Carestream DENTAL

PRODUCT GUIDE

Your Practice.
Your Solutions.

Why have we created this product guide?

This brochure aims to help you choose the right products from Carestream Dental for your practice.

With this in mind, we have summarised the most important advantages and selling points of our digital radiography and imaging systems, software and applications.

Our service offerings for you

CS Advantage

CS Advantage is a Carestream Dental service product built around three main pillars: warranty protection, software update and support programs. Depending on the product, our extended service offering CS Advantage or our warranty extension CS Protect covering all parts are available to protect your investment.

CS Protect

- Covers warranty extensions on all parts
- Provides a safeguard against unexpected equipment repairs in the event of failure or malfunction by extending the manufacture's standard warranty
- Offers fast equipment repair and replacement turnaround times to reduce downtime and prevent disruption to practice workflow

CS Update

- Keeps you informed of the latest software updates as they become available
- Ensures you always have access to the latest technology and software innovations
- Facilitates software maintenance, updates and enhancements through a simple download link and license key

CS Support

- Through site visits, phone support and troubleshooting our business partners keep your systems up and running
- Additional support is available depending on country and/or product range (e.g., online community, webinars)

Intraoral imaging

CS 1500
Intraoral Camera

The ideal communication tool for any dental practitioner.

Features and benefits

- Best-in class image quality and resolution
- Patented true autofocus technology
- With built-in Wi-Fi support, the camera provides total freedom of movement
- White LED exposure ensures uniform and bright illumination
- Intraoral and extraoral imaging
- Compatible with computer and video screens
- Available as wired and wireless configuration

Technical specifications	
Sensor	Micron 1/2.5 CMOS
Video resolution	640 (H) x 480 (V)
Image resolution	1024 (H) x 768 (V)
Focus range	1 mm to infinity
Angle of view	90°
Field of view	80°
Focus	Autofocus
Light source	8 White LED array
Video output	TV-NTSC, TV-PAL, VGA, S-Video
Connection	USB 2.0

Intraoral imaging

CS 1200
Intraoral Camera

Superior image quality at an affordable price.

Features and benefits

- High image resolution (1024 x 768)
- Easy to share, supporting both PC and analog display
- Lightweight and compact
- The rounded head and tapered shape of the camera ensure patient comfort
- Six LED illumination system automatically adjusts to ensure perfectly lit images in any lighting condition
- Stores up to 300 images within the camera itself, eliminating the need for memory cards or multiple computers

Technical specifications	
Sensor	Micron 1/2.5 CMOS
Video resolution	640 (H) x 480 (V)
Image resolution	1024 (H) x 768 (V)
Focus range	3 mm – 25 mm
Angle of view	90°
Field of view	80°
Focus	Fixed Focus
Light source	6 White LED array
Video output	TV-NTSC, TV-PAL, VGA, S-Video
Connection	USB 2.0
Recommended PC requirements see page 38	

Intraoral imaging

CS 2100
Intraoral X-Ray System

Sharp, high contrast images with an affordable
high frequency generator.

Features and benefits

- High-frequency DC technology at the price of a conventional generator
- Sharp and high-contrast images for easy diagnosis
- Easy-to-use and fast-setting generator thanks to its improved timer design
- Dose display after each exposure
- Ideal for digital sensors, analog films or phosphor plates
- Multiple configurations available

Intraoral imaging

CS 2200
Intraoral X-Ray System

Superior digital image quality and accurate diagnoses in any environment.

Features and benefits

- Maximum image quality with minimum exposure
- Total control on tube voltage (60 or 70 kV) for high contrasted or high latitude images
- Intuitive and easy-to-use
- Ideal for digital sensors, analog films or phosphor plates
- High frequency for better patient safety - reduces the radiation dose up to 25% in comparison with a standard generator
- Dose display after each exposure
- Multiple configurations available, a mobile or fixed column mount, as well as wall mounting option fully compatible with the Irix installed base

Wall Mount

Irix Mount

Complete unit with wall mount for replacing existing IRIX systems as well as a variety of other popular manufacturers' systems. Existing holes can be used for wall mounting

Technical specifications	
Power supply	230 – 240 V
X-ray generator	Very high frequency – DC (300 kHz)
Tube voltage	CS 2100: 60 kV CS 2200: 60 kV, 70 kV
Tube current	7 mA
Tube focal spot	0.7 mm IEC
Focal spot/skin distance	200 mm
X-ray units are also available with 100-110-130 V	

Intraoral imaging
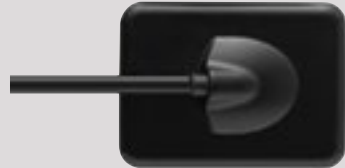
RVG 6200
Digital Radiography System

Maximum diagnostic precision. Film-quality digital images. Perfect for any dental application.

Features and benefits

- 24 lp/mm true image resolution promotes maximum diagnostic precision
- Customized image contrast according to diagnostic need
- Ergonomically optimized rear entry cable attachment facilitates comfortable positioning
- Sensor cable is 20% thinner and more flexible than previous models of RVG sensors
- Workflow is reduced by two steps and is optimized to the extreme: Position. Expose. View.
- Simplified installation process verifies that the sensor is installed correctly
- Better diagnostic and improved workflow with CS Adapt (for details see page 36)

Optimized Contrast   Optimized Smooth   Ultra Speed   Insight

Technical specifications	Sensor size 1	Sensor size 2
True image resolution*	> 24 lp/mm	> 24 lp/mm
Pixel size	19 μm	19 μm
External dimensions	27.6 x 37.7 mm	32.2 x 44.2 mm
Dimensions of active area	22.2 x 29.6 mm	26.6 x 35.5 mm
Number of pixels	1.82 million	2.63 million
Sensor plate thickness	7.3 mm	7.3 mm
Purpose	All-purpose sensor	Bitewing examinations
Sensor	CMOS with optical fiber technology	
Connection	USB 2.0	
Recommended PC requirements see page 38		

*Did you know? Theoretical resolution is a calculation of what the sensor is capable of in an ideal world, based solely upon the number of pixels and pixel size of the CMOS sensor. In contrast, true resolution adds in the components of the finished product, including sealants, shock layers, scintillators, and protective housing, as well as detector noise and scanner vibrations, to determine the measured resolution in lp/mm.
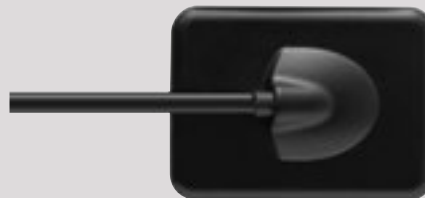
Intraoral imaging

RVG 5200
Digital Radiography System

Intuitive intraoral imaging.
Affordable price.

Features and benefits

- An ideal solution for basic intraoral imaging needs
- Exceptional images quickly and easily
- Advanced image processing tools
- 16 lp/mm true image resolution
- Affordable entry point into digital intraoral imaging

Technical specifications		
	Sensor size 1	**Sensor size 2**
True image resolution*	16 lp/mm	16 lp/mm
Pixel size	19 µm	19 µm
External dimensions	27.6 x 37.7 mm	32.2 x 44.2 mm
Dimensions of active area	22.2 x 29.6 mm	26.6 x 35.5 mm
Number of pixels	1.82 million	2.63 million
Sensor plate thickness	7.3 mm	7.3 mm
Purpose	All-purpose sensor	Bitewing examinations
Sensor	CMOS with optical fiber technology	
Connection	USB 2.0	

*Did you know? Theoretical resolution is a calculation of what the sensor is capable of in an ideal world, based solely upon the number of pixels and pixel size of the CMOS sensor. In contrast, true resolution adds in the components of the finished product, including sealants, shock layers, scintillators, and protective housing, as well as detector noise and scanner vibrations, to determine the measured resolution in lp/mm.

Comparative Matrix for RVG Range

Features	RVG 5200	RVG 6200
Topline Advantages	• Best value • Resolution/price balance	• Direct to USB • Streamlined, three-step workflow • Highest resolution
Pedodontic sensor – Size 0		
Size 1 and 2 sensors	✓	✓
Automatic FMS	✓	✓
Waterproof	✓	✓
Specialized positioners	✓	✓
Shock resistant	✓	✓
Optimal patient comfort	✓	✓
Instant image acquisition	✓	✓
High resolution	✓	✓
USB Connectivity	✓	✓
Best-in-class warranty	✓	✓
Advanced image enhancement	✓	✓
TWAIN compatible	✓	✓
Film-quality resolution		✓
Caries detection		✓
Wi-Fi enabled		
CS Adapt image processing module		✓

Use the comparative matrix below to select the best sensor model and sensor size based on the practitioner's specialty or intended use.

Systems	Size 1		Size 2	
	RVG 5200	**RVG 6200**	**RVG 5200**	**RVG 6200**
General diagnostics	●●	●●●	●●	●●●
Caries detection	●●	●●●	●●	●●●
Endodontics	●	●●●	●	●●●
Implantology	●●	●●●	●●	●●●
Pedodontics	●	●●		
Periodontics	●●	●●●	●●	●●●

●Good   ●●Better   ●●●Best
Please note bullets are simply a recommendation based on feedback from our thought leaders and users. One bullet indicates it meets the basic requirements for the application. Three bullets indicates it is the best choice.

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Intraoral imaging

CS 7200
Intraoral Imaging Plate System

The everyday digital system that's as easy as film. With its slim, compact design, the CS 7200 is the
perfect chairside system for routine intraoral exams and an easy, affordable digital solution for your practice.

Features and benefits

- True resolution up to 19 lp/ml
- Covers most intraoral indications including periapical, bitewing and pediatric exams
- Space-saving design and quite scanning
- Simple workflow – no clicks required
- Thin, flexible plates
- Better diagnostic and improved workflow with CS Adapt ([for details see page 36](#))

Technical specifications		
Imaging plate scanning resolution	Ultra high resolution	19 lp/mm
	High resolution	14 lp/mm
	High speed	8 lp/mm
Plate Sizes	Size 0 – 22 mm x 35 mm Size 1 – 24 mm x 40 mm Size 2 – 31 mm x 41 mm	
Power supply	100-240 V (ac), 50/60 Hz, 1.2 A	
Connectivity	USB	
System dimensions	270 (H) x 130 (W) x 300 (D) mm	
Weight	3.5 kg	
Recommended PC requirements see page 38		

Intraoral imaging

CS 7600
Intraoral Imaging Plate System

The first imaging plate system to feature a fully automated and secure workflow designed to improve productivity and user experience by allowing multiple operators to use the system on multiple patients at the same time, with no waiting required and no risk of errors.

Features and benefits

- High image resolution (up to 18 lp/mm) with a wide exposure range
- First image viewable in as few as 5 seconds. Full Mouth Series from 2-6 minutes
- Can be used by multiple users at the same time
- Built-in memory eliminates the risk of lost images and allows users to scan plates during network failure
- **Scan & Go** technology
  - Fully secure and automated workflow, avoiding plate mix-up, confusion, and mistakes
  - Secured multi-patients and multi-users management at the same time
  - Bulk scanning reduces operating time
- Remote services help reduce downtime and optimize service cost
- Better diagnostic and improved workflow with CS Adapt (for details see page 30)

Technical specifications		
Imaging plate scanning resolution	Super high resolution	17 lp/mm
	High resolution	14 lp/mm
	High speed	8 lp/mm
Plate Sizes	Size 0 – 22 mm x 35 mm Size 1 – 24 mm x 40 mm Size 2 – 31 mm x 41 mm Size 3 – 27 mm x 54 mm Size 4 – 57 mm x 76 mm	
Power supply	100-240 V (ac), 50/60 Hz, 1.5 A	
Display	7.5 cm (3.5") color LCD display	
Unit dimensions (without bracket)	266 (H) x 237 (W) x 259 (D) mm	
Weight	6 kg	
Recommended PC requirements see page 38		

Extraoral Imaging

CS 8100
Extraoral Imaging System

The sleek and simple panoramic unit that's ideal for every-day use. Blending advanced technologies in an ultra-compact design, the system provides everything you need to capture high-quality, crystal-clear images in seconds.

EXCLUSIVE 2D+ TECHNOLOGY

reddot design award winner 2013

Features and benefits

- Compact, slim unit – perfect for tight spaces
- Versatile imaging programs cover all your daily panoramic needs
- Use artifact-free image filters to adjust contrast and sharpness with one click
- Acquire images in 10 seconds; then access them instantly
- Convenient and practical face-to-face patient positioning
- Includes our user-friendly and powerful imaging software
- Exclusive 2D+ Technology: allows for buccal/lingual exploration and visualization of multiple slices for more details than ever
- Better diagnostic and improved workflow with CS Adapt (for details see page 30)

NEW

- Tomosharp technology - brand new algorithm delivers best-in-class panoramic images
- New family of CS Adapt filters deliver outstanding panoramic and cephalometric images

Extraoral Imaging

CS 8100 3D
Extraoral Imaging System

The CS 8100 3D combines 2D and 3D imaging in one unit, helping general practitioners, endodontists, periodontists and other specialists alike fulfill all of their routine imaging needs.

Features and benefits

- Provides best image quality for your investment
- Selectable 3D programs include four fields of view ranging from 4 x 4 cm to 8 x 9 cm
- Ultra-high resolution perfect for endodontic needs (75µm)
- Multifunction system covers a broad range of dental procedures
- Lightweight, ultra-compact unit fits easily in small spaces
- Delivers outstanding value; quick return on investment
- Easy to install, learn, and use
- Better diagnostic and improved workflow with CS Adapt (for details see page 36)
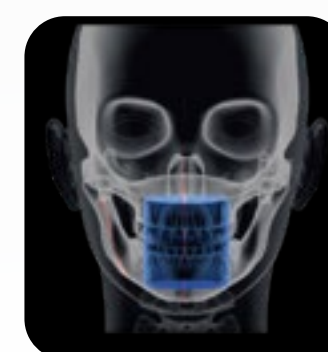
4 cm x 4 cm   5 cm x 5 cm   8 cm x 5 cm   8 cm x 9 cm

NEW

- Tomosharp technology - brand new algorithm delivers best-in-class panoramic images
- New family of CS Adapt filters deliver outstanding panoramic and cephalometric images
- Advanced noise reduction algorithm reduces noise while preserving image details
- CS MAR algorithm effectively reduces metal artifacts

CAD/CAM COMPATIBLE

Extraoral Imaging

CS 8100SC / CS 8100SC 3D
Extraoral Imaging System

The unit features the award-winning technology and compact design concept of the CS 8100 system but with the added benefit of advanced cephalometric imaging.

Features and benefits

- Same features as CS 8100 or CS 8100 3D system, plus cephalometric imaging, offering a range of new diagnostic possibilities
- Versatile cephalometric image formats: 26 x 24 cm, 18 x 24 cm and 18 x 18 cm
- Short exposure time reduces patient dose and the risk of motion blur
- Exclusive automatic tracings for faster diagnosis
- Optimized visualization thanks to orthodontic pre-set filters
- Advanced imaging technology ensures crystal-clear image capture
- Dual sensors – one for panoramic and cephalometric imaging, so there is no need to change the sensor between examinations
- Unrivalled combination of small size and powerful performance

EXCLUSIVE
AUTOMATIC TRACING

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Extraoral Imaging

CS 8100 Family

Technical specifications	
3D Modality	
Sensor	CMOS
Scan mode	Continuous and pulse
Exposure time	7 to 15 seconds
Field Of View (cm)	4 x 4 / 5 x 5 / 8 x 5 / 8 x 8 / 8 x 9
Voxel size (µm)	75µm minimum
Reconstruction time	Less than 2 minutes
Cephalometric Modality	
Technology	Scan
Sensor	CMOS
Gray scale	16384 – 14 bits
Image field	6.4 x 263.3 mm
Magnification	1.13 (± 10%)
Exposure time	3 to 10 seconds
Radiological exam options	Lateral, frontal AP or PA, oblique, submento-vertex, carpus (optional)
Cephalometric formats	26 x 24 cm, 18 x 24 cm and 18 x 18 cm
Minimum required space	1842 (L) x 1133 (D) x 1596 (min H) mm
Weight	107 kg

Technical specifications	
Panoramic Modality	
Sensor	CMOS
Gray scale	4096 - 12 bits
Sensor matrix	64 x 1312 pixels
Magnification	1.2 (± 10%)
Exposure time	2 to 12.5 seconds
Exposure mode	4 patient sizes (child, small, medium, large)
Radiological exam options	Full panoramic, segmented panoramic, maxillary sinus, LA TMJ x 2, LA TMJ x 4, 2D+
X-Ray Generator and other specifications	
Tube voltage	60 - 90 kV
Tube current	2 - 15 mA
Frequency	140 kHz
Tube focal spot	0.5 mm (IEC 60336)
Total filtration	> 2.5 mm eq. Al
Unit dimensions	330 (L) x 894 (D) x 1596 (H) mm
Weight	72 kg

Extraoral Imaging

CS 8200 3D Neo
Extraoral Imaging System

See more. Do more. Right in your practice.
The CS 8200 3D Neo Edition is a versatile and compact CBCT system featuring an extended field of view – ideal for practices that want to cover a broader range of indications or expand their treatment capabilities.

Features and benefits

- Up to 9 selectable fields of view – ranging from 4 cm x 4 cm to 12 cm x 10 cm (optional)
- Exclusive CS MAR technology with live comparison automatically reduces metal artifacts and helps confirm diagnosis and reduces the risk of misinterpretation.
- The advanced noise reduction algorithm reduces image noise while preserving clinical details and improves perception of the cortical bone edge, ligament space, soft tissues and other small details.
- Thanks to the new Tomosharp technology and advanced image processing, the CS 8200 3D Neo delivers panoramic, cephalometric and extraoral bitewing images with impressive sharpness.
- Low dose panoramic mode produces crystal-clear images with up to a 50% lower dose.
- EndoHD mode delivers extremely high-resolution images (up to 75 µm), perfectly suited for endodontic indications.
- CS Imaging Version 8 connects all Carestream Dental imaging and CAD/CAM technologies into a single platform – the first step to an effective digital workflow.
- Multi-functional imaging system that blends 2D panoramic technology and CBCT imaging with 3D model scanning to create one powerful unit, which can also be upgraded to include cephalometric imaging.
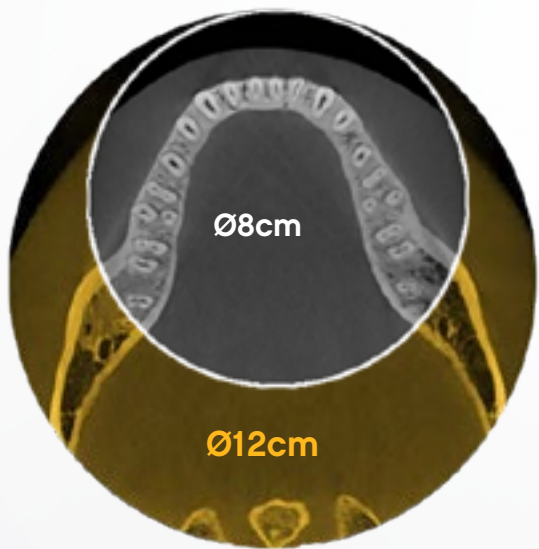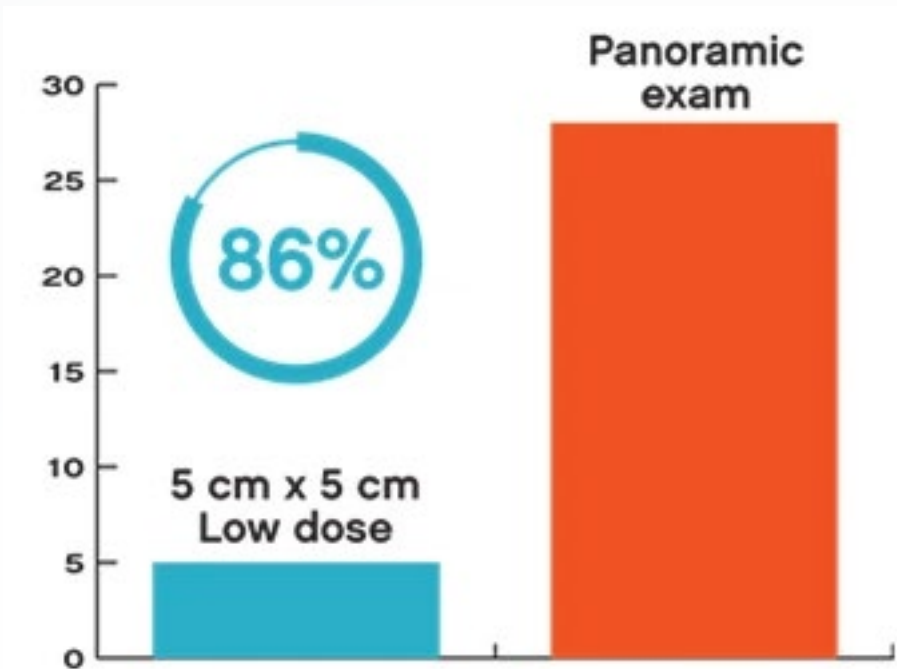
CS Advantage

C A D / C A M COMPATIBLE

Extraoral Imaging

CS 8200 3D Neo

Extended diameter (+50%)
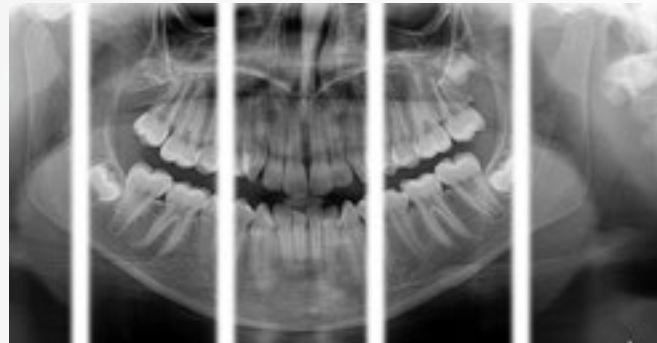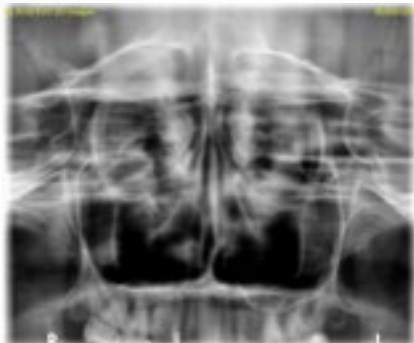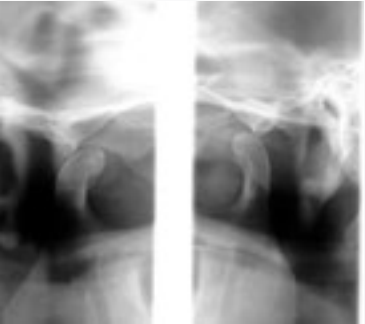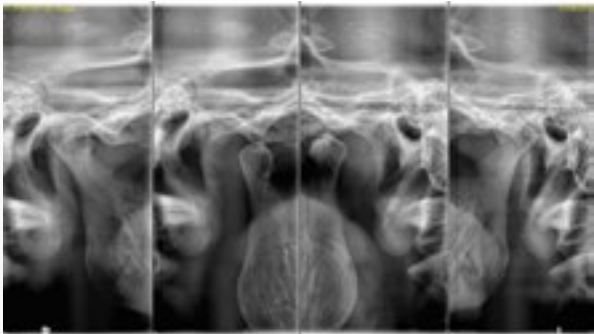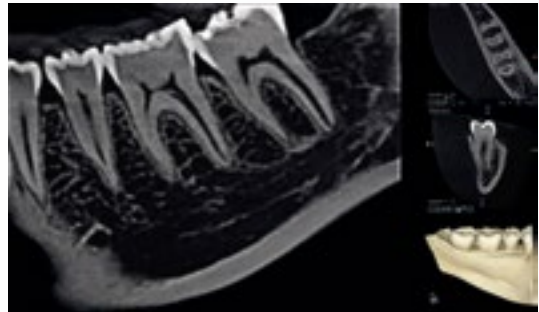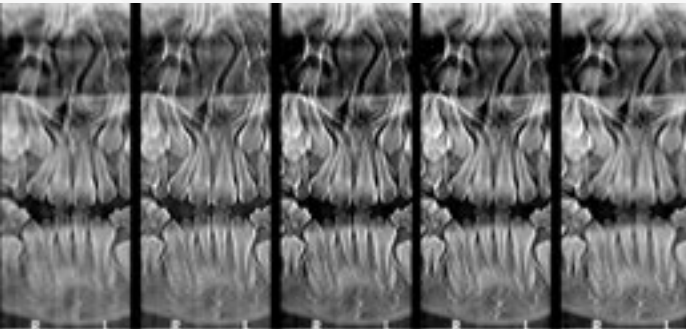
Ø8cm
Ø12cm

12 x 10 cm (CS 8200 3D Neo)

Panoramic exam
86%
5 cm x 5 cm Low dose

Technical specifications	
Tube voltage	60 - 90 kV
Tube current	2 - 15 mA
Frequency	140 kHz
Tube focal spot	0.7 mm with X-ray tube OPX110 / 0.6 mm with X-ray tube D-067
Total filtration	> 2.5 mm eq. Al
Input voltage (AC)	100 - 240 V 50/60 Hz
Minimum required space	Without ceph arm: 1200 (L) x 1400 (D) x 2400 (H) mm With ceph arm: 2000 (L) x 1400 (D) x 2400 (H) mm
Weight	Without ceph arm: 92 kg (202 lb.) With ceph arm: 127 kg (280 lb.)

	Panoramic Modality	Cephalometric Modality	3D Modality
Sensor technology	CMOS	CMOS	CMOS
Image field	6.4 x 140 mm (Adult) 6.4 x 120 mm (Pediatric)	6.4 x 263.3 mm	Field of View (cm): 4 x 4 / 5 x 5 / 8 x 5 / 8 x 8 / 8 x 9 / 12 x 5 / 12 x 10*
Gray scale	16384 - 14 bits	16384 - 14 bits	16384 - 14 bits
Magnification	1.2	1.13	1.4
Radiological exam options	Full panoramic, segmented panoramic, maxillary sinus, LA TMJ x 2, LA TMJ x 4	Lateral, frontal AP or PA, oblique, submento-vertex, carpus (optional)	Full, upper or lower jaw - Full, upper or lower molar – Occlusion - Teeth
Exposure mode	4 patient sizes (Child. Adult: small, medium, large) 3 dental arch morphology (normal, square, sharp)	4 patient sizes (Child. Adult: small, medium, large)	High Definition (75 μm), Standard, Fast and low dose
Exposure time	2 to 14 seconds	2.9 to 11 seconds	3 to 20 sec

Clinical Indications CS 8100 Family / CS 8100 3D Family / CS 8200 3D Neo Family

PANORAMIC IMAGING	CEPHALOMETRIC IMAGING	3D IMAGING

Standard panoramic

Pediatric panoramic

Segmented panoramic

Maxillary sinus

Lateral TMJ x2

Lateral TMJ x4

2D+

Cranial format 26 cm x 24 cm

Standard format 18 cm x 24 cm

Reduces format 18 cm x 18 cm

Lateral view

Frontal views (AP/PA)

Carpus

Universal field of view 5 cm x 5 cm

Pediatric mode 4 cm x 4 cm

Endo HD mode 5 cm x 5 cm

Single jaw mode 8 cm x 5 cm

Dual jaw mode 8 cm x 9 cm

12 x 10cm*

* Only available for CS 8200 3D family

Extraoral Imaging

CS 9600
So smart, yet so simple

The world's most intelligent CBCT system is smarter and more versatile than ever. The system features intelligent innovations and automated workflow technologies to ensure reliable patient positioning and reproducible image quality. And for a future the system can grow with your practice – thanks to upgradeable fields of view, versatile imaging options and added-value software.

Features and benefits

- **75 microns resolution on all fields of view up to 10 cm x 10 cm,** providing a full-mouth status in high resolution.
- Available in three upgradable versions – 12 cm x 10 cm, 16 cm x 10 cm, 16 cm x 17 cm
- Patient positioning with cameras
- SmartAuto Pan and SmartAuto 3D analyze the patient morphology and density to automatically calculate the right exposure settings and trajectory, or to precisely define the field-of-view position
- A sleek, modern touch screen and clear user interface guide you through the entire exam protocol
- CS MAR automatically reduces metal artifacts for better image quality, including exclusive live comparison feature
- Stellar Technology reduces beam hardening artifacts and improve contrast without increasing dose, thanks to the 120 kV X-ray tube and intelligent filtration
- Capture realistic 3D facial photos with the optional CS Face Scan, and automatically superimpose the surface scans on CBCT images and 3D models

NEW:

- Cephalometric capabilities using state-of-the-art scanning ceph technology and automatic tracing
- Brand new tomosharp algorithm delivers best-in-class panoramic images
- AI-powered positioning automatically detects the Francfort plane to reduce risk of mistake and to obtain consistent results even more easily
- Advanced noise reduction algorithm reduces image noise while preserving image details
- Audio communication enables clear and direct communication with patient during the procedure

* Only available in combination with CS Advantage

CS UpStream

C A D / C A M COMPATIBLE

CS Advantage

Extraoral Imaging

CS 9600

FLEXIBILITY WITH UP TO 14 FIELDS OF VIEW AVAILABLE

	4 x 4 cm / 5 x 5 cm / 6 x 6 cm	5 x 8 cm	8 x 5 cm / 10 x 5 cm / 12 x 5 cm	8 x 8 cm / 10 x10 cm	12 x 10 cm	16 x 6 cm	16 x 10 cm	16 x 12 cm	16 x 17 cm
CS 9600 12x10 Edition — 10 FOVs Available: **Specialty:** General Dentistry, Implants, Periodontics, Prosthodontics, Oral Surgery	✔	✔	✔	✔	✔	Upgradeable	Upgradeable	Upgradeable	Upgradeable
CS 9600 16x10 Edition — 12 FOVs Available: **Specialty:** Implants, Oral and Maxillofacial Surgery, Periodontics, Prosthodontics	✔	✔	✔	✔	✔	✔	✔	Upgradeable	Upgradeable
CS 9600 16x17 Edition — 14 FOVs Available: **Specialty:** Oral and Maxillofacial Surgery, Orthodontics, Radiology, ENT	✔	✔	✔	✔	✔	✔	✔	✔	✔

UPGRADEABLE

Extraoral Imaging

CS 9600

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 (without ceph)	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)
Minimum required space (with ceph)	2050 (L) x 2000 (D) x 2200 (H) mm (without seat or when seat is installed on the left) 2290 (L) x 2000 (D) x 2200 (H) mm (when seat is installed on the right)
Weight	Without ceph arm: 210 kg – With ceph arm: 240 kg

| Technical specifications	Panoramic Modality	Cephalometric Modality	3D Modality
Sensor technology	CMOS	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)	6.4 x 263.3 mm	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	16384 - 14 bits
Magnification	1.28	1.13	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	Lateral, frontal AP or PA, oblique, submento-vertex, carpus (optional)	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)	4 patient sizes (Child. Adult: small, medium, large)	HR, Standard, Low Dose

Clinical Indications CS 9600
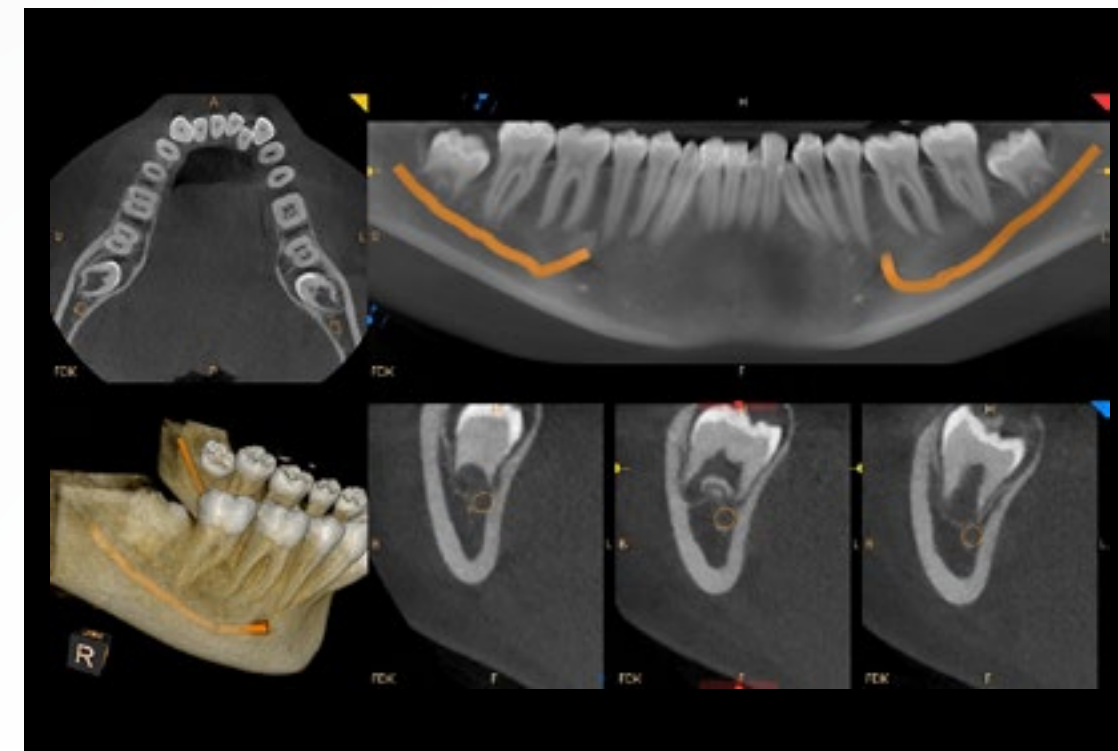
IMPLANTS
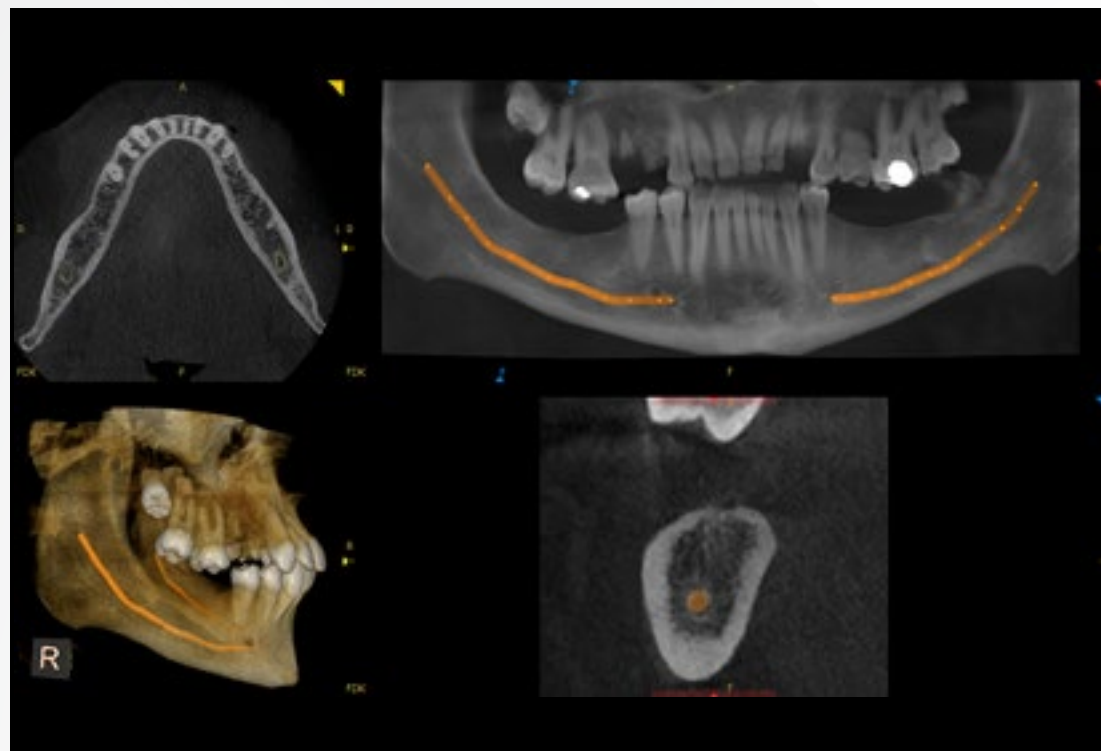
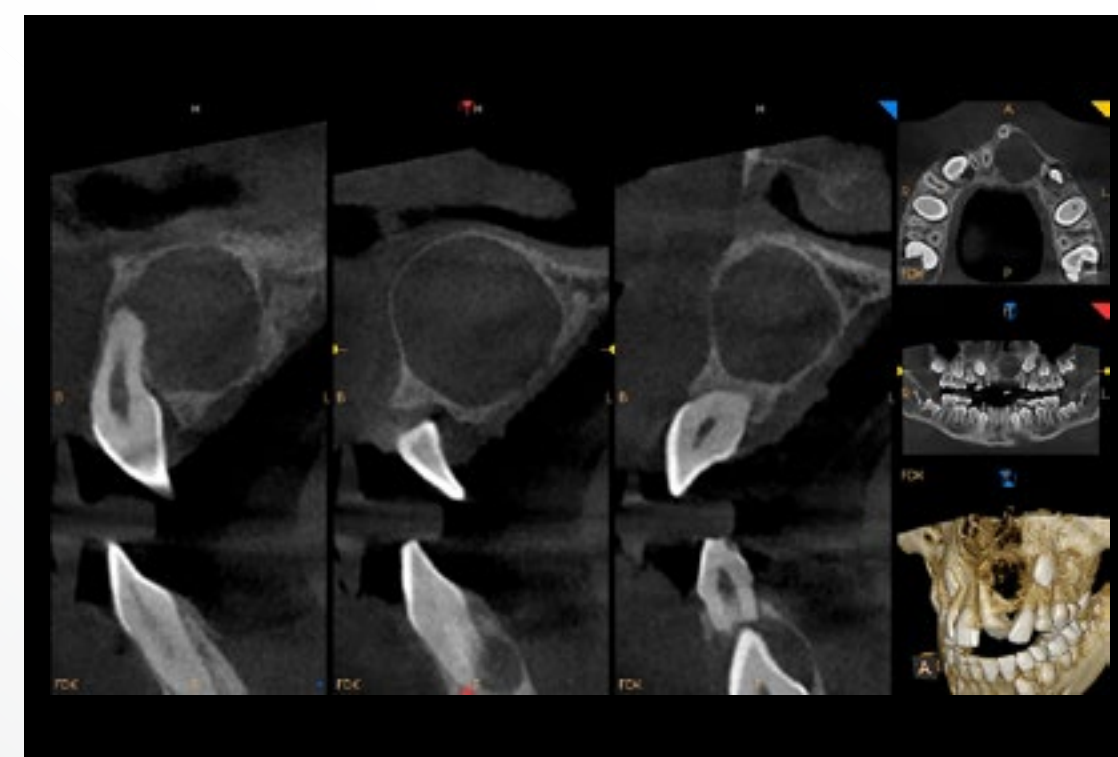Evaluate bone quantity and quality, and localize anatomical obstacles.
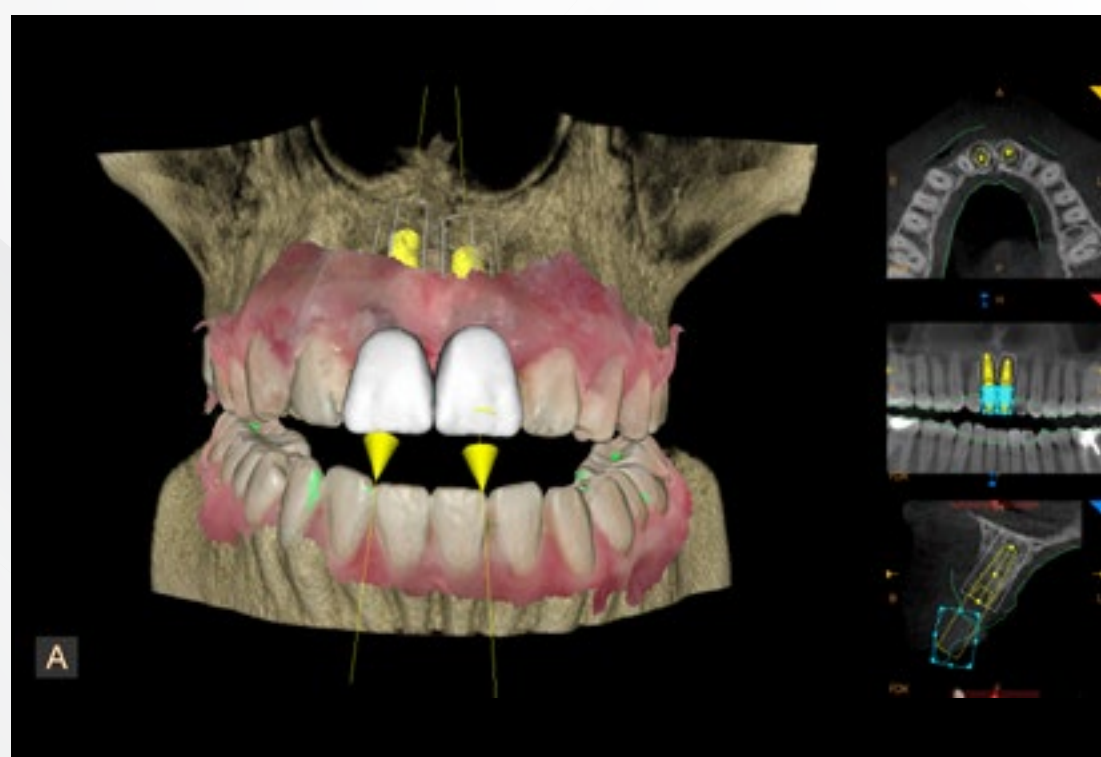
Plan implants with confidence using virtual crowns and comprehensive implant library.

ORAL SURGERY

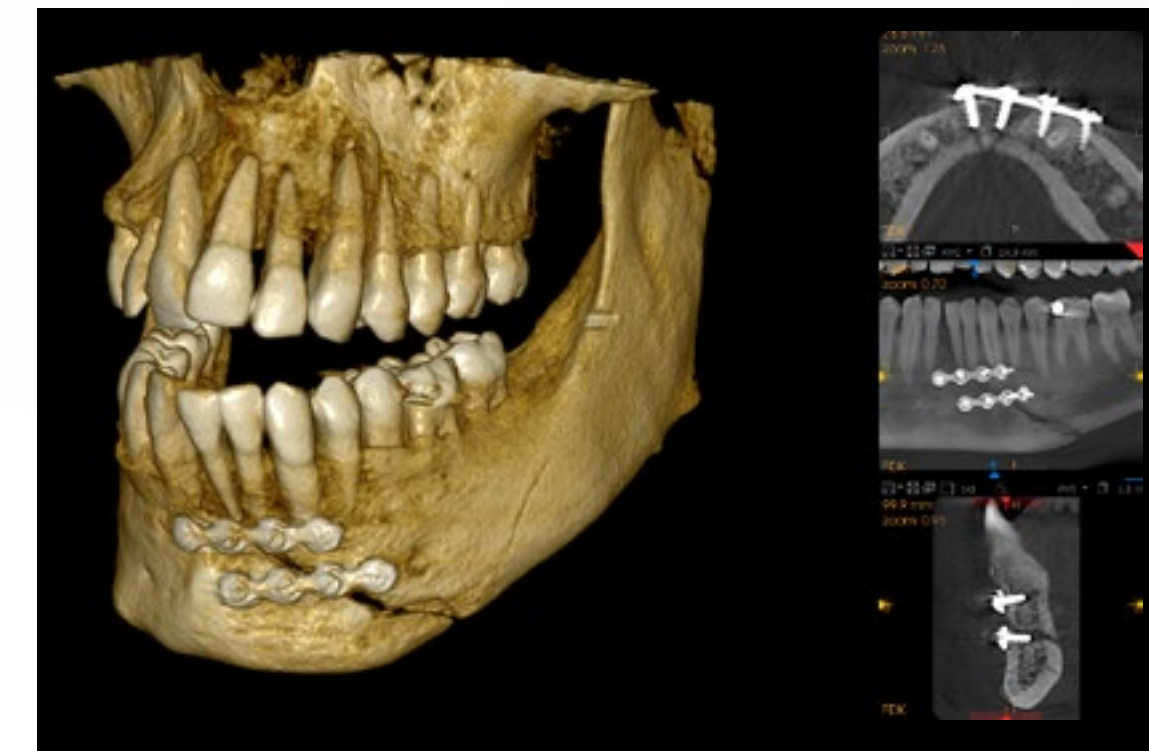Identify relationships between impacted teeth and vital anatomical structures.

Visualize cysts and define surgical protocol for removal.

ORAL AND MAXILLOFACIAL SURGERY

Make pre-operative and post-operative assessments.
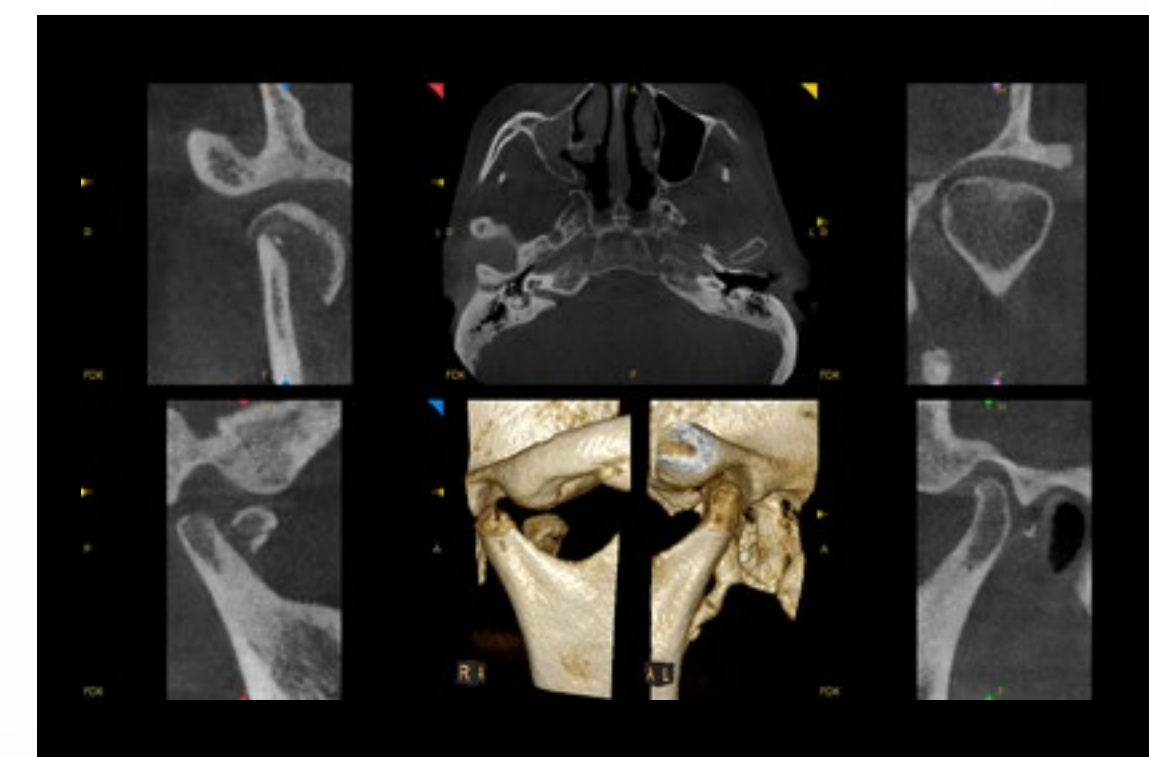
Assess TMJ dysfunction and fractures.

ORTHODONTICS

Follow orthodontic traction and communicate effectively with oral surgeon.

Evaluate impacted teeth and define the least invasive treatment.

Clinical Indications CS 9600

AIRWAY ANALYSIS

ENDODONTICS

CS MAR

TMJ ANALYSIS

PERIODONTICS
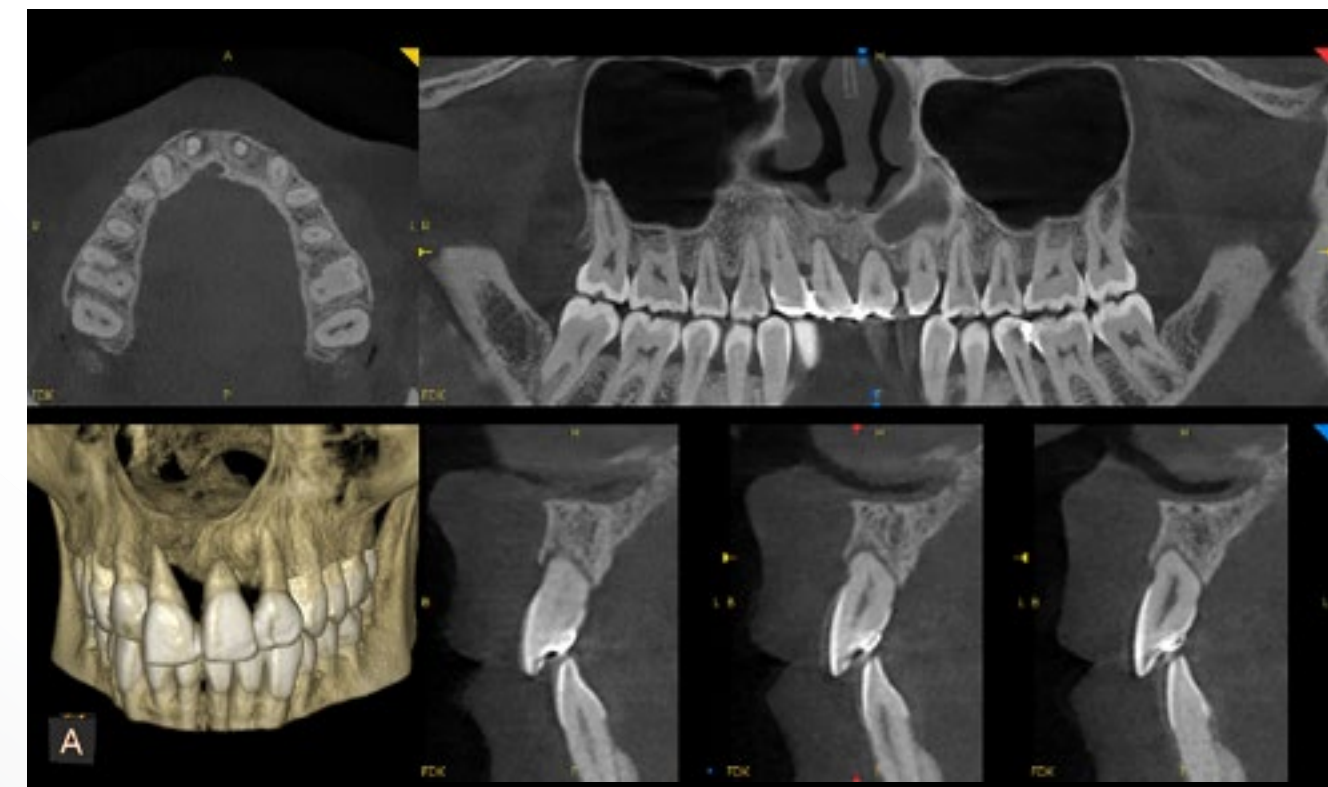
CS FACE SCAN
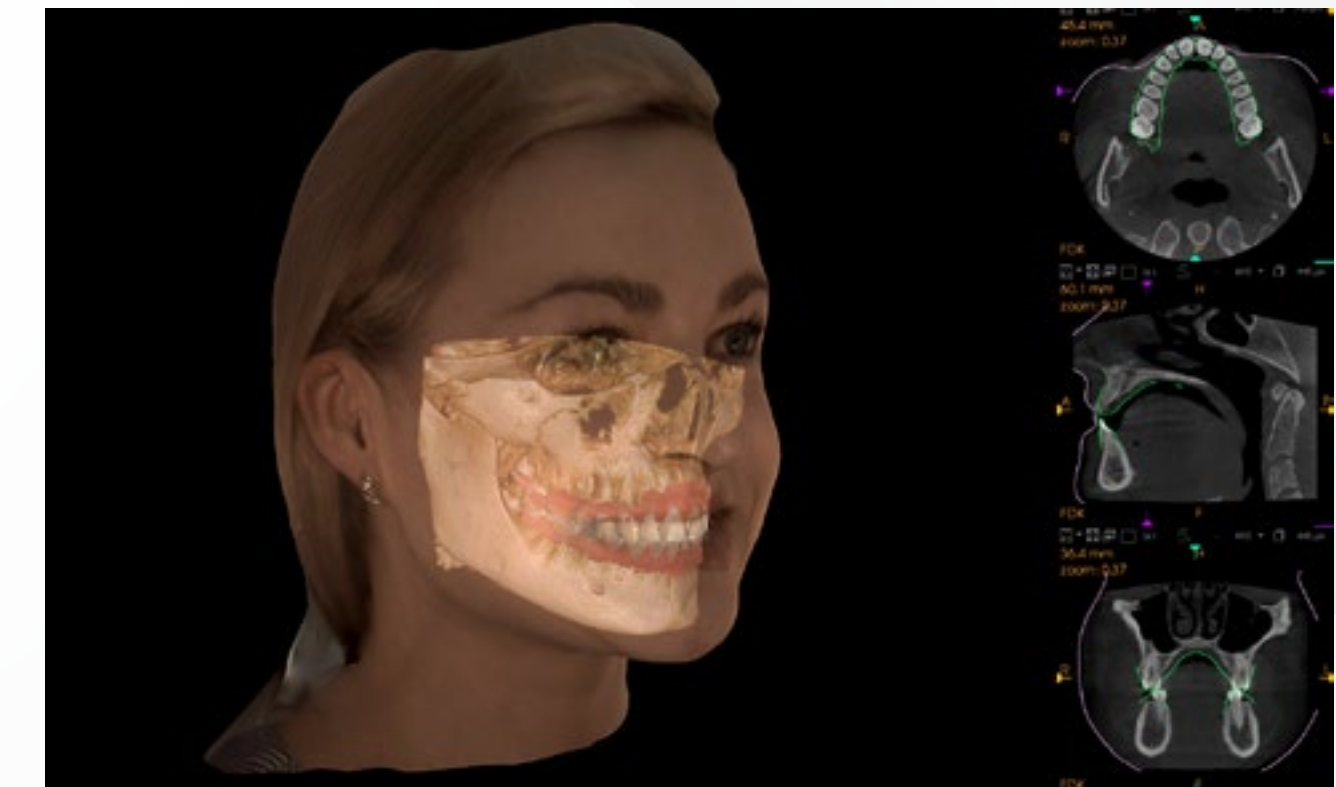
Comparative Matrix for Extraoral Range

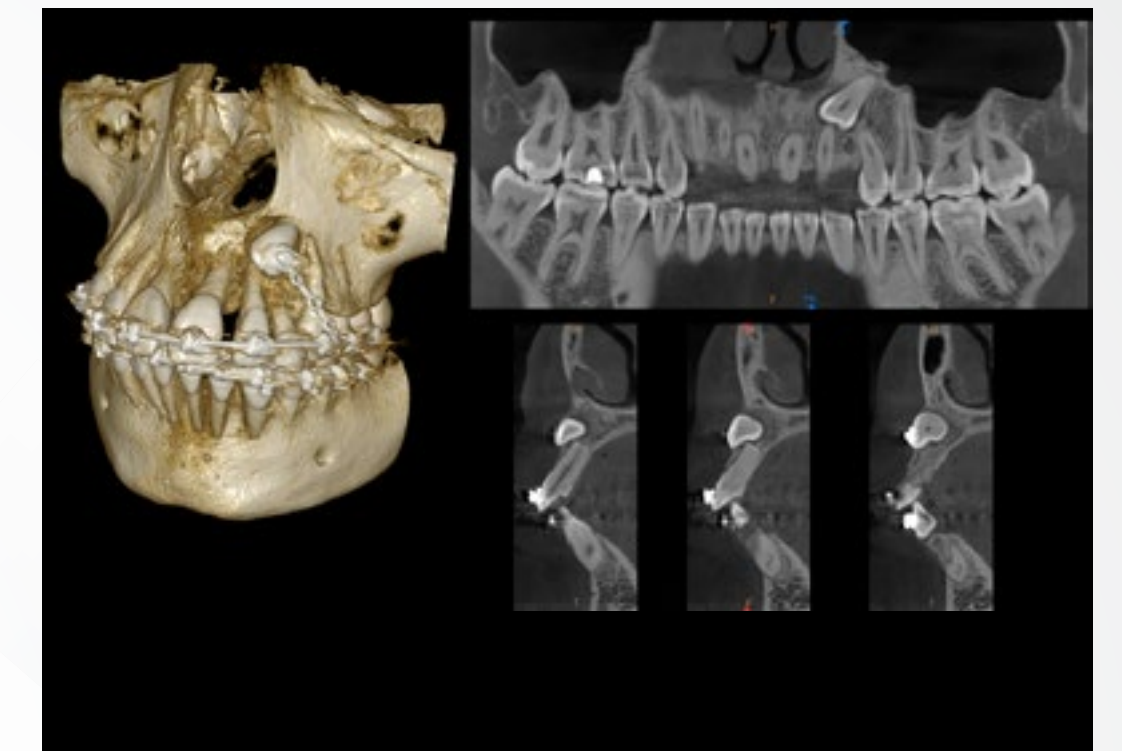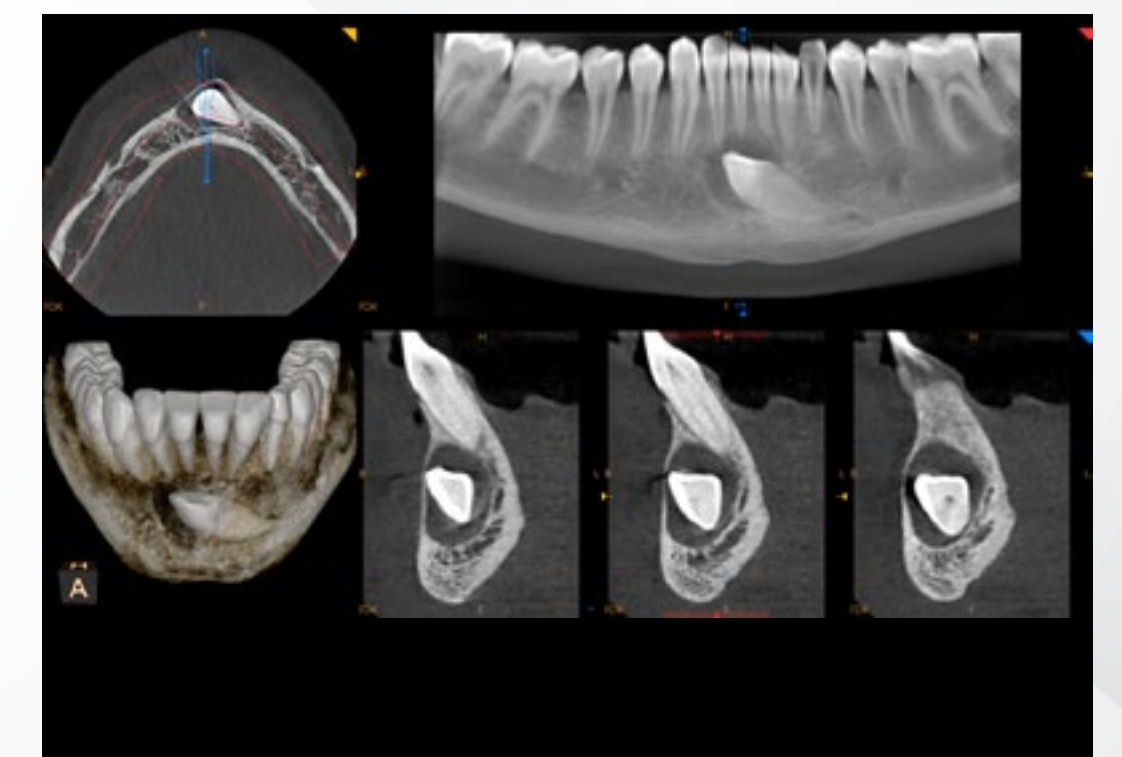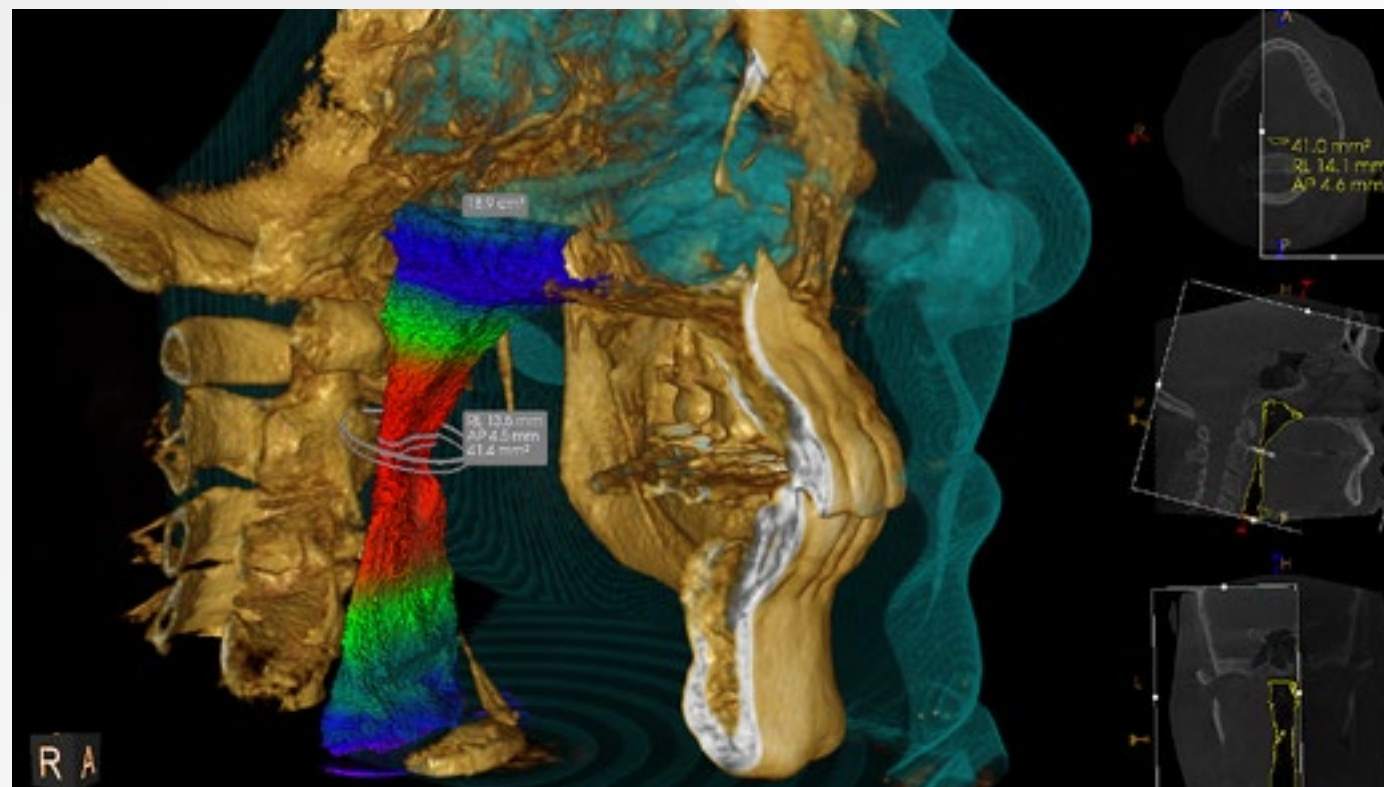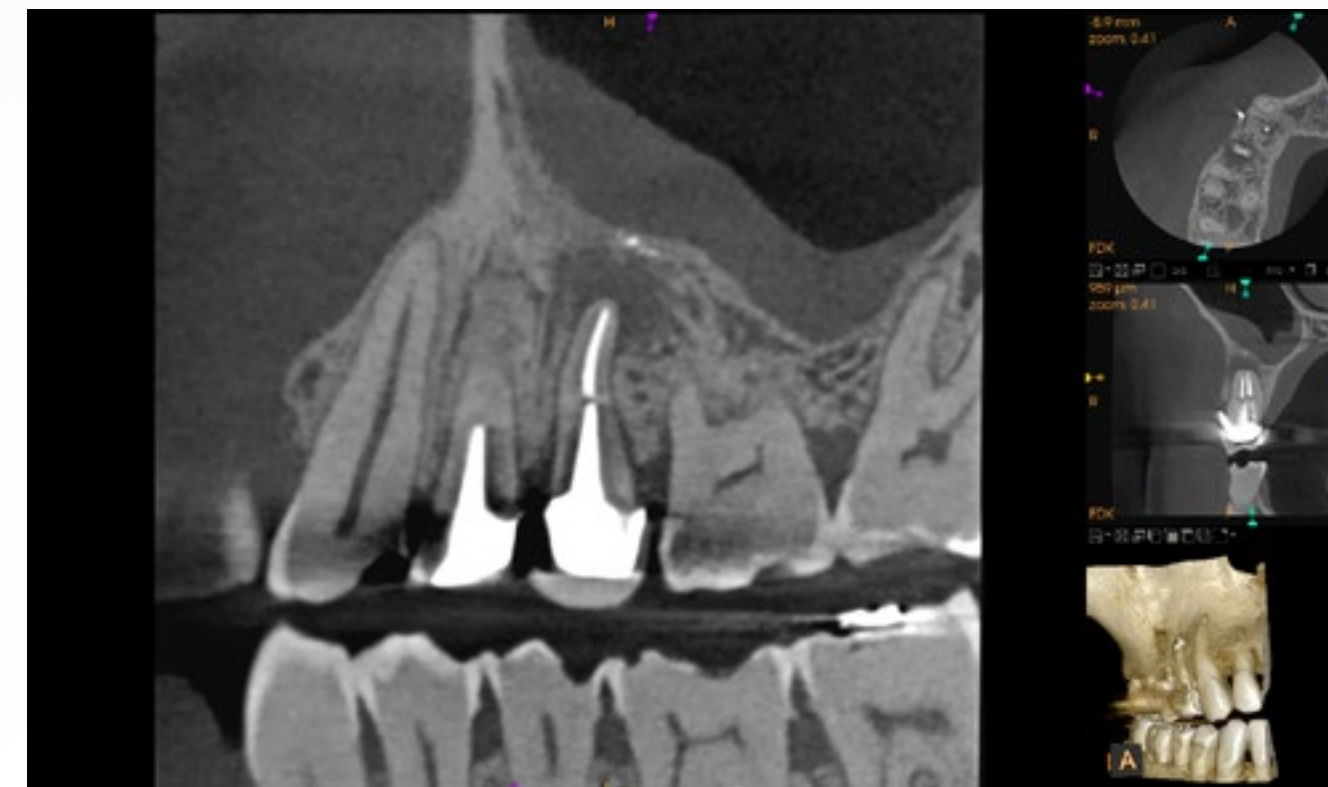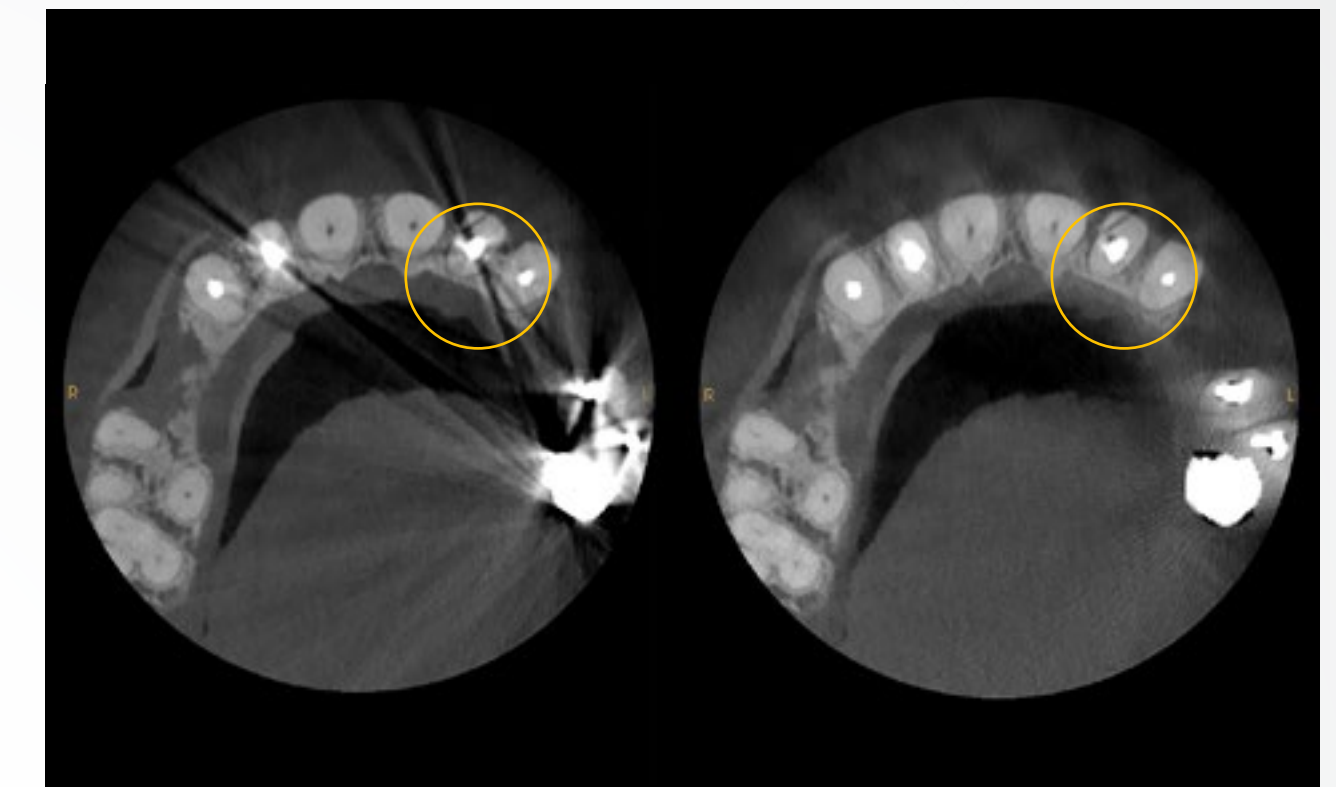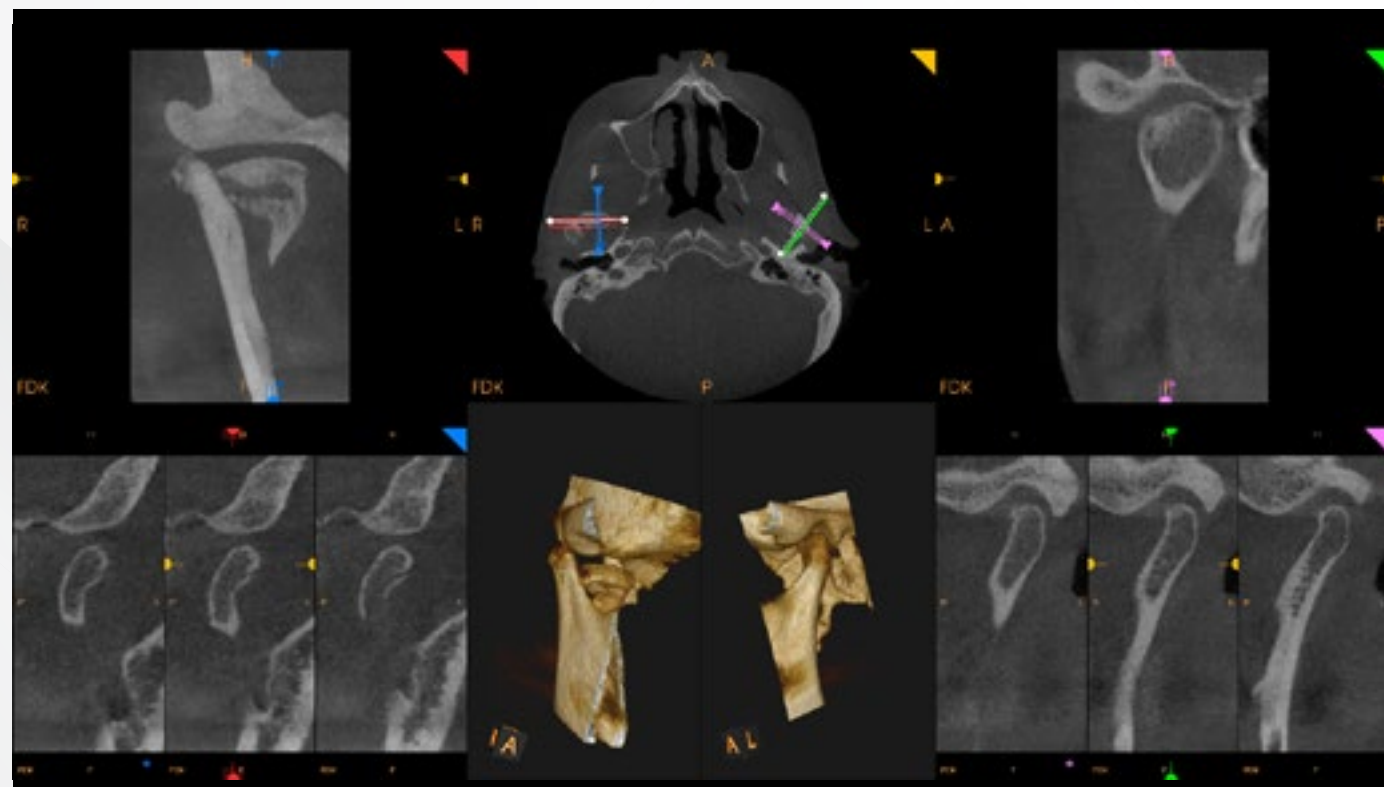|	CS 8100 CS 8100SC	CS 8100 3D CS 8100SC 3D	CS 8200 3D Family	CS 9600 12x10 Edition	CS 9600 16x10 Edition	CS 9600 16x17 Edition
FOVs (CBCT)	-	4 FOVs available: 4 x 4 cm to 8 x 9 cm	4 or 6 FOVs available: 4 x 4 cm to 12 x 10 cm	10 FOVs available: 4 x 4 cm to 12 x 10 cm	12 FOVs available: 4 x 4 cm to 16 x 10 cm	14 FOVs available: 4 x 4 cm to 16 x 17 cm
Tomosharp pan imaging	✓ NEW	✓ NEW	✓	✓ NEW	✓ NEW	✓ NEW
Ceph imaging	✓	✓	✓	✓ * NEW	✓ * NEW	✓ * NEW
CBCT imaging	Upgradable to 3D	✓	✓	✓	✓	✓
3D model scan	-	✓	✓	✓	✓	✓
3D facial scanner	-	-	-	✓ *	✓ *	✓ *
CS MAR	-	✓ * NEW	✓ *	✓ *	✓ *	✓ *
120 kV tube voltage	-	-	-	✓ *	✓ *	✓ *
Practices / Specialties	General practice Orthodontics	General practice Endodontics	General practice Implant Periodontics Orthodontics	General practice Endodontics Implant Oral surgery Periodontics	Implant Oral surgery Periodontics	Oral and maxillofacial surgery Orthodontics Radiology centers Hospitals ENT

*Option

CAD/CAM

CBCT
Impression Scanning

Accurate 3D models plus broad diagnostic capabilities

Using the CS 8100 3D, CS 9300 and CS 9600, you can scan traditional impressions to create high precision 3D models quickly and easily.

Features and benefits

- Precise scanning, even in hard-to-reach areas, for superior clinical results
- Digital impressions with an average resolution of 30 μm
- Works with any A-silicon impression material
- Covers single tooth indications (full crown, inlay, onlay)
- Intuitive interface and dedicated platform for fast and precise scanning
- Open STL format fits any workflow

An upgrade kit is required for 3D units produced prior to 2011. Denture mode with appliance mode to find the capture.

Three simple steps to a 3D model

1 Take impression and bite using silicon material

2 Scan the impression using your CBCT system from Carestream Dental's CS 9300 or CS 8100 families

CS Restore   CS Model+

**3** Design restorations in CS Restore software, or review digital orthodontic models via CS Model / CS Model+

Software

CS Imaging Software Version 8

CS Imaging version 8 - the platform that provides one-stop access to all your 2D images, 3D images and CAD/CAM data. It offers a faster, more efficient way to access, review and share images so you can present treatment proposals more clearly to patients and increase case acceptance.

Features and benefits

- Manage all images in one platform, without switching between programs
- New, intuitive interface is designed to reduce clicks
- Quickly access patient images while chair side or at the front desk
- Combine 2D, 3D and CAD/CAM images on one screen for better treatment planning and case presentations
- Use powerful analysis tools and cross-image comparisons
- Easily share data with your treatment team
- Obtain automatic tracings in just 10 seconds
- Apply filters to several images at the same time
- Display and save as many measures as needed
- Display pre and post 3D images side by side without opening CS 3D Imaging Software
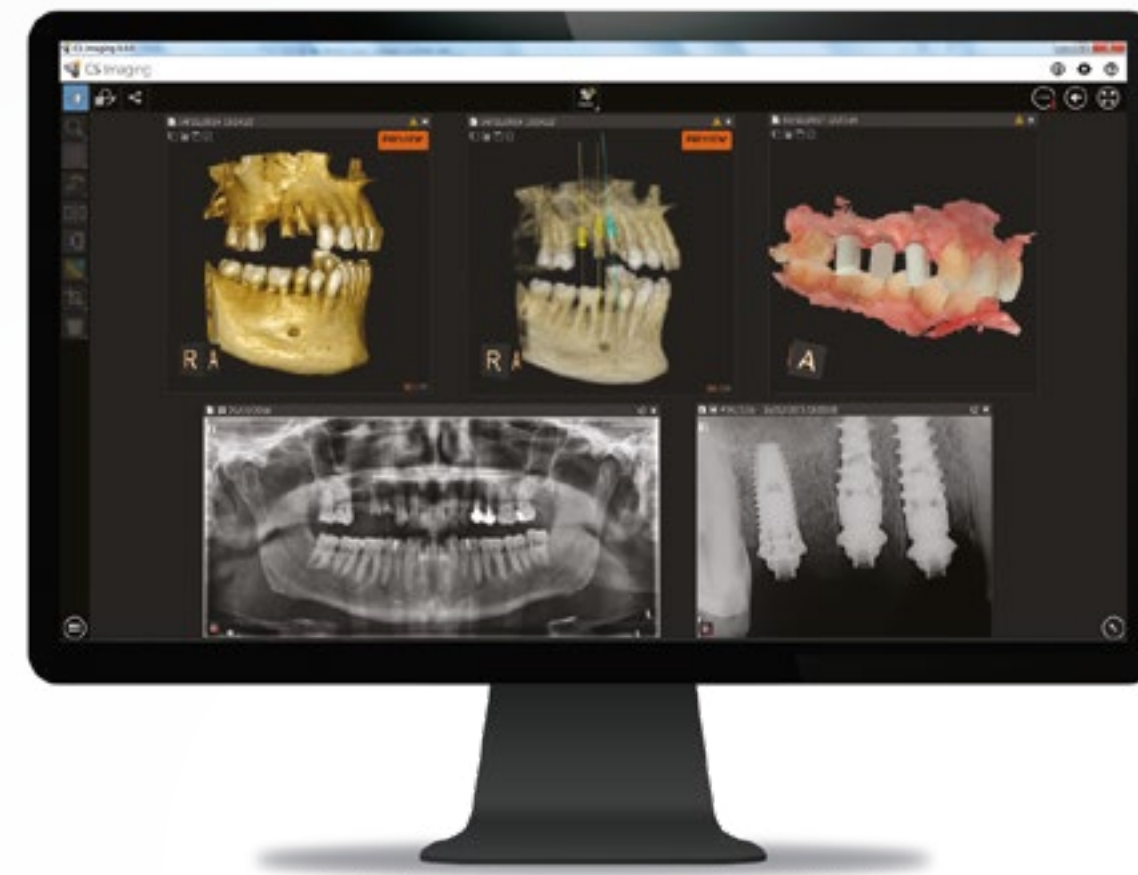
Centralized Configuration

- Use a single tool to configure both imaging and DICOM services

Improved Serviceability

- Finalize practice installation even without an activation voucher thanks to a **30-days grace period**

Centralized Activation

- Save time with server-only software activation
- No need to activate CS Imaging on each client workstations thanks to **shared floating licenses.**

Unchanged Integration

- The integration between dental practice management software (DPMS) and CS Imaging remains unchanged

For the Planet

- CS Imaging is now fully dematerialized
- **No more DVDs and no more printed documentation for reducing the impact on the environment**
- Easily software download
- Access documentation in a digital format within the software or online

Software

Prosthetic-Driven Implant Planning

Prosthetic-Driven Implant Planning with CS 3D Imaging is designed to make implant placement simple – delivering optimal results to ensure confidence and improve predictability of treatment outcomes.

Features and benefits

- Ability to visualize placement of implant in relation to bone and restoration
- Digital workflow improves efficiency, safety and communication
- Implant positioning based on ideal future restoration, not the other way around
- Ensures patient's prosthetic needs, functional requirements and anatomical constraints are considered during implant planning
- Direct export to SMOP and BlueSkyPlan
  - Data export
  - Matching export
  - Implant position export

sm⊙p
powered by **swissmeda**
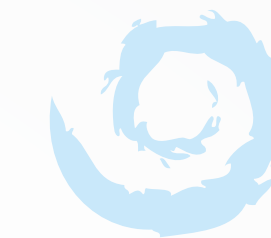
BlueSkyBio

Discover a simpler workflow:

Scan Patient	Merge Data	Plan Implant	Export Data	Create Guide
Take 3D X-ray and digital impression to capture both bone structures and soft tissue situations	Automatically combine digital impression and CBCT scan in CS 3D Imaging	Add crown and plan implant position, taking into account final restoration and anatomy	Export 3D data into third-party software	Use your preferred third-party software to produce surgical guide

Software

CS Connect

Contactless data transfer

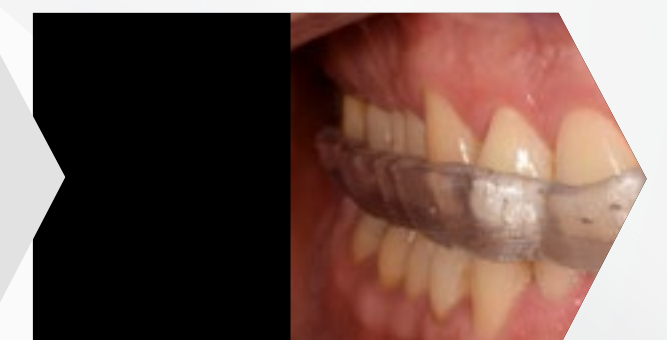Discover a faster, more secure way to exchange information. With CS Connect, export data with one click to your referrals or preferred lab via this online portal, eliminating shipping and manual tasks and streamlining your workflow. CS Connect not only gives you the freedom to choose which lab you want to use, but it also gives the lab freedom to use their preferred CAD software.

Features and benefits

- One-click Integration to third-party Labs
- Transfer STL, PLY, OBJ, Xorder (DWOS), and Dentalproject (exocad) to any lab of your choice
- Simplifies the workflow with integrated customizable online forms
- 14 days of cloud storage
- Send data anytime and access datasets from anywhere
- The cloud-based CS WebViewer allows the lab to view the dataset including the 3D margin line in full HD color in real time

CS Acquisition

Streamlined workflow for oral, maxillofacial and ENT imaging.

The first software for dental and ENT applications that addresses the unique imaging needs of radiologists. Designed to acquire images quickly and easily, CS Acquisition transforms Carestream Dental oral, maxillo-facial and ENT imaging systems into radiological modalities.

Features and benefits

- Familiar, time-saving radiology workflow
- Acquire dental/ENT images the same way as any other radiology modality
- Integrates seamlessly with DICOM systems
- Allows users to review, print and store images
- directly on radiology IT systems (PACS or DICOM printer)

Software

CS Adapt

Upgrade to more individualised diagnostics. Imaging that works the way you do.

The state-of-the-art rendering algorithms of CS Adapt let you decide how you want your images to appear.

Features and benefits

- Six panoramic look-and-feel filter presets
- Four cephalometric look-and-feel filter presets
- Ability to define your own look-and-feel
- Intuitive library-style browsing and selection
- State-of-the-art image quality
- No more processing artifacts or "dark halos"
- Same flexibility and quality across devices

CS Airway

**Clear Visualisation. Fast Analysis. Enhanced communication.**

Use 3D imaging for quick and simple airway analysis.

Features and benefits

- Simplifies airway analysis by providing segmentation in as little as two clicks
- Automatically calculates total volume, minimal cross-sectional area, anterior/posterior and left/right measurements
- Displays and updates measurement values in real time
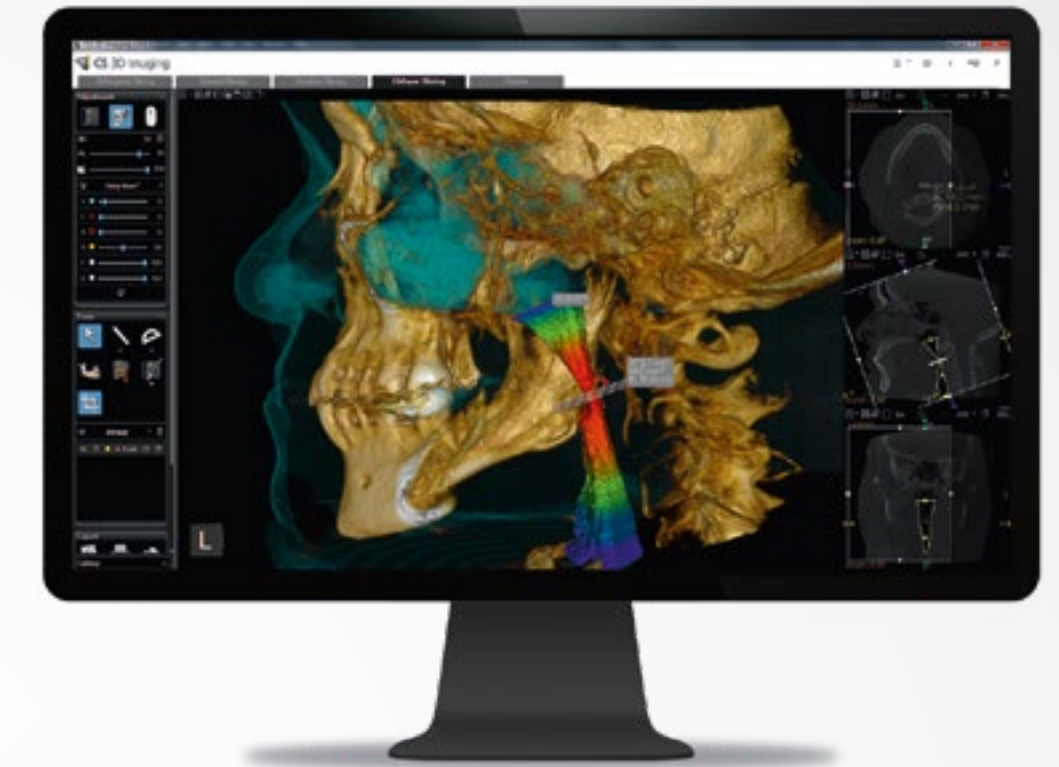
Software

CS Imaging Software 8 DICOM Module

Full DICOM integration for Intraoral and Extraoral equipment including a powerful 2D/3D Review Station

CS Imaging DICOM Module has been developed to address the needs of users in a DICOM environment, including hospitals, radiology centers and ENT practices, using RIS to organize acquisitions and PACS as archiving systems.

Features and benefits

- DICOM interoperability provides the ability to use CS Imaging 8 as an acquisition and/or review station in a DICOM environment
- Featuring a unique common search engine for RIS acquisitions, local and PACS images which improves the whole workflow, user experience and facilitates like never before search and review.
- Receive clinical work from CS 9600 acquisition workstation including raw data(xml), X-ray 3D (cross section, virtual ceph), SC (cross section, virtual ceph) and screenshots
- Query PACS then retrieve images from PACS and store in CS Imaging 8 software
- Manually transfer CS Imaging 8 image to the PACS
- Search the worklist from multiple RIS (one RIS at a time)
- Query/retrieve and store to and from multiple PACS (one PACS at a time).
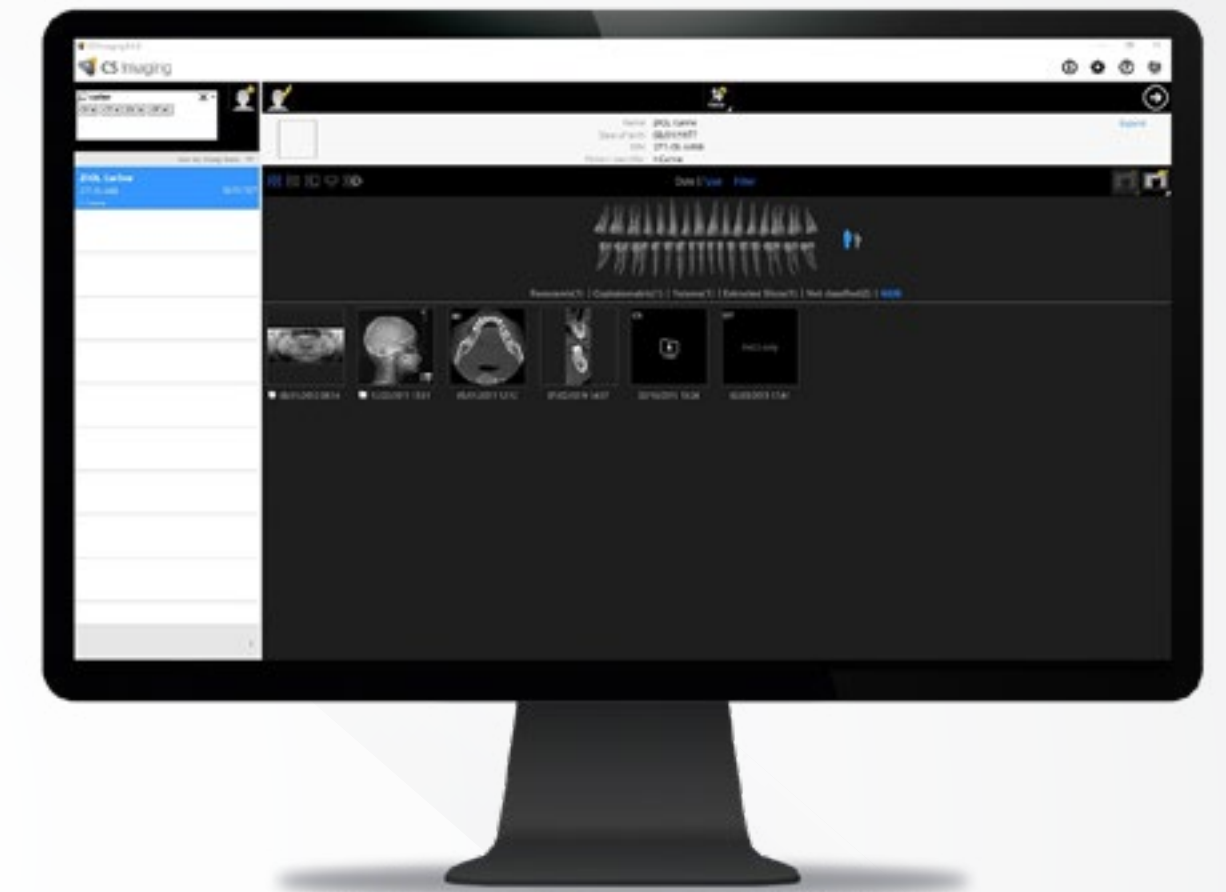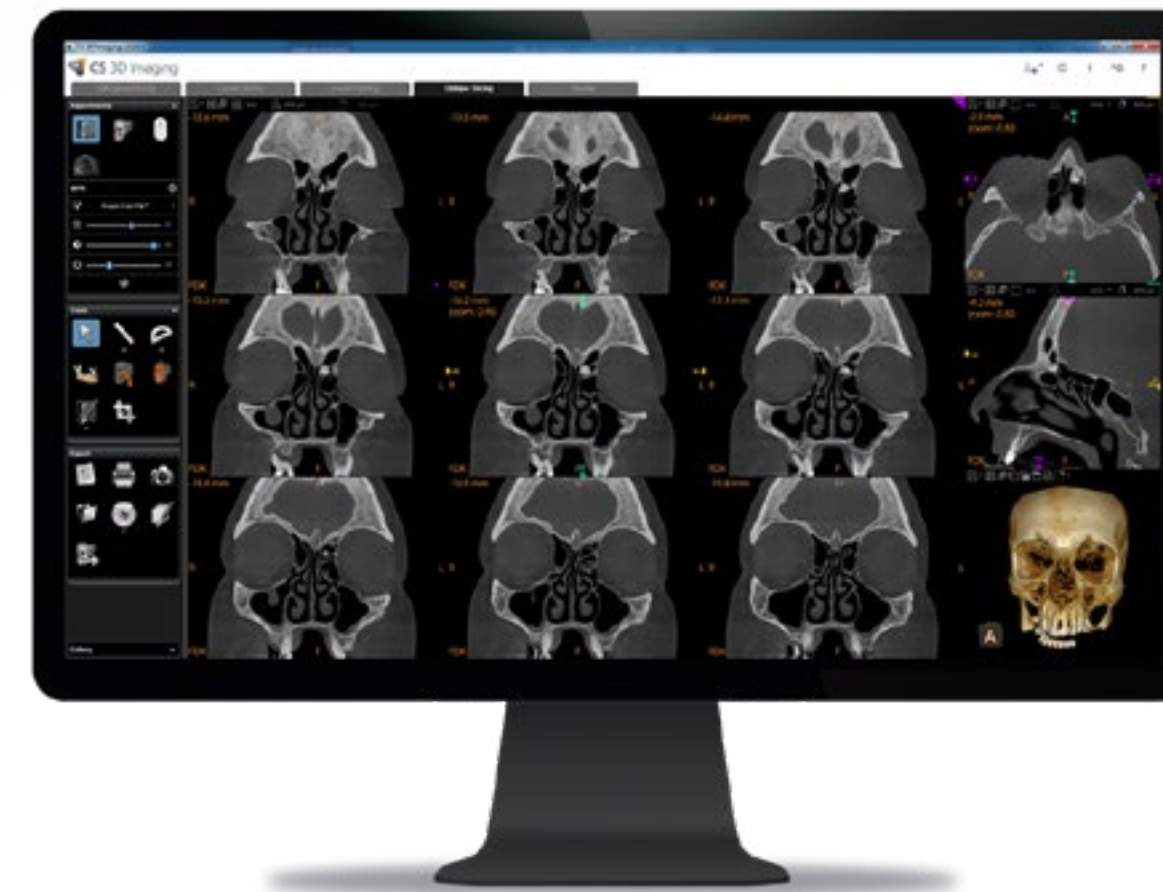
The following DICOM services are supported with CS Imaging Software version 8 DICOM Module:

- Modality Worklist (SCU)
- DICOM Query/Retrieve (SCU)
- DICOM Storage (SCU/SCP)
- DICOM Print (SCU) using Film Composer

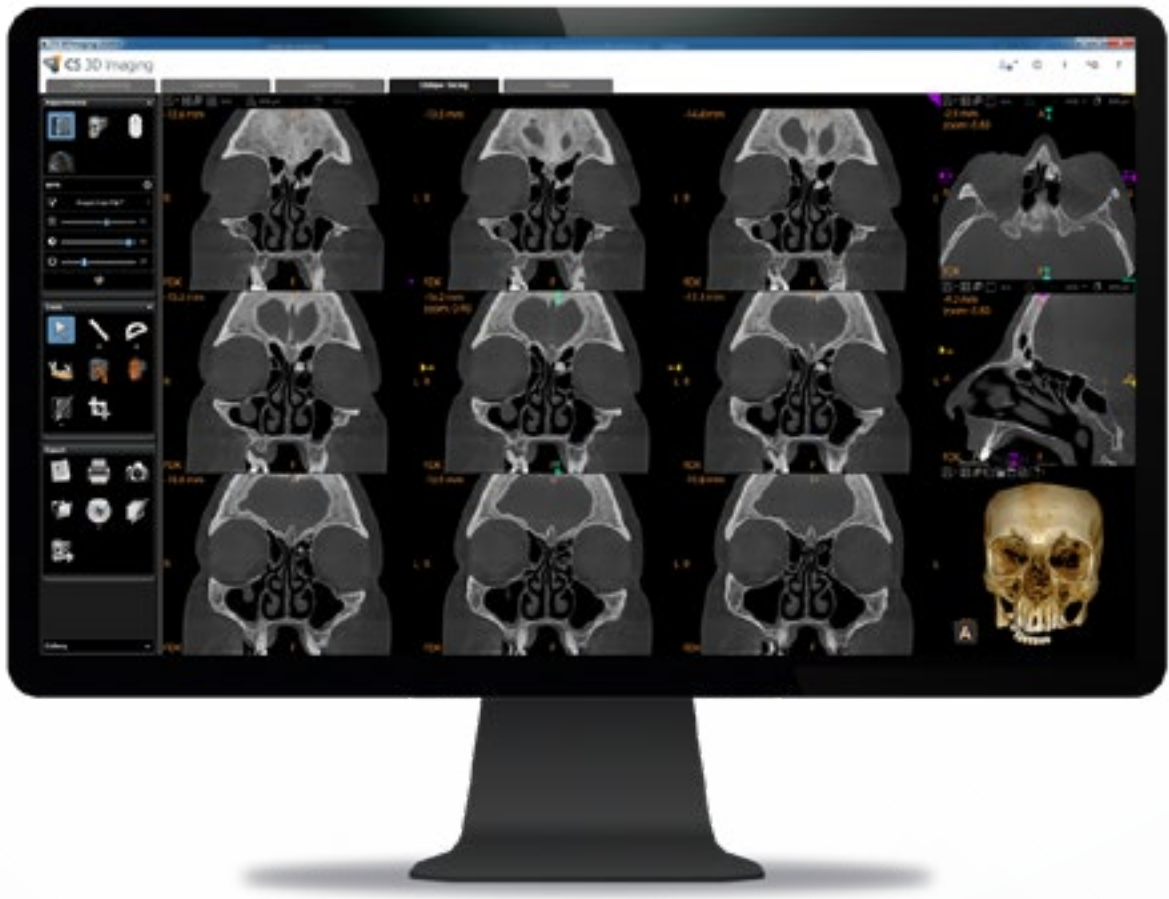| Product	Description	Specialty	Features	Benefits
CS Imaging Software Version 8	The new hub of your practice.	All	• All images in one place, no need to switch between programs • Intuitive interface with Darkroom mode • Auto-arrange function	• Improved workflow, spend less time searching for images • Improves diagnostic comfort • Faster workflow, fewer clicks
CS Adapt (included in CS Imaging Software)	Customisable enhancement imaging filters for RVG, CR, panoramic and cephalometric images.	All	• Define your own image look and feel • State-of-the-art image processing • Intuitive filter library for easy selection	• Faster and more accurate diagnosis • Reduced risk of misdiagnosis • No more processing artefacts/dark halos
Auto Tracing (included in CS Imaging Software)	Customisable cephalometric tracing software.	Ortho, Maxillofacial surgery, ENT	• Automatic tracings • Several methods of analysis available • Adaptable to your needs	• Immense time saving • Choose the analysis you're familiar with
CS 3D Software (included in CS Imaging Software)	State of the art 3D software with viewing, measurements, nerve tracing, implant simulation and printing capabilities.	All, ENT	• Four working tabs from easy to specific diagnostics needs • MPR/3D rendering • Implant simulation • Export, print and CD creation	• Intuitive and easy to use • Low learning curve • 3rd party interface • Stand-alone viewer makes image sharing easy
Film Composer (included in CS Imaging Software)	Export images into PDF format and print.	All, ENT	• Export to PDF • Print 1:1 • Customisable templates	• Improved communication and case acceptance • Better diagnostics
CS Airways (optional module of CS Imaging Software)	Optional CS 3D module for quick and simple airway analysis.	ENT, Maxillofacial surgery, Ortho, Sleep Apnea	• Airway segmentation • Automatic calculation of total volume, minimal cross-sectional area, anterior/posterior and left/right measurements • Customised colour scale	• Clear constrictions visualisation • Simplified clinicians experience • Easy adjustment of parameters • Safer examinations
CS Mesh Viewer	Free STL viewer/export software	All, ENT	• Supports DICOM, PLY and STL filters • Allows orientation changes	• Maximise return on investment for CBCT equipment • Easy sharing with 3rd party software
Prostetic Driven Implant Planning – PDIP (optional module of CS Imaging Software)	Optional CS 3D module as an integrated digital implant solution for more predictable diagnoses and higher confidence when placing implants.	Implantology	• Automatic merge of digital impression and CBCT data • Implant positioning based on ideal future restoration	• Predictable outcome • Faster treatment • Increased case acceptance
CS Connect	A secure on-line portal to send digital impressions data to any laboratory.	All	• Secure data transfer • Online forms • Easy communication with labs	• Integrated workflow • Cost savings • Customisable forms
CBCT STL Converter	Allows high quality STL export of silicon impressions or stone models acquired with CBCT scan.	All, ENT	• High quality STL export • Free Mesh Viewer software	• Maximise return on investment for CBCT equipment • Easy sharing capabilities
CBCT STL Converter Suite	Allows high quality STL export of silicon impressions or stone models acquired with CBCT scan for CS Model with automatic creation of the base: ABO/Simple	Ortho	• High quality STL export • Free Mesh Viewer software	• Maximise return on investment for CBCT equipment • Easy sharing capabilities
Dental DICOM (Trophy DICOM)	Patient database with DICOM functionalities, which allows the connection of Carestream dental digital imaging system to a DICOM network.	Radiology centers, hospitals, ENT practices	• DICOM 3.0 compliant • Common image database	• Full integration within DICOM 3.0 workflow • Integration of several CS Imaging workstations
CS Imaging Software version 8 Dicom Module	Full DICOM integration for IntraOral and Extraoral equipments providing DICOM worklist, DICOM storage SCU/SCP, DICOM QUERE & RETRIVE and DICOM print SCU	Radiology centers, hospitals, ENT practices	• DICOM 3.0 compliant • DICOM Client / Server Architecture • Single image gallery for local and PACS images	• Powerful 2D/3D Dental Review WS • Seamless integration with DICOM systems • Feature-rich 3D review workstation that improves reading and diagnostic speed
CS Acquisition	Easy DICOM workflow for extraoral and 3D equipments providing DICOM worklist, DICOM storage SCU/SCP and DICOM print SCU	Radiology centers, hospitals, ENT practices	• Independent application • Embedded visualisation tools for quality control • Works with extraoral imaging systems	• Easy integrations of dental modalities in DICOM 3.0 systems • True radiology-like workflow • Time saving (query, acquire, control, print)

Recommended PC Requirements

Intraoral cameras, RVG sensors, CS 7200, CS 7600

	Viewing and acquisition
CPU	Intel Core i5 or higher
RAM	4 GB
Hard disc drive	1.2 GB for software installation, 80 GB free space to use the software
Graphic board	Separate video card with min 256 MB of video RAM
Monitor	17" or larger, Minimum screen resolution of 1024 x 768, 32-bit color mode
Operating system	Windows 7 / 8 / 10 64 Bit Professional
Ethernet interface	1 Gbit for LAN
USB ports	USB 2.0 high speed or USB 3.0
CD/DVD drive	DVD-ROM drive
Backup Media	Removable/portable, external hard disk drive
Mouse	A mouse with 2 buttons and a scroll wheel is required

CS 8100 Family / CS 8100 3D Family / CS 8200 3D Neo Family

	Viewing	Acquisition
CPU	2 GHz Intel Dual Core	9th Generation Intel Core i5-9500 6 cores (3 GHZ base frequency, up to 4,4 GHz with Intel® Turbo Boost Technology)
RAM	4 GB	16 GB
Hard disc drive	1.2 GB for software installation 250 GB free space to use the software	4 GB for software installation 500 GB free space to use the software
Graphic board	Nvidia/ATI based board supporting Open GL 1.2 with 512 MB RAM on AGP x8 video bus	Cuda version 10.1 or higher, Compute capability 3 or higher, Nvidia based board on PCI Express video bus with minimum 4 GB of video RAM
Monitor	1280 x 1024 minimum screen resolution	1280 x 1024 minimum screen resolution
Operating system	Windows 10 (64 bits)	Windows 10 (64 bits)
Ethernet interface	N/A	2 Ethernet interfaces: 1 Gbits Ethernet board for the connection with the unit*. Another optional Ethernet board for a LAN connection.
CD/DVD drive	DVD-Burner drive is required	DVD-ROM drive is required to install the product.
USB ports	USB 2.0	USB 2.0
Backup Media	Removable/portable, external hard disk drive	Removable/portable, external hard disk drive
Mouse	A mouse with 2 buttons and a scroll wheel is required	A mouse with 2 buttons

CS 9600 Family

	Viewing and Acquisition
CPU	Intel Core i7-2600 (2nd generation)
RAM	8 GB; 16 GB (PDIP option); 32 GB (for CS MAR option)
Hard disc drive	500 GB
Graphic board	Any GPU with 1GB RAM that is compatible with Open GL 3.2.
Monitor	1024 x 768 minimum screen resolution 32 bits color mode
Operating system	Windows 10 (64 bits)
Ethernet interface	100 Mbps minimum but recommended 1 Gbps
CD/DVD drive	DVD-Burner drive is required
USB ports	USB 2.0
Backup Media	Removable/portable, external hard disk drive
Mouse	A mouse with 2 buttons and a scroll wheel is required

CS Imaging Server / CS Imaging Client

CS Imaging Server Note: When the station is also an acquisition WS, please refer to equipment requirements	**Processor:** Intel Core i3 or equivalent. Intel Core i5 is recommended for CS DICOM **RAM:** 4 GB Graphics card: Any **Hard disk:** 20 GB free space (image repository not included). SSD is recommended for CS DICOM Display: 1024 x 768 minimum screen resolution - 32-bit color mode **Operating system** Windows 10 64 bit (maximum of 20 stations with CS Imaging) Windows Server 2012 or 2012 R2 Windows Server 2016 Windows Server 2019
CS Imaging Client Note: When the station is also an acquisition WS, please refer to equipment requirements. Note: When the station is also used with CS 3D Imaging software, please refer to CS 3D Imaging requirements.	**Processor:** Intel Core i3 or equivalent **RAM:** 4 GB **Graphics card:** Any **Hard disk:** 10 GB free space (image repository not included) Display: 1024 x 768 minimum screen resolution - 32-bit color mode **Operating system:** Windows 8.1, 32 and 64-bit Windows 10, 32 and 64-bit Windows Server 2012 or 2012 R2 Windows Server 2016 Windows Server 2019
Network requirements	For 3D volume use 1000 Base-T network bandwidth (minimum) For 2D or standalone server 100 Base-T network bandwidth

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Looking for an imaging solution?

We're confident we have the ideal solution for every practice!

- A full range of dental radiography and imaging systems
- 100 years' experience in dental imaging
- In-house product development and manufacturing
- Worldwide dealer and service network
- The inventor of intraoral sensor technology
- High quality standards

Would you like to know more?

carestreamdental.com
Alternatively, contact your local authorised dealer.