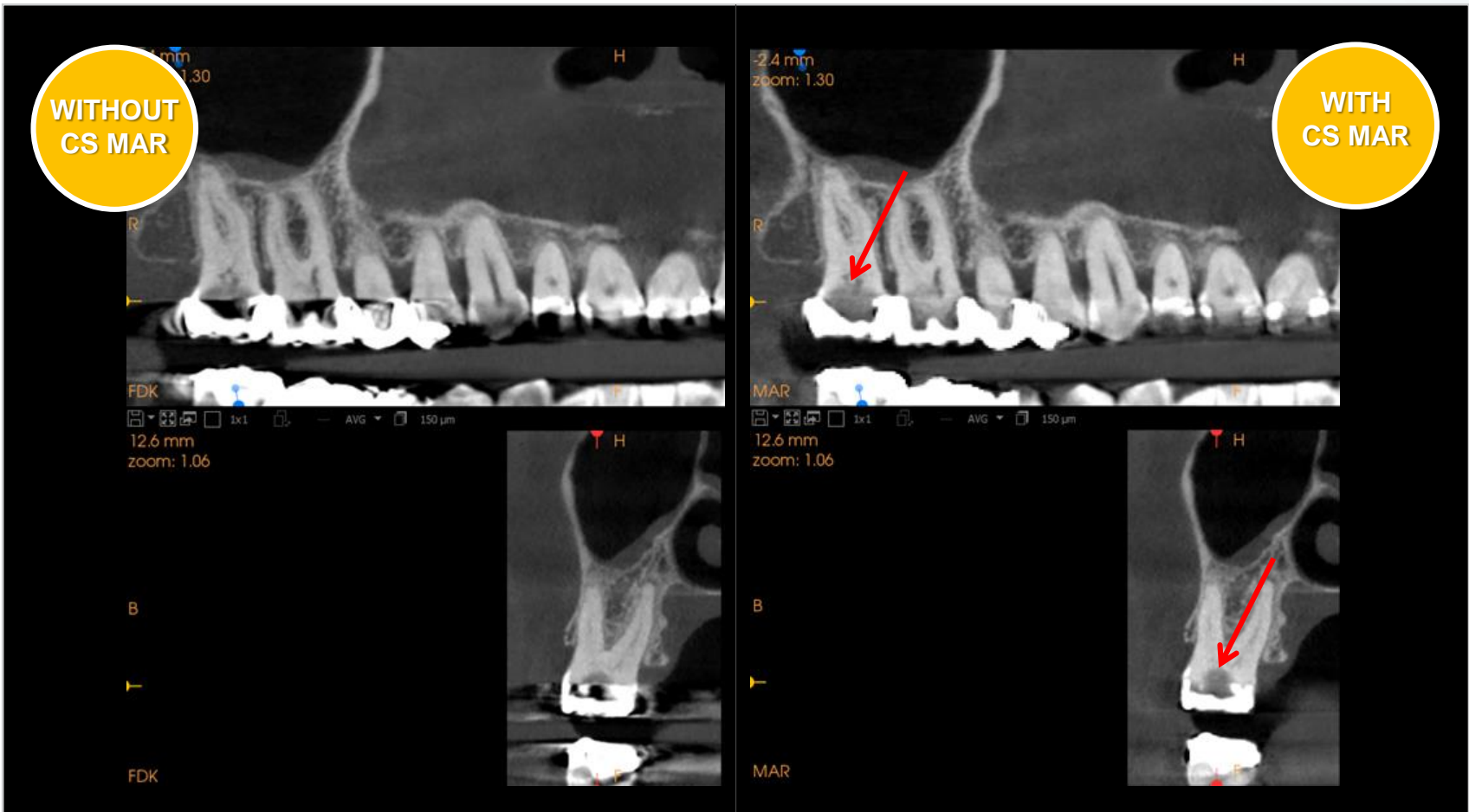


Carestream Dental's high-end MAR algorithm effectively reduces metal artifacts



# CS MAR

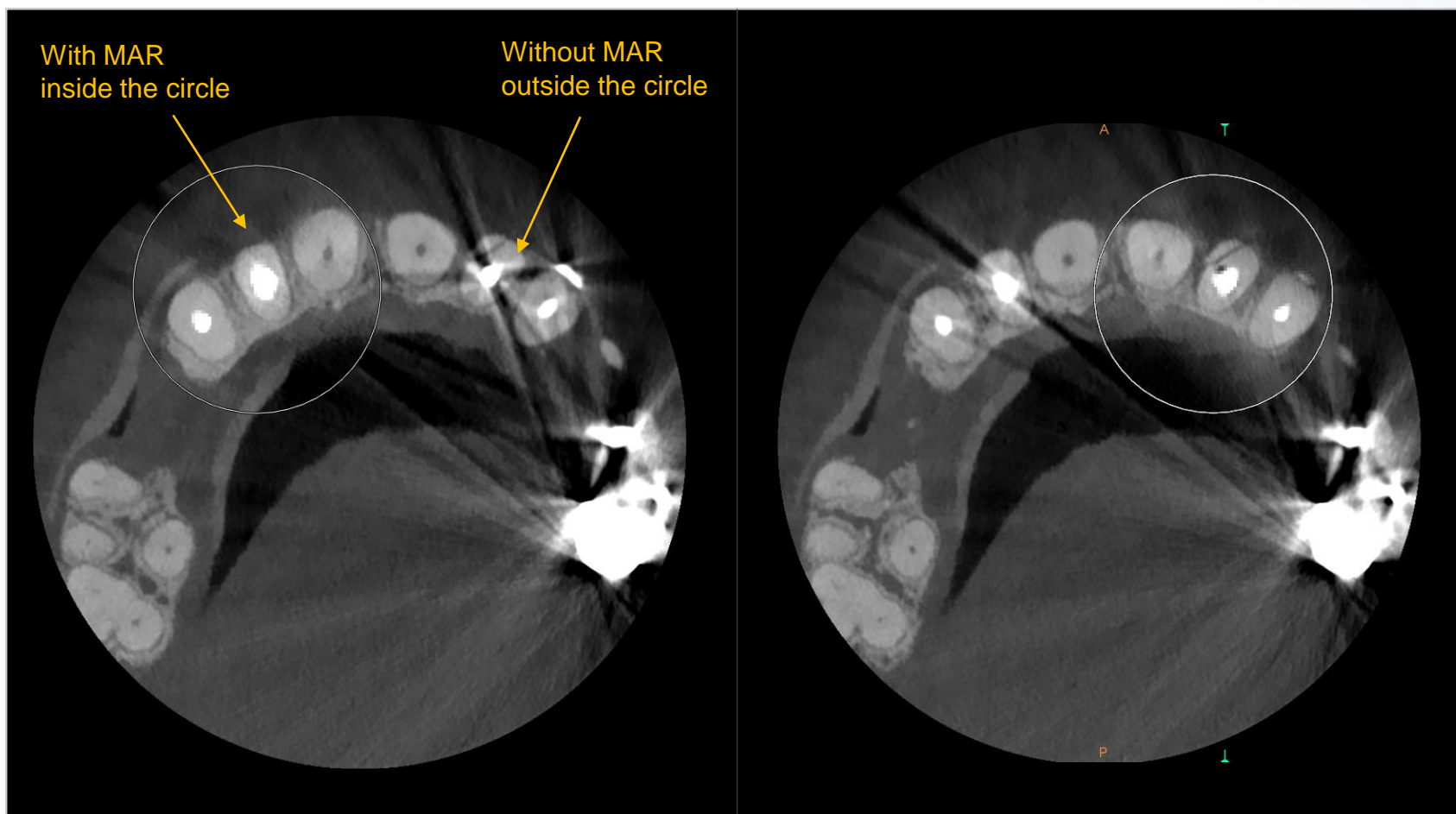
- Enables live comparison of images with and without MAR filter
- Helps confirm diagnoses and reduces risk of misinterpretation





# CS MAR

- Enables live comparison of images with and without MAR filter
- Helps confirm diagnoses and reduces risk of misinterpretation



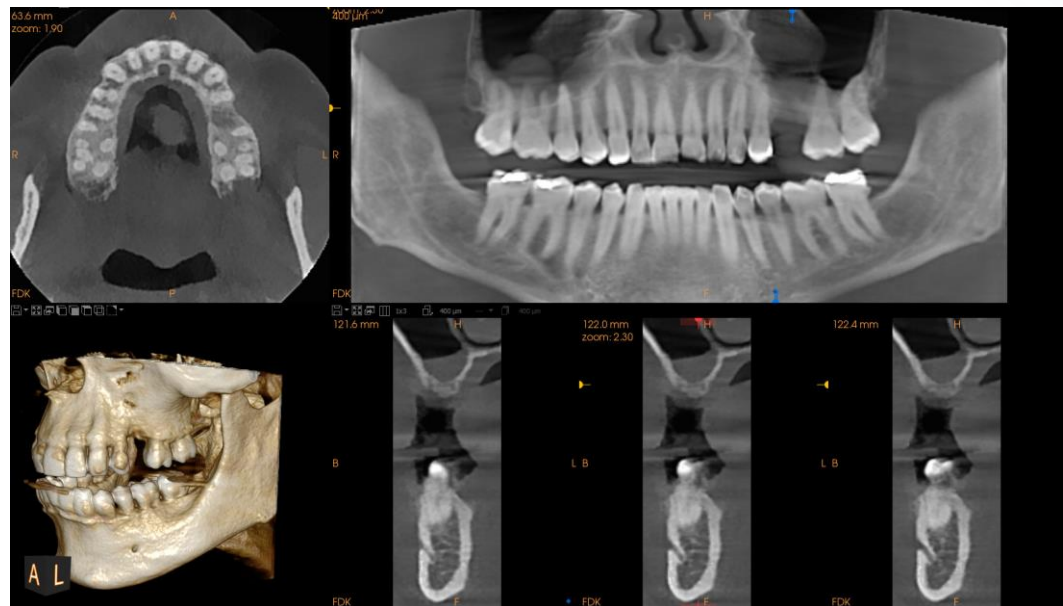
# 3D images at a lower dose than 2D panoramic

## LOW DOSE IMAGING

- Delivers 3D images at a significantly lower dose than 2D panoramic imaging
- Can be used for all 3D FOVs and resolutions

Covers multiple applications:

- Implant planning
- Follow-up exams
- Pediatric examinations
- Analysis of skeletal symmetry
- Impactions/supernumerary evaluations

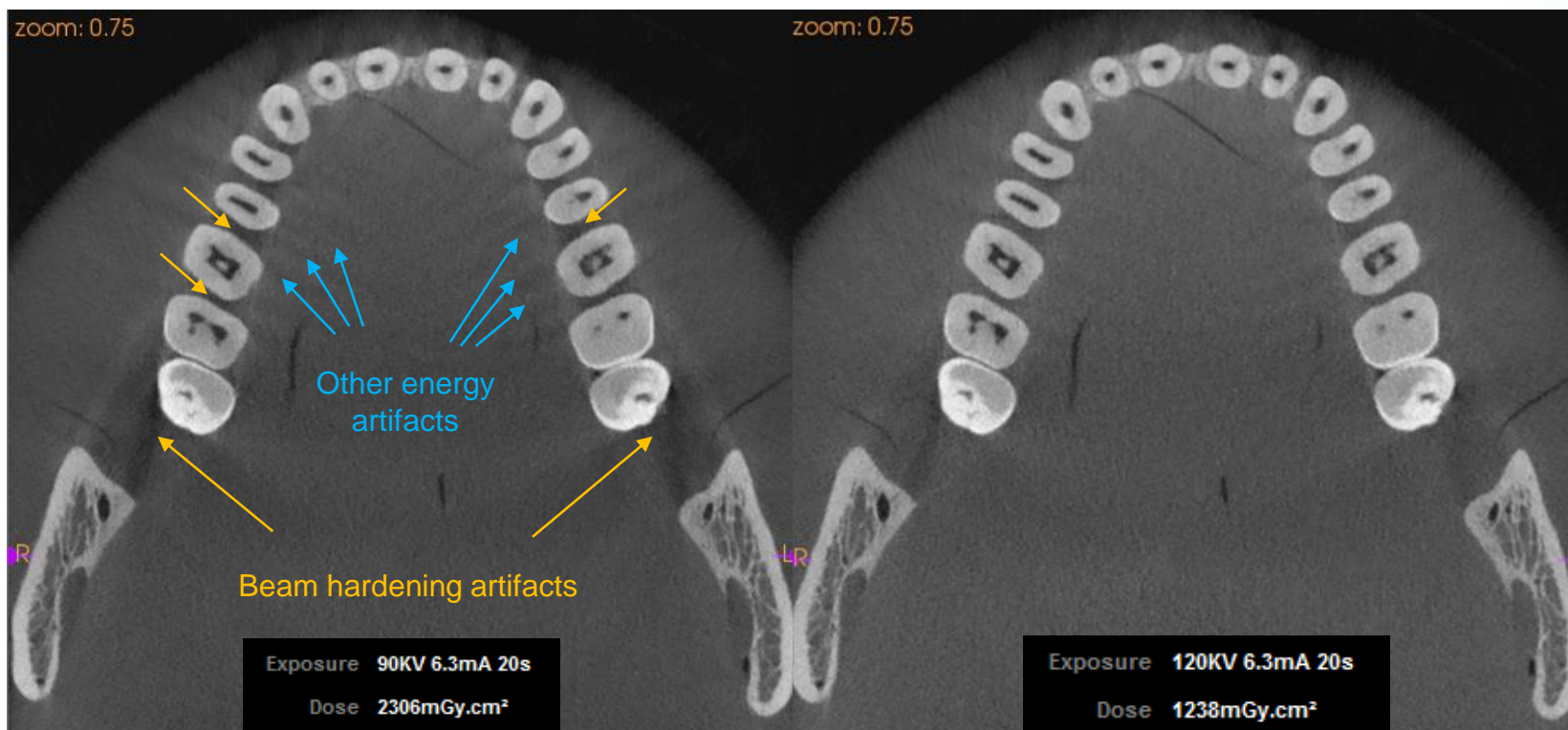




# Optimized image quality and dose

## 120 kV HIGH POWER TUBE

- Compared to 90 kV:
  - Increases image quality at similar dose
  - Or obtain similar image quality at lower dose
- Reduces artifacts, enhances image quality



# CS Face Scan



- Captures realistic 3D facial photos
- Automatically superimposes the surface scan with CBCT images and 3D models
- Helps patient better understand the proposed treatment plan



# CS Face Scan



- Can be performed when conducting the CBCT scan, or at any other time
- Dedicated support eliminates any interference with patient's face
- Large scanning area delivers full face photos including chin and ears





# CS Solutions Ready

- Scan patient's impression, plaster cast or radiographic guide\*
- User-friendly interface and scanning platform
- Cost-effective solution for both impression scanning and radiographic examinations



# Engaging treatment plans improves case acceptance

## YOUR COMPLETE DIGITAL WORKFLOW

Our scanning solutions and add-on software are designed to address your specific needs

### DATA CAPTURE



INTRAORAL SCANNERS



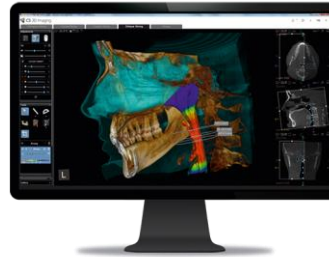
CBCT SYSTEMS

### SPECIALTY MODULES



PROSTHETIC-DRIVEN IMPLANT  
PLANNING

PLAN IMPLANT WITH MORE CONFIDENCE



CS AIRWAY

ANALYSE UPPER AIRWAY  
PRECISELY



CS MODEL / CS MODEL+

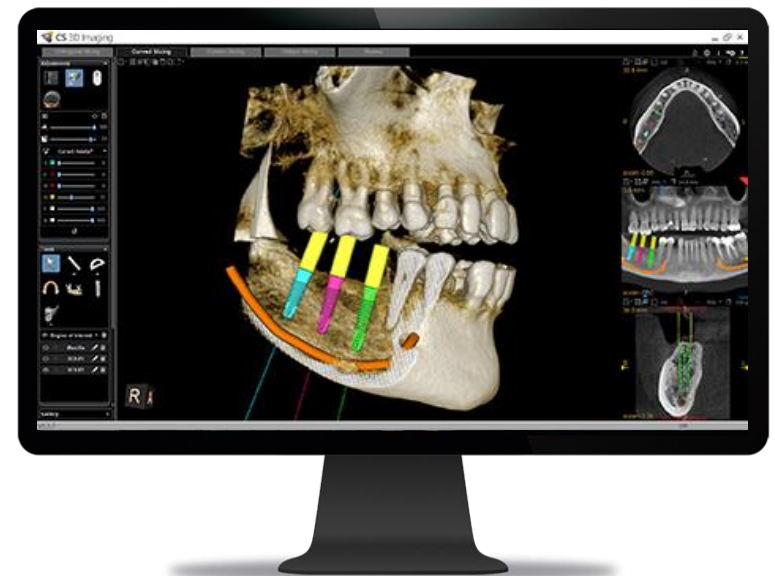
PLAN ORTHODONTIC TREATMENT  
EFFECTIVELY



# Get the most from every image

## CS 3D IMAGING SOFTWARE

- Probably the most user-friendly 3D imaging software available
- Provides you all the tools to assist you in:
  - Implant planning
  - Surgical guide
  - Surgical procedures
  - Endodontics
  - Airway analysis
- Integrated implant library including more than 70 international implant manufacturers
- Complete set of tools for viewing, processing and annotating CBCT volumes



# Improving communication and collaboration



## PERSUASIVE IMAGES

Stunning 3D views enhance patient education and communication



## IMAGE VIEWER

3D software can be shared with colleagues or referrals to facilitate case collaboration



## REPORTS AND PRINTS

Versatile options for printing images and customizable reports are available



## DICOM

DICOM files are compatible with leading third party software (NobelGuide, SimPlant,...)



## COPY/PASTE

Images can be copied and pasted directly into documents (Word doc, PowerPoint, etc.)



## SHARE

Easily share data using USB flash drive, CD/DVD, email or lightweight screen capture

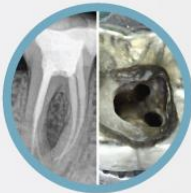


# One stop-access to all your images

CS Imaging Version 8 gives you access to all of your digital images and CAD/CAM data

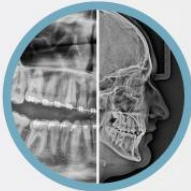
## INTRAORAL

RVG 5200 / RVG 6200  
CS 7200 / CS 7600



## EXTRAORAL

CS 8100  
CS 8100SC



## CBCT

CS 8100 3D  
CS 8100SC 3D  
CS 9300  
CS 9600

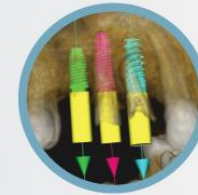


## CS IMAGING VERSION 8



## CS 3D IMAGING

PROSTHETIC DRIVEN  
IMPLANT PLANNING  
CS AIRWAY  
CS FACE SCAN



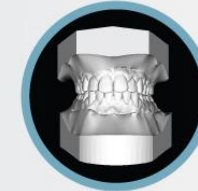
## IMPRESSION

CS 3600  
CS MESH VIEWER



## DIGITAL MODEL

CS MODEL  
CS MODEL+



# Smarter Design Drives Precision For Any Patient



# Comfortable scanning experience

- Open design with face-to-face positioning
- Easily adjustable for all patients
- Standing or sitting patients
- Wheelchair accessible



# Exclusive integrated seat\*

- First unit with an integrated retractable seat
- Ensure patient comfort and stability
- Ideal for examinations requiring higher stability or for challenging patient
- Can be rotated 180° when not in use or to accommodate patient in wheelchair



\* Option





# CS ADVANTAGE FOR CS 9600

- ▶ **Stay tuned and covered. Enroll in CS Advantage.** Get the extended warranty coverage, software updates, training and support you need to ensure the best possible experience with your equipment purchase. It's easy with our CS Advantage plan. Contact your Carestream Dental representative for more information.



CS Advantage

# CS 9600 Service Offering

CONSISTENT, SIMPLE, HARMONIOUS AND GLOBAL



# The advantages of CS Advantage

Category	Offerings	CS ADVANTAGE
CS Protect	Warranty extension on <b>All Parts</b>	✓
CS Update	Software updates, <b>including other software related to the CS 9600's options</b>	✓
CS Support	Live telephone support	✓*
	Remote technical support	✓*
	Remote clinical application support	✓*
	Premium training on Carestream Dental Institute	✓
	<b>CS UpStream**</b>	✓ optional

\* Not available in all countries

\*\* CS UpStream available from 2018 Year-end



# Taking service and support to a whole new level

## CS UPSTREAM OPTION

- Innovative, 24/7 advanced monitoring service for your equipment
- Allows our service experts to track in real time the historical behavior of your equipment
- Enables you to increase productivity, maximize efficiency and stay focus on your patients



## ▶ BENEFITS

- Leads to faster, more responsive service
- Accelerates trouble shooting
- Enables proactive support
- Saves iterative onsite visits
- Reduces equipment downtime



**CS UpStream**



# Configurations and Options



# Configurations and options



Unit Type	12x10 Edition	16x10 Edition	16x17 Edition
Max FOV (Dxh)	12x10	16x10	16x17
FOV available	4x4-5x5-6x6-8x5-5x8-8x8 10x5-10x10-12x5-12x10	4x4-5x5-6x6-8x5-5x8-8x8 10x5-10x10-12x5-12x10 16x6-16x10	4x4-5x5-6x6-8x5-5x8-8x8 10x5-10x10-12x5-12x10 16x6-16x10-16x12-16x17
2D panoramic, sinus	●	●	●
CBCT imaging	●	●	●
CBCT object scanning*	●	●	●
Low Dose (2D / 3D)	●	●	●
Live Positioning Assistant (2D / 3D)	●	●	●
Ceph ready	●	●	●
<b>Options</b>			
CS SmartAuto Package	○	○	○
CS MAR (Metal Artifact Reduction)	○	○	○
Extraoral FMS	○	○	○
120 kV (3D imaging)	○	○	○
CS Face Scan*	○	○	○
Integrated seat	○	○	○
Advanced Radiology feature*	○	○	○



# Comparison between our 3D systems



	CS 8100 3D	CS 9300 Select CS 9300	CS 9600 12x10 Edition	CS 9600 16x10 Edition	CS 9600 16x17 Edition
Fields Of View	4x4, 5x5, 8x5, 8x9	5x5, 8x8, 10x5, 10x10, 17x6, 17x11, 17x13.5	4x4, 5x5, 6x6, 8x5, 5x8, 8x8, 10x5, 10x10, 12x5, 12x10	4x4, 5x5, 6x6, 8x5, 5x8, 8x8, 10x5, 10x10, 12x5, 12x10, 16x6, 16x10	4x4, 5x5, 6x6, 8x5, 5x8, 8x8, 10x5, 10x10, 12x5, 12x10, 16x6, 16x10, 16x12, 16x17
Panoramic Modality	✓	✓	✓	✓	✓
Cephalometric Modality	Optional	Optional	Ceph Ready*	Ceph Ready*	Ceph Ready*
Practices / Specialties	General practice Endodontics Periodontics	Implant Oral surgery Periodontics Orthodontics Oral and maxillofacial surgery Radiology centers Hospitals	General practice Endodontics Implant Oral surgery Periodontics	Implant Oral surgery Periodontics	Oral and maxillofacial surgery Radiology centers Hospitals ENT



# Technical specifications

Tube voltage	60 - 90 kV / 60 – 120 kV (optional)	
Tube current	2 - 15 mA	
Frequency	140 kHz	
Tube focal spot	0.3 or 0.7 mm	
Total filtration	> 2.5 mm eq. Al	
Input voltage (AC)	100 - 240 V 50/60 Hz	
Minimum required space	1500 (L) x 2000 (D) x 2200 (H) mm (without seat or when seat is installed on the left) 1900 (L) x 2000 (D) x 2200 (H) mm (when seat is installed on the right)	
Weight	210 kg	
	<b>Panoramic Modality</b>	<b>3D Modality</b>
Sensor technology	CMOS	CMOS
Image field	6.4 x 140 mm (for adult patient size) 6.4 x 120 mm (for child patient size) 120 x 140 mm (for sinus one-shot exam)	Field of View (cm): 4 x 4, 5 x 5, 5 x 8, 6 x 6, 8 x 5, 8 x 8, 10 x 5, 10 x 10*, 12 x 5, 12 x 10*, 16 x 6, 16 x 10*, 16 x 12, 16 x 17 * *with tip of the volume
Gray scale	16384 - 14 bits	16384 - 14 bits
Magnification	1.28	1.4
Radiological exam options	Full panoramic, segmented panoramic, bitewing, maxillary sinus, LA TMJ x 2, LA TMJ x 4, sinus AP / PA / Lateral, orthodontic panoramic	Tooth / Teeth, Full, upper or lower jaw, TMJ, Face, ENT, Upper cervical spine, Wrist
Exposure mode	4 patient sizes (Child. Adult: small, medium, large) 3 dental arch morphology (normal, square, sharp)	HR, Standard, Low Dose





# Dimensions

