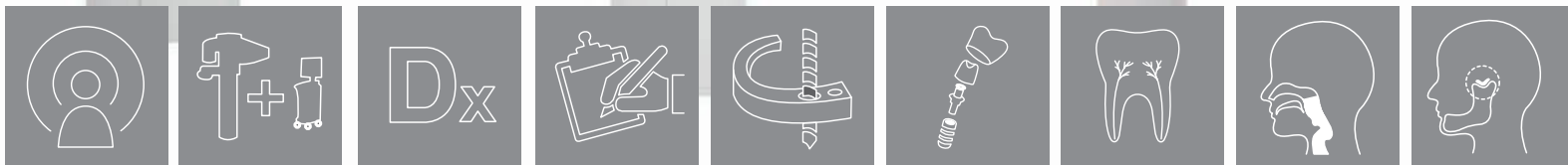


3D Imaging Family

A new dimension of
success in your practice

dentsplysirona.com





Good reasons for 3D

With 3D imaging, you have the ideal basis for a new dimension of success in your practice.

BETTER

Communicate with stunning images to your patients

Best image quality at a low dose and shorter visits—that is what Dentsply Sirona 3D x-ray units provide for your practice. These benefits provide greater certainty to help make difficult diagnoses easier, while providing the opportunity to explore new options for implantology, endodontics, orthodontics, and more.

Thanks to the 3D Family, Galileos® Comfort Plus, Orthophos® SL 3D and Orthophos XG 3D patients have a better understanding of the diagnosis and accept treatment more readily. It all adds up to efficient clinical workflow that leads to greater practice success. Enjoy every day. With Dentsply Sirona.

SAFER

Predictable diagnosis and treatment options

FASTER

Efficient clinical workflow



More insight More possibilities

Your patients are candidates for 3D more often than you think.

How severe is the bone atrophy or the periapical lesion? Is the tooth impacted? In all dental disciplines, there are numerous questions that can be answered far more easily using 3D imaging with CBCT.

3D CBCT from Dentsply Sirona offers clinicians and specialists numerous options for diagnosis, treatment plans, patient consultation—all with a seamless, efficient workflow. This is one way you can expand your range of services and treat more patients at your practice. With Dentsply Sirona 3D, patients understand and accept treatment recommendations more readily, improving their overall experience. Dentsply Sirona 3D allows a broadened range of procedures for your practice, from placing implants faster and with confidence to providing TMD and sleep apnea solutions.



When does 3D provide more certainty?

Areas	Cases
Implantology	eg, recognizing case risks and limitations before performing a surgical procedure, performing implants with minimal invasion, assessing the prosthetic and surgical conditions at the same time
Endodontics	eg, detecting auxiliary and hard to find canals and traumas to the dentoalveolar complex, depicting internal and external root resorption, preoperative diagnostics in the case of periapical osseous lesions, preoperative endodontics planning (eg, before apicoectomy)
Oral and maxillofacial surgery	eg, displaced teeth, fracture diagnostics, sinus diagnostics, cysts, retained roots, orthognathic surgical procedures
Orthodontics	eg, displaced, impacted teeth, cephalometric analysis, root resorptions, cleft lips, jaws, and palates
TMD treatment	eg, functional diagnostics and therapy of the temporomandibular joint dysfunctions (TMD)
General dentistry	eg, contradictory findings, as well as those that are difficult or impossible to view in the 2D panoramic image, apical radiolucency, periodontal indications and extent of lesions, patient consultation, implantology, and minor oral surgical procedures
Airway analysis	3D visualization of the airways, while taking the position of the condyle into consideration can significantly help with appliance based therapy

What does 3D from Dentsply Sirona offer?

Best image quality at a low dose and an efficient workflow: That is Dentsply Sirona's basic principle for all of our dental x-ray tools and software.

Best image quality

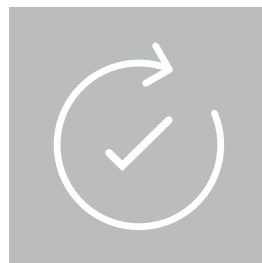
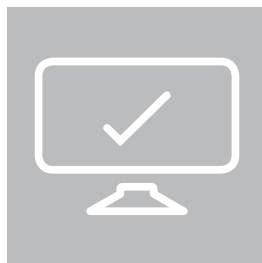
From the positioning of the patient to the optimized image, all elements of the image process are carefully synchronized to complement each other. High resolution and noise reduction work together. The reduction of metal artifacts produces images with reduced scatter. And when it comes to the highest image quality, choose the HD mode with Galileos® Comfort Plus, Orthophos® SL 3D, and Orthophos XG 3D.

Low dose

For patients, the lowest possible exposure to radiation is crucial. This is why we use an image intensifier with state-of-the-art technology for the large scan volumes. You can lower the dose even further by choosing a smaller volume for the least exposure to radiation.

Perfect workflow

Intuitive handling, time-saving, findings-oriented work, individualized with just a few clicks: The Sidexis software package is tailored exactly to the needs of the practice. In addition, Dentsply Sirona CBCT systems are also compatible with most third-party software for orthodontics, which makes processing 3D x-rays extremely simple.

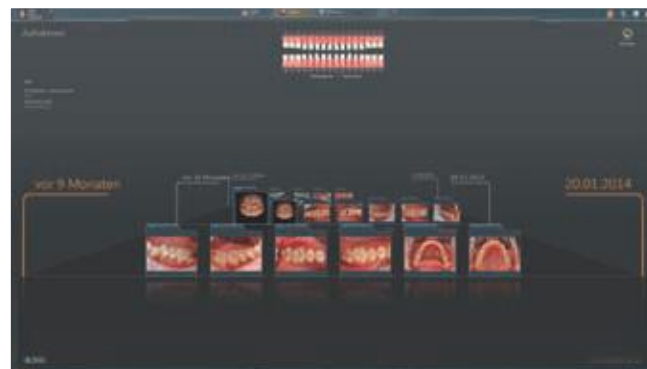




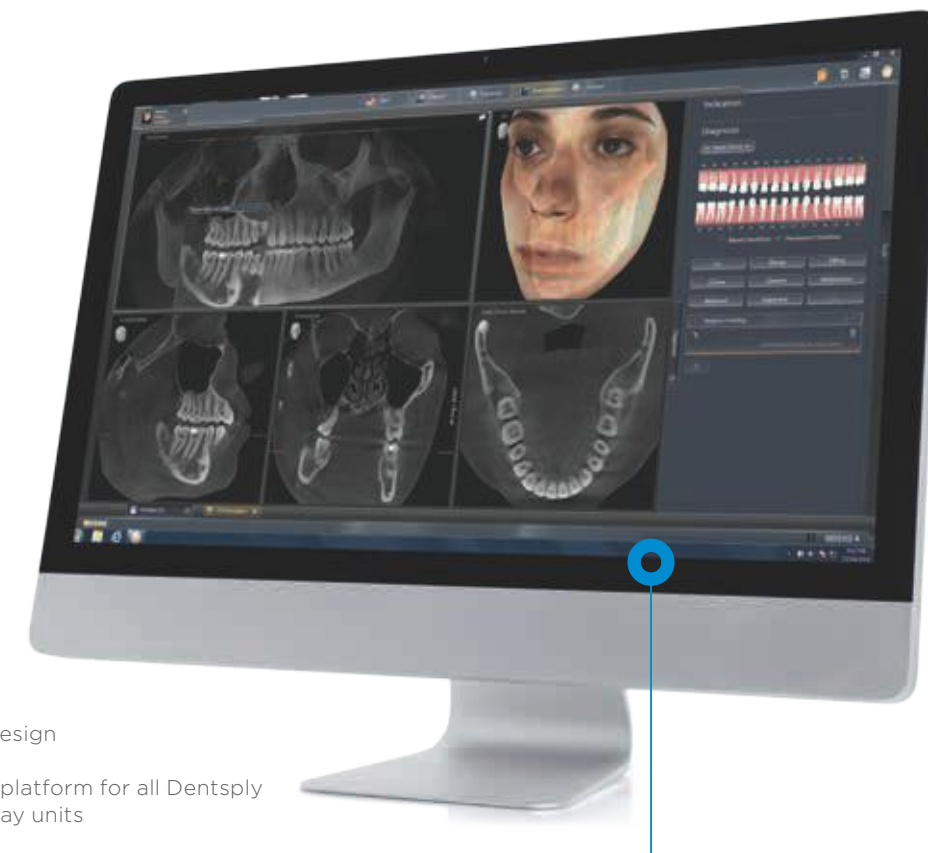
Working digitally is now so easy

Sidexis 4—this is the core of the digital workflow with Dentsply Sirona.

With its intuitive user interface, Sidexis 4 software has a very simple structure: it follows the clear direction of your work processes and at a glance—whether 2D, 3D, or intraoral. This integrates your patients optimally and thus results in a high acceptance of your treatment proposal. Sidexis 4 stands for real imaging efficiency.



The timeline provides a quick overview of the entire history of the patient. This allows you to add a time dimension to your diagnostic options in a very intuitive way.



- Modern design
- Software platform for all Dentsply Sirona x-ray units
- Intuitive operation, optimally coordinated workflow
- Simple overview of the patient history thanks to the intuitive timeline
- Easy export of DICOM data sets
- Interface of the integrated solutions from Dentsply Sirona

Clear and understandable workflows

With easy-to-understand symbols, the software is simple to use. It is geared to your practice workflows and it helps the entire practice team to use the software intuitively.



Side-by-side display of multiple images taken over time offers objective anatomical comparisons.



"Lightbox" feature allows the simultaneous display of multiple images obtained from a variety of sources, including FaceScan images, digital x-rays, pan-ceph images, CBCT scans, intraoral cameras, and more.

Sidexis 4



The new standard in clinical diagnosis and patient communication.

Sidexis 4 is the software for clear diagnoses. It efficiently structures your workflow in its modern and intuitive design and serves as a basis for further planning and diagnosis.

For the most effective comparison, images are shown together in a Lightbox whether they are 2D, 3D, or intraoral. 3D can also be used interactively in this view.



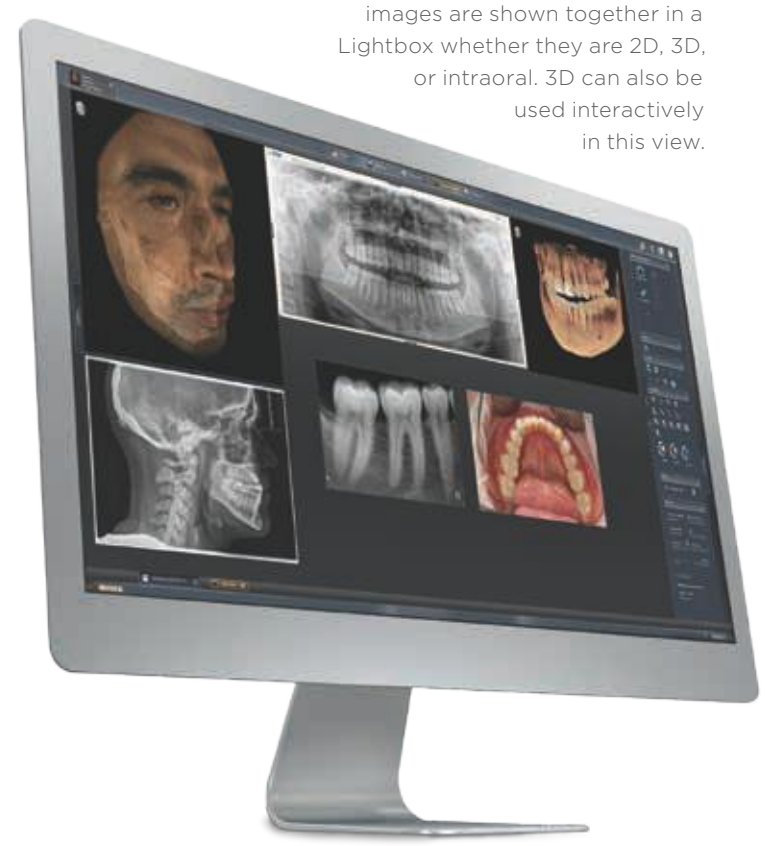
Schick 33



Orthophos® SL 3D



Galileos®



Scan

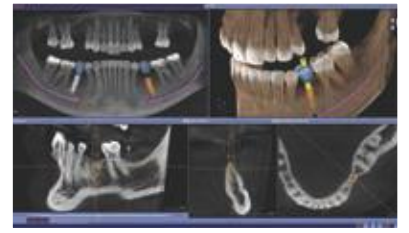
For intraoral, 2D or 3D scans, or intraoral camera images, with Sidexis 4 you are prepared for every situation.

The software controls your x-ray unit within the Dentsply Sirona workflow and the images are assigned directly to the respective patient file. This speeds up your work in the practice.

Diagnosis

Once you have used the new, well-planned diagnosis functions of Sidexis 4, you won't want to be without it. The timeline function shows you the visual patient history in chronological order, and using the Drag & Drop function, you can easily select the images that you require for your diagnosis.

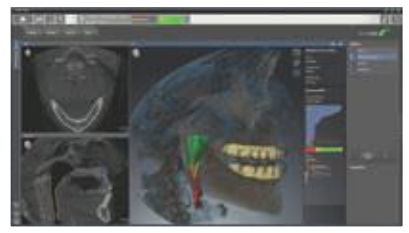
Galileos® Implant



SICAT Function



SICAT Air



Surgical Guide



TMD Appliance



Sleep Appliance

Planning

When you have finished making your diagnosis, Sidexis 4 offers you a variety of solutions that are directly linked with the software. Whether the treatment plan involves sleep apnea, implants, or TMD, the SICAT software package includes solutions for these problems and many others. Use these in Sidexis 4 and plan your treatment reliably and quickly.

Treatment

More work remains in your practice. The entire package of Sidexis 4 and SICAT allows you to offer your patients a wide range of solutions—without the need to refer your patients elsewhere. Your patients benefit from fewer visits and you benefit from doing more in your practice.

SCAN

DIAGNOSIS

PLANNING

TREATMENT



Place implants safely

Whether you are a first-time user or a specialist, Galileos® Implant software makes implant planning very easy and ensures highly accurate and predictable results.

Galileos Implant software efficiently guides clinicians through the planning process within minutes. Thanks to color visualization of the nerve canal and the depiction of the bone structure in all dimensions, the implant can be optimally positioned to fit the patient's anatomy. This ensures a high degree of safety and longevity of the implants because negative effects can be avoided through precise planning and placement.

You can order the surgical guides directly in the software with a click of the mouse. Or, you can opt for an integrated implantology system and benefit from a unique workflow combined with CEREC®. (See pages 14-15).

MORE INFORMATION:
dentsplysirona.com



Working together to create a revolutionary approach to implantology

The patented Sirona 3D implant process allows for true digital dentistry. The results are enhanced patient communication, improved case acceptance, and superior final outcomes—**only from Dentsply Sirona.**

Advantages of integrated implantology

- ① SAFETY
- ② TRUST
- ③ PROFITABILITY
- ④ EASE OF USE
- ⑤ PRACTICE MARKETING



>200K
number of implants
placed with surgical
guides from
Dentsply Sirona

>250
Scientific studies
documenting
clinical safety

**>28
MILLION**
Restorations
placed

Sirona 3D Imaging + CEREC®

Synchronized prosthetic and implant planning meets optimum diagnostics and certainty.

- Increased patient understanding and treatment acceptance
- Improved diagnostics with clear 3D x-ray and intra-oral surface images
- Simultaneous prosthetic and surgical planning
- Improved implant accuracy with CEREC and SICAT surgical guides
- Enhanced surgical ease, speed, and outcomes
- CEREC Digital Impression creates a comprehensive patient record
- Maximum patient convenience with minimal office visits
- The only CBCT company to manufacture surgical guides

The simple way to a completed implant

Software and hardware perfectly coordinated—that is Dentsply Sirona quality in implantation.

With the support of the Galileos® implant software, prosthetic suggestions from the CEREC® software can be combined with your 3D x-ray data. In this way you can enjoy absolute certainty in an efficient, time-saving workflow. And your patients can look forward to perfect results with fewer treatment sessions.



Appointment 1

Scan:

In the first step, all of the necessary images for planning are prepared: Intraoral impressions for the prosthesis and 3D x-ray images for surgical planning.

Appointment 2

Plan:

The prosthetic suggestion and the x-ray data are combined in the software. On the basis of this combination, implant planning and the completion of the appropriate surgical guide follow.

Appointment 3

Place:

Next, the implant is inserted securely and in an uncomplicated fashion using the surgical guide, which allows minimally invasive work. With CEREC® Guide 2, Dentsply Sirona has the most convenient and quickest in-house surgical guide in the world.

Restore:

In the final step, you plan the abutment and crown with the CEREC 4.4 software, which you then produce quickly and very precisely in your own practice with CEREC MC X or the MC XL Premium package. The crown is precisely fitted and this is monitored with either intraoral sensors or a 3D Low dose image.

Precise planning

Implant planning with 3D Imaging implant is simple, accurate, and saves time. You select the appropriate implant from the integrated database, together with the standard abutment and position it in all views comfortably and optimally.

Safe implementation

Inexpensive, highly accurate surgical guides with which you can safely place the implant; this can be obtained in four ways:

SICAT Classicguide

SICAT checks every implant planning data and the radiographic template before fabricating your SICAT Classicguide to guarantee the ultimate precision of .5mm at the apical end. Assurance on precise surgical guides gives you the confidence you need for successful implant placements.



Edentulous.



Partially Edentulous.

SICAT Digitalguide

The SICAT Digitalguide is your local SICAT surgical guide solution. It gives you the opportunity to print a surgical guide designed by SICAT at any local laboratory without losing confidence on double checked treatment plans and flexibility of over 500 implant lines to choose from by gaining faster turnaround to meet even the tightest deadline.



Fabricate locally through a SICAT Partner lab or laboratory of your choice.

SICAT Optiguide

The SICAT Optiguide receives its name from the optimal clinical workflow including digital data only with highest precision guaranteed. After double checking your treatment plan SICAT fabricates the Optiguide on the basis of optical scans by CEREC®.



Complete digital workflow.

CEREC Guide 2

You can fabricate a surgical guide in less than one hour with CEREC using optical impressions and Dentsply Sirona 3D x-ray scans. You no longer need to create a model and fabricate an x-ray template with reference bodies. Thus CEREC Guide 2 is a fast and cost effective way to produce surgical guides.



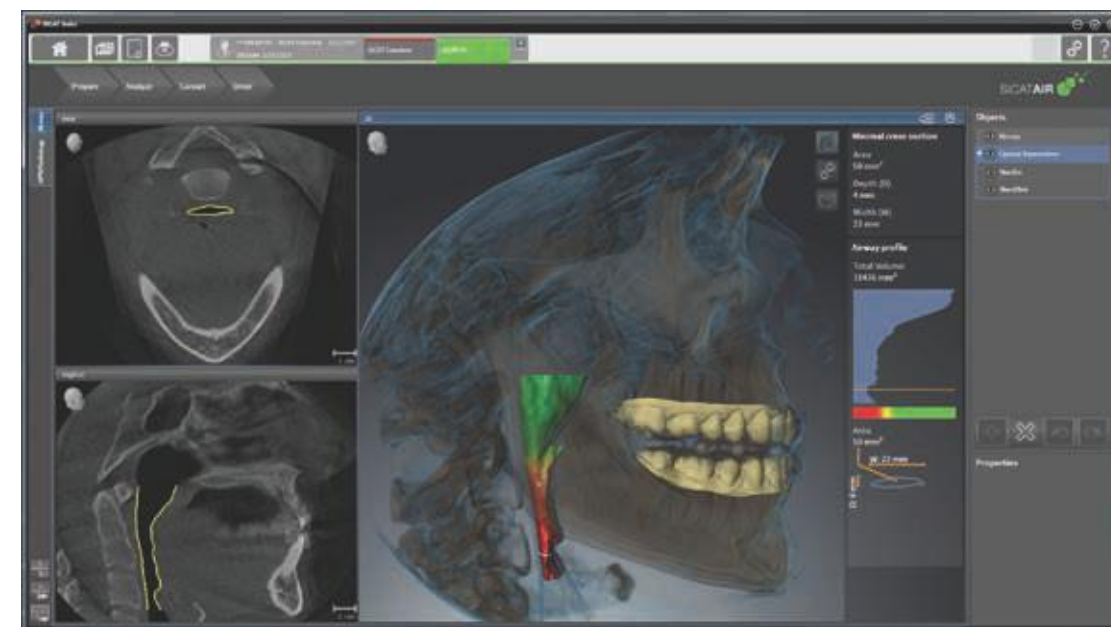
In-office fabrication in less than one hour.

Unique possibilities

In addition to integrated implantology, Sidexis 4 integrates many other time-saving and convenient software solutions. For example, the SICAT Function offers a simple workflow for functional diagnosis and therapy. For the first time, a 3D solution is available that allows analysis and treatment of obstructive sleep apnea in a purely digital workflow thanks to the new SICAT Air software.

SICAT Air

After analysis of the upper airway in 3D, SICAT Air gives a report on the effect of the planned protrusion degree and possible effects on the temporomandibular joint. Ordering an individual patient therapeutic appliance is done purely digitally.



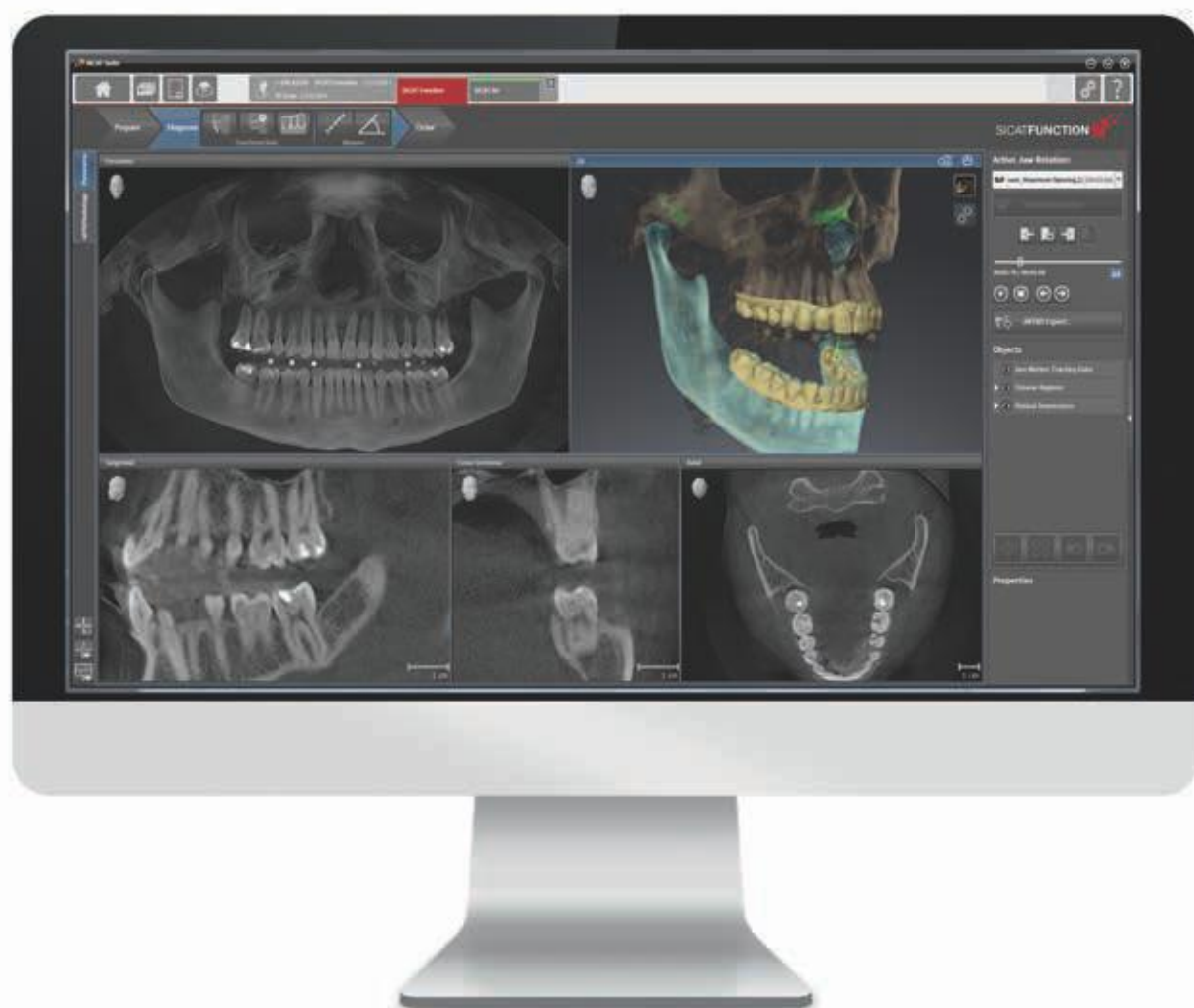
SICAT Function

For the first time, SICAT Function gives an anatomically correct view of the movement of the lower jaw of the individual patient in the 3D volume. Movement of the mandibular joint can be visualized for each point in the 3D volume.

SICAT Function with CEREC®

The combination of SICAT Function, SICAT JMT+, and CEREC allow for the first time the fabrication of prosthetic restorations based on the patient individual lower jaw movements.

Your benefit: Automatically adjusted restoration proposals lead to patient individual functional prosthetics.



SICAT Function

Track real motion in motion

SICAT Function is the first integrated digital 3D solution to visualize real patient-individual movement of the lower jaw within the 3D volume. The anatomic traces of the temporomandibular joint can be displayed for every possible position in the volume.

Thanks to the highly precise recording of all degrees of freedom and movements of the mandible with the SICAT JMT+, you can now transfer, visualize, and diagnose anatomically correct jaw movement within the 3D volume:

- Real Condyle-Fossa relationship during jaw movement
- Anatomically correct trajectory
- Specific positioning of the trajectory in the 3D volume— if necessary also in comparison to conventionally used axial points
- Evaluation of the occlusion based on the integrated optical surface scans



SICAT Function and CEREC®

Individual functional prosthetics

Diagnostic patient information from a 3D x-ray system, Jaw Motion Tracker (SICAT JMT+), and optical surface scan data obtained from CEREC, are merged in SICAT Function.

The integration of jaw movement data in CEREC allows a restoration design that takes the actual dynamic of the lower jaw into account, allowing for the first time the fabrication of prosthetic restorations based on the patient-individual lower jaw movements.

Your benefit: Automatically adjusted restoration proposals lead to patient-individual functional prosthetics.



SICAT Function and OPTIMOTION

Individual functional treatment

Each patient is individual, and so is each SICAT OPTIMOTION. Following diagnosis and planning in SICAT Function, a SICAT OPTIMOTION therapeutic appliance can be ordered according to the practitioner's preference.

The SICAT OPTIMOTION therapeutic appliance is fabricated on the basis of the CBCT data, the optical surface scan data, and the jaw movement data obtained from the SICAT JMT+ according to the principles of a Michigan appliance.

Your benefit: The completely digital workflow saves time and ensures the exact fit of the therapeutic appliance.



Freedom in centric



Front canine guidance

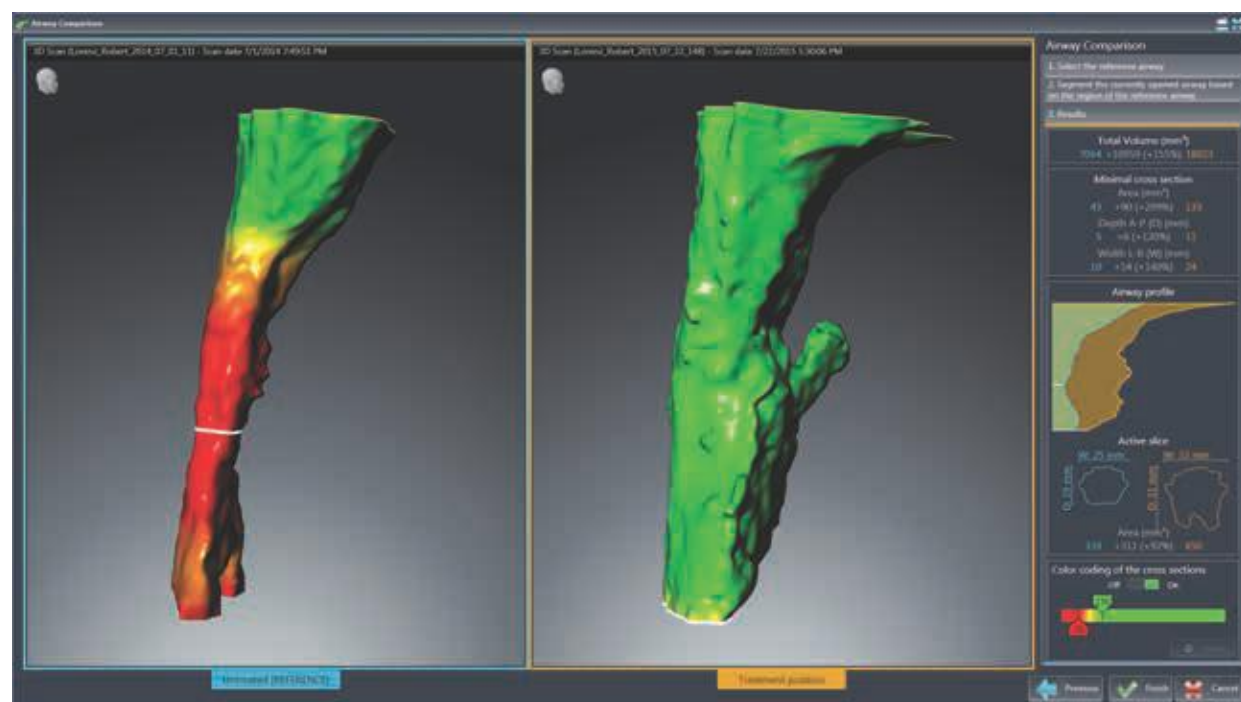
Michigan Principle

SICAT Air with OPTISLEEP

The first digitally produced oral appliance for deep, restful sleep

SICAT Air is the first 3D solution to allow not only the analysis of the upper airway in the 3D volume but also visualization, planning and implementation of treatment.

The digital workflow takes you directly to the ideal therapeutic appliance: OPTISLEEP. What was already successfully established with the SICAT Suite based on 3D X-ray data—diagnosis and planning in 3D—is now reaching new dimensions with a further application for the treatment of obstructive sleep apnea.



Two-part therapeutic appliance

Durable material

Slim design



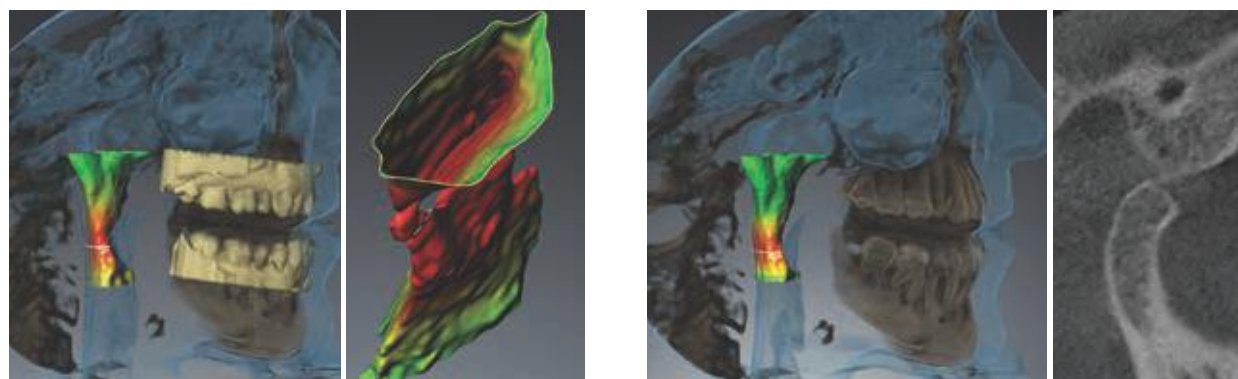
First fully digital workflow

Tooth-individual undercuts

Exchangeable connectors

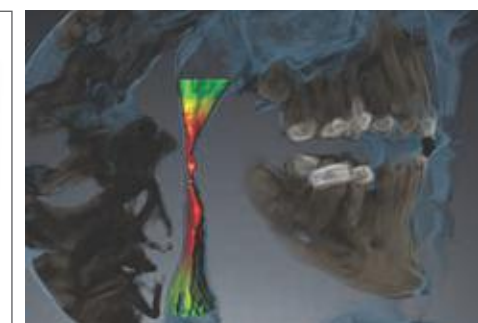
The combination of SICAT Air and OPTISLEEP enables you to save time and to ensure reproducibility. The fully digital planning and manufacturing increases your workflow's efficiency.

SICAT Air and OPTISLEEP workflow



STEP 1

3D X-ray scan in protruded position with a 3D CBCT, such as Galileos® or Orthophos® 3D SL-Ai. The degree of protrusion can be set by simply using a bite fork such as the George Gauge.



STEP 2

Recording of the optical surface scan data of the patient's upper and lower jaw and subsequent fusion with the 3D data within the software.



STEP 3

Ordering of the OPTISLEEP is completely digital; Presentation of the appliance to the patient is conducted during the second patient visit.



Galileos® Comfort Plus

The complete x-ray solution for every practice.

Galileos Comfort Plus is the high-end CBCT unit with HD mode, large field-of-view, and packages that include Galileos FaceScan and SICAT Function, offering maxillofacial surgeons, orthodontists, radiologists, general dentists, and ENT doctors all the options they need for diagnosis, treatment, and patient consultation.



- The optional HD mode of Galileos Comfort Plus ensures the highest image quality for a clear and quick diagnosis, even in difficult cases.
- 15.4 cm spherical volume with MARS
 - Close-up feature with 125µ resolution for endodontic applications
 - Lateral and AP/PA Cephalometric views
 - One of the lowest diagnostic doses per volume size available
 - Stable patient positioning, whether standing or sitting
 - 14 second scan for minimized patient movement
 - Seamless workflow integration
 - Software with superior diagnostic features

Integrated FaceScan



Galileos® Comfort Plus	Implant	Air	Function	FaceScan
Elite Package: Galileos FaceScan, SICAT Function, RCU, Galileos Implant, SICAT Air	■	■	■	■
Function Package: SICAT Function, RCU, Galileos Implant, SICAT Air	■	■	■	
Standard Package: RCU, Galileos Implant, SICAT Air	■	■		

More about Galileos® Comfort Plus

Galileos FaceScan

The FaceScan plots the patient's facial surfaces at the same time the x-ray image is taken. With a realistic image of their own face, patients understand and accept treatment recommendations more readily. And now, with Sidexis 4, FaceScan is integrated into one diagnostic software.

Integrated implantology

Implants with a final prosthesis in fewer visits. The prosthetic suggestion from the CEREC® software is united with the 3D x-ray data, helping to achieve the perfect final outcome.

Compatible with third party software including Dolphin

The Dolphin 3D imaging software is a powerful tool for orthodontists that makes processing 3D data from any Dentsply Sirona CBCT x-ray system extremely simple. Dolphin 3D features tools for on-screen manipulation and analysis of volumetric datasets. Images are easily oriented and rotated, and tissue density thresholds can be adjusted for detailed views of craniofacial anatomy. Measurements and digitization can be performed in both 3D and traditional 2D views. In addition to Dolphin integration, Sirona 3D CBCT systems are also compatible with other popular orthodontic software programs.



SICAT Function

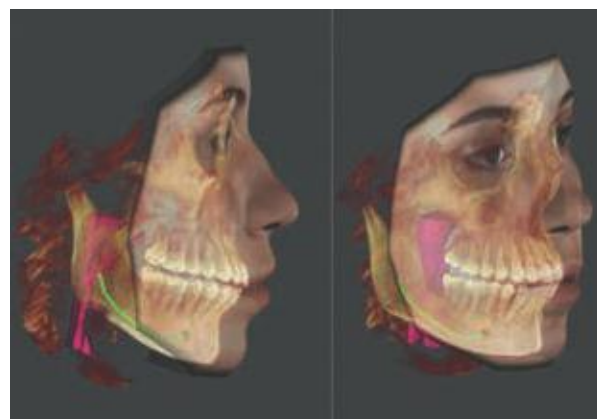
The first integrated digital 3D solution to provide a simple workflow diagnosis and treatment of temporomandibular joint dysfunctions (TMD).



Dolphin cephalometric



Dolphin integration



Orthophos® SL 3D

A powerful performer for every practice.

A true all-in-one imaging unit that produces unbelievably sharp 2D panoramic images, offers full flexibility in 3D volumes, and provides simple, dependable positioning of the patient for perfect images and optimal reproducibility.

With the Orthophos SL 3D, your practice is well prepared for the various treatment situations you encounter every day. On the 2D side, the groundbreaking DCS sensor and SL technology satisfy the requirements of dentists with very high demands for panoramic imaging. In 3D, a variety of volumes allows you to adjust to the given indication with ease, whether it be 11 cm x 10 cm for the full dentition including wisdom teeth and upper airways, an 8 cm x 8 cm standard volume, or a 5 cm x 5 cm for a targeted area of interest—meaning your practice is well prepared for nearly all clinical situations.

DCS and Sharp Layer technology

With DCS and SL technology, you not only get high-resolution panoramic images in the sharp layer, but also can respond interactively within the image to special cases (lingually/buccally) without additional imaging.

Variety of volumes

Whether the analysis of the upper airways, extracting wisdom teeth, or the focused view of a specific area, Orthophos SL 3D has a number of volumes for a broad spectrum of applications.

Easy Volume Indicator (EVI) light localizer

In order to make best use of the volume sizes, the EVI light localizer automatically indicates the patient's position in the volume.

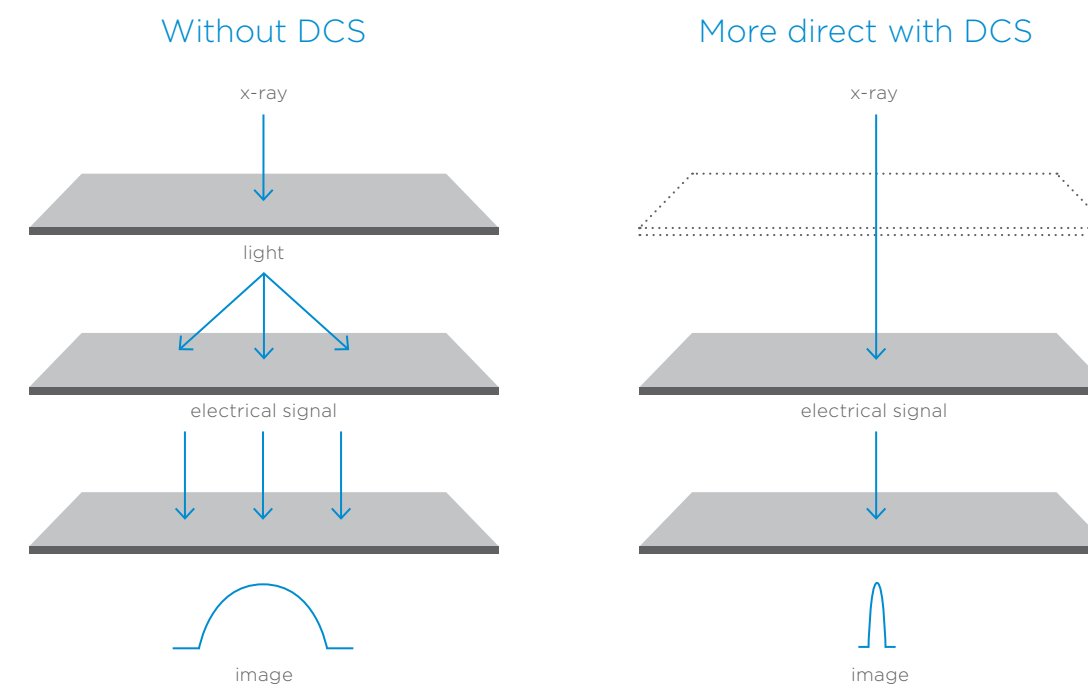
UNPARALLELED
IMAGE QUALITY

MORE INFORMATION:
dentsplysirona.com



Smart solution:
Dynamic images
that you can adjust
to the situation.

Sharpness down to the smallest detail



Precise images, extremely low dose: Direct Conversion Sensor

The revolutionary DCS sensor converts x-rays directly into electrical signals without the conventional intermediate step of conversion into light. Thus, signal loss is minimized, resulting in images with unparalleled definition.



Direct Conversion Sensor (DCS)

Unparalleled image quality with the lowest dose: The Direct Conversion Sensor in Orthophos® SL directly converts x-rays into electrical signals. This leads to less signal loss and an improved yield of image information. The results produce high definition images—at an extremely low dose.

Orthophos[®] SL with 3D I-X

3D I-X adds a Low Dose mode to the Orthophos SL 3D imaging system

Optimized radiation dose for every indication

With the three settings HD, SD and 3D I-X, the Orthophos SL can be ideally set to best suit the patient's needs with the perfectly balanced image quality, volume and dose. While the HD mode provides images with maximum sharpness for visualizing fine structures, the SD mode with an optimized radiation dose covers common indications. As a new addition, owners of this technology can clarify clinical issues for which a significantly reduced dose is sufficient with the 3D I-X function.

Highest degree of safety

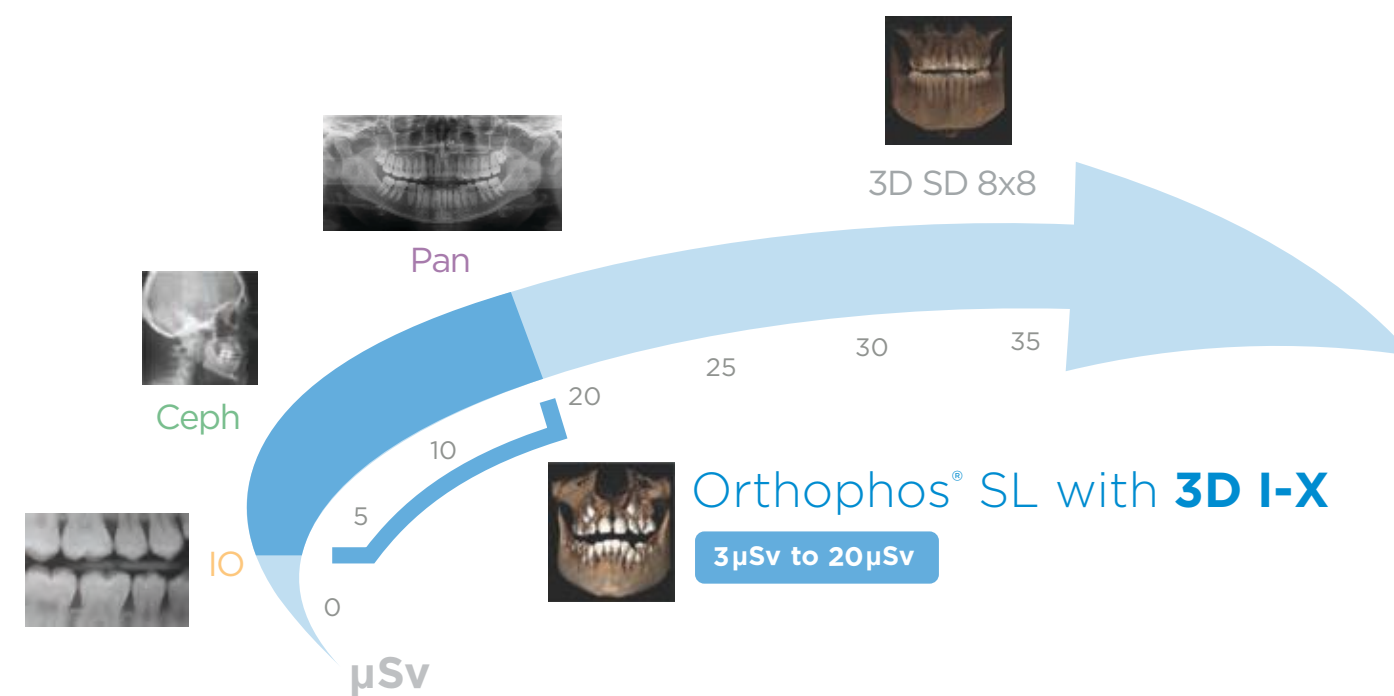
The Orthophos SL with 3D I-X is indication-based diagnostics using CBCT images in the same dose range as 2D images. This allows you to offer your patients the highest degree of safety with the lowest dose level.

Ideal for a large number of dental specialties

Intelligent filtering preserves the dense structures such as bones, so it can be used easily and efficiently in many specialists' fields. The 3D I-X is suitable for checking implant positions, performing sinus analysis, and determining the position of teeth. This expands the application area of 3D imaging in the fields of implantology, orthodontics, and for dentists who treat a large number of children, as well as SICAT Air users who use 3D images to display the upper airways and treat obstructive sleep apnea.



Minimum dose for maximum safety for your patients



3D I-X for diagnostic optimization

Indication based on the lowest dose

Intuitive selection for an efficient workflow

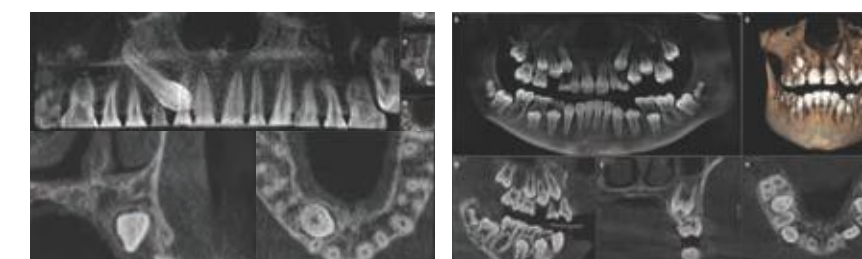
Intelligent technical realization for optimal results

Low dose for a wide range of clinical tasks

- Locating displaced canine teeth
- Determining the position of teeth and reviewing courses of treatment in orthodontics
- Postoperative 3D check in implantology and surgery
- Analysis of the airways and paranasal sinuses




Locating displaced canine teeth
5 cm x 5.5 cm at 3 µSv

Determining the position of
teeth 8 cm x 8 cm at 8 µSv



Flexible volume selection

Orthophos® SL 3D is available in the following package configurations

Orthophos SL 3D-i:	Orthophos SL 3D-Ai:	
Implant Volume	Airway Volume	Implant
		



Everything in site: flexible volume selection

Orthophos SL 3D is available with your choice of 8 cm x 8 cm or 11 cm x 10 cm volume, both of which allow you to select the 5 cm x 5.5 cm volume for endodontic treatment and single implant planning. HD or SD mode and the possibility to select the volume size according to your diagnosis allow for excellent image quality by limiting radiation to the region of interest. The optional ceph arm provides images perfectly suited for orthodontic analysis and tracings.

The right volume for all situations



Additional volumes available: 8 cm x 5.5 cm; 11 cm x 8 cm; 11 cm x 7.5 maxilla



Ambient light

The soothing ambient light with a range of over 30 colors creates a pleasant atmosphere for your patients and fits perfectly into your modern practice look.

Easy operation, safe positioning

The Orthophos® SL's intuitive user interface and automatic positioning aids can be very easily operated by the practice team. This minimizes waiting times, avoids the need for corrections, and guarantees perfect results.

Using the patented auto positioner, the Orthophos SL automatically determines the correct head inclination—all you need to do is press the up and down arrows. The swiveling and tilting EasyPad guarantees optimal and simple operation with easily visible buttons and symbols.



The patented auto positioner

Position the patient with the patented auto positioner. The unit automatically determines the correct tilt of the head and indicates it using corresponding symbols and colors—all you need to do is press the up and down arrows.



Stable positioning for high-quality images

Stable patient positioning prevents motion blurring. The motorized 3-point head fixation and stable handles give your patients the necessary support. At the same time, the EVI* light localizers show you the patient's position in the volume. The integrated temple width measurement ensures an orbit specific to each patient and thereby results in high image sharpness.

*Easy Volume Indicator



Orthophos® XG 3D

Optimized for daily practice tasks: The hybrid Orthophos XG 3D unit combines 2D and 3D x-rays.

Orthophos XG 3D provides the clinical workflow advantages of 2D and 3D together while emitting the lowest possible effective dose for the patient.

The 3D function allows for increased diagnostic accuracy when it is needed most:

- Endodontic procedures
- Surgical procedures
- Volumetric imaging of jaws, sinuses, and other dental anatomy
- 8 x 8 cm volumes (5.5 x 8 cm collimated volume) with MARS
- Automatic sensor rotation between 2D and 3D functions
- 5.5 x 5 cm HD module with MARS
- Optional Optiguide and CEREC® Guide for simplified integrated implantology

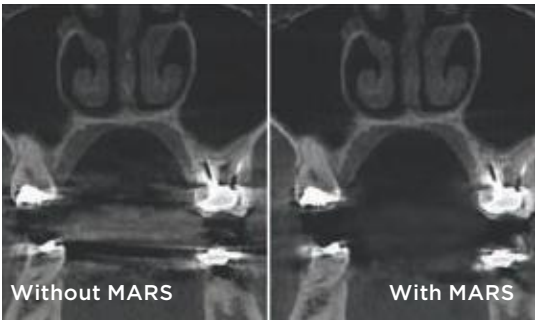
For standard 2D images, Orthophos XG 3D offers:

- The most comprehensive panoramic selections
- Automatic patient positioning using auto positioner
- HiDef sensor with ASTRA for 2D images with unprecedented clarity
- Sinus, TMJ, and extraoral bitewing options and many more



The Orthophos® XG 3D can be upgraded to include the Implant software.

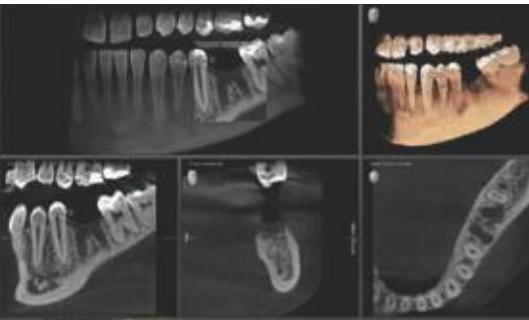
Whether implantology, endodontics, or orthodontics—Orthophos XG 3D provides the right x-ray image. You will find a list of the 2D programs at the end of the brochure.



MARS

Reduces metal artifacts for a better diagnosis

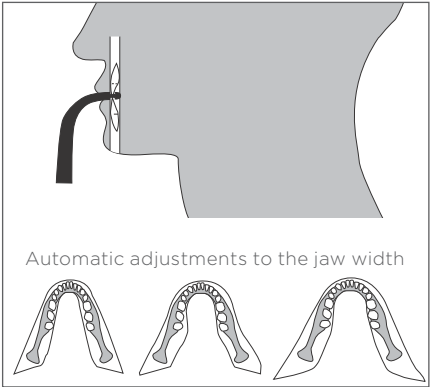
- Makes it possible to provide an improved diagnosis in areas where it was difficult before due to metal artifacts



Endo HD for Orthophos XG 3D

HD volumetric images for accurate and precise endodontic treatment

- Increase diagnostic certainty and treatment planning: Utilizes a smaller volume (5 cm x 5.5 cm) specifically developed for the treatment of a highly focused region of interest



Precise positioning.



Comfortable stabilization.



Ease of operation.

Comparison of Standard and HD mode			
Mode	VOL 1 (8 cm Ø x 8 cm height)		VOL 2 (5 cm Ø x 5.5 cm height)
Standard mode	<ul style="list-style-type: none">■ 200 individual images■ Pulsed radiation■ Voxel size 160 µm		<ul style="list-style-type: none">■ 200 individual images■ Pulsed radiation■ Voxel size 160 µm
HD mode	<ul style="list-style-type: none">■ 500 individual images■ Continuous radiation■ Voxel size 160 µm		<ul style="list-style-type: none">■ 500 individual images■ Continuous radiation■ Voxel size 100 µm

ASTRA for Orthophos® XG 3D

44/45

For quick and reliable diagnoses in all cases, Orthophos XG 3D units offer three image options for 2D imaging:

- Standard view
- Artifact-reduced images with ASTRA
- Sharper, higher-contrast images for HD scans with the HiDef sensor

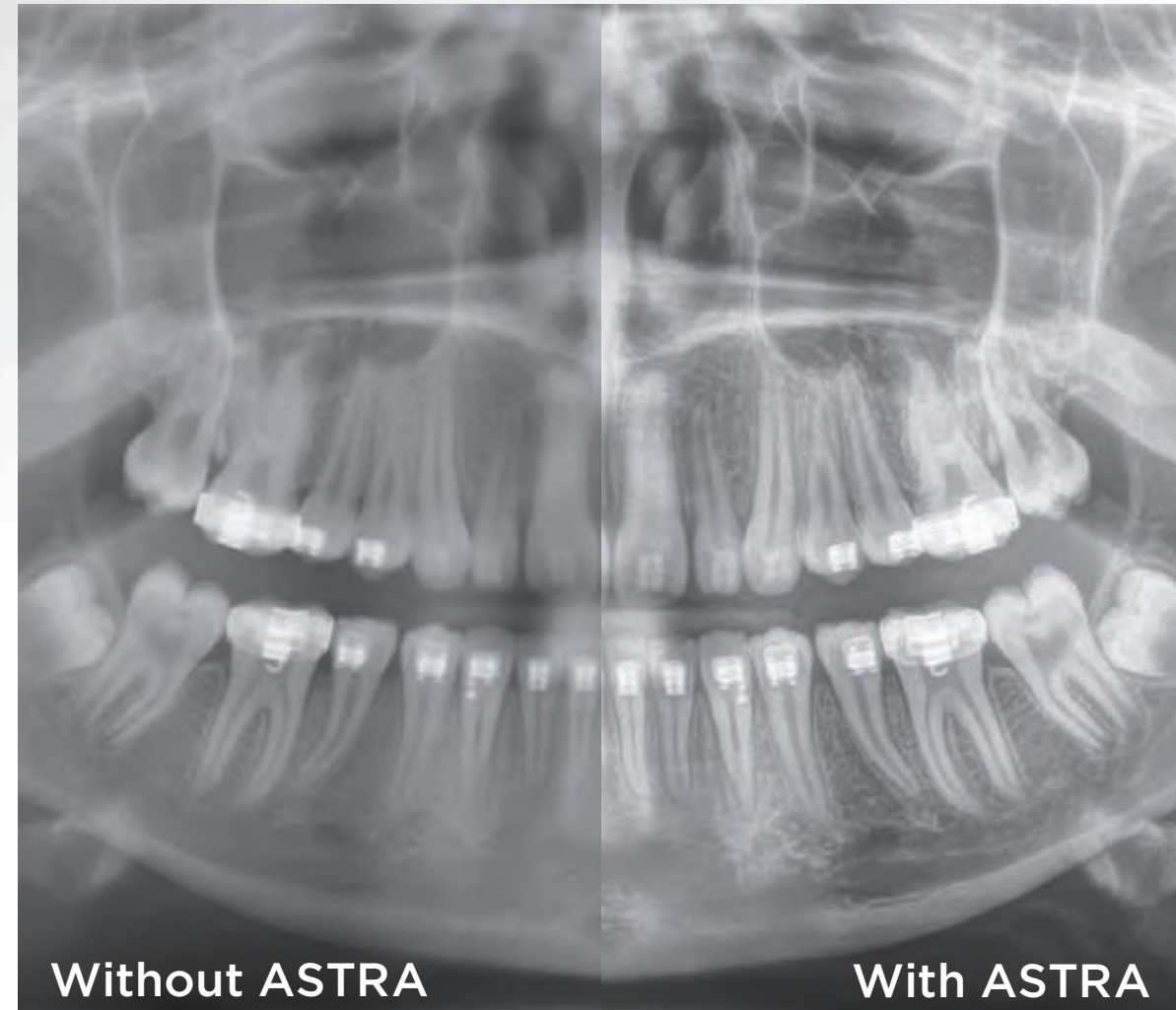
Standard image quality

Captured at 16 bits and automatically pre-processed, the standard image sensor generates images with an excellent standard resolution. The standard image provides the widest possible grayscale between black and white, ensuring easily recognizable details.

What is also crucial to the image quality is uniform irradiation by the high-frequency generator with simultaneous automatic adjustment to fluctuations in the object density in the spinal area. The kV level is raised in the spinal area so that the image shows no shadowing of the spine on the front teeth. Compared to an increase in tube current or reduction in circulation speed in the spinal area, this leads to a reduced patient dose.

HD x-ray scans

Together with the ASTRA, the HiDef sensor produces extremely high-contrast and detailed panoramic and cephalometric for easier diagnosis.



Without ASTRA

Scan with HiDef sensor.

With ASTRA

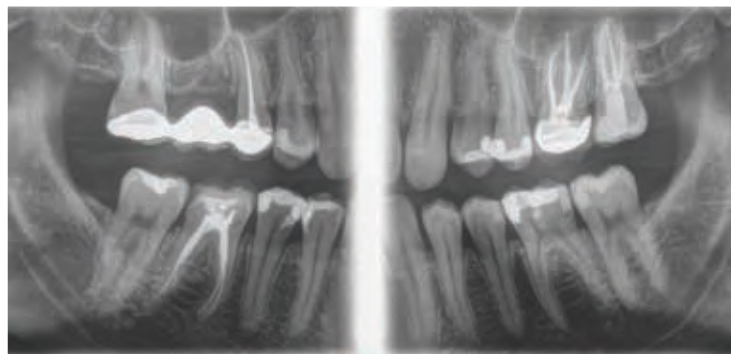
Scan with HiDef sensor and processing with ASTRA.

ASTRA

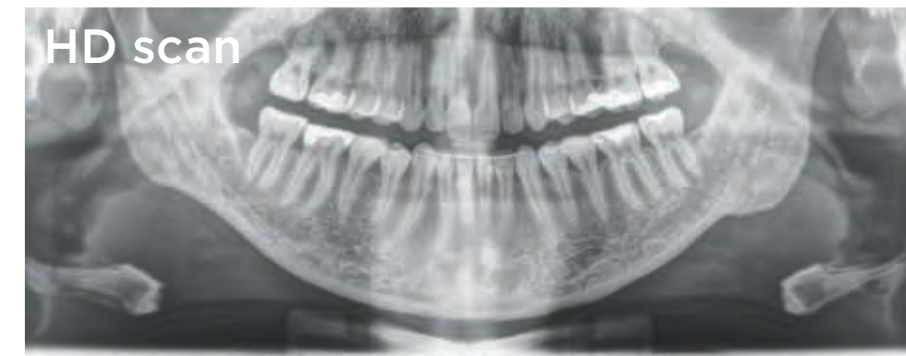
The ASTRA image-processing algorithm produces 2D panoramic and cephalometric images with unprecedented clarity and contrast.

- Highest 2D image quality at the touch of a button, for faster and better diagnoses thanks to clearer images
- Reduces false positive diagnoses of caries on metal margins
- Persuasive image impression, even for patients
- ASTRA = Anatomically STructured Reconstruction Algorithm

High contrast and improved visualization of details.



HD imaging with the HiDef sensor.





Which unit is the one for you?

Frequency and type of use, specialization, price, and personal preferences—every dental practice has its own requirements for an x-ray unit. Here is a quick overview of which Dentsply Sirona 3D x-ray unit is right for you.

Unit	Galileos® Comfort Plus	Orthophos® SL 3D	Orthophos® XG 3D
General dentists	■	■	■
Orthodontic practice	■	■	–
Endodontist	■	■	■
Implantology practice	■	■	□
Oral and maxillofacial surgery	■	■	–
Radiology center	■	■	–
ENT practice	■	–	–
Functional Diagnosis/TMD	■	–	–
Sleep and Airway	■	■	–

■ Suitable
□ Optional

Overview of 3D units



Galileos® Comfort Plus
Our most comprehensive and capable 3D unit, ideal for full-service practices that routinely provide implantology, endodontics, oral and maxillofacial surgery, orthodontics, and general dentistry procedures. Galileos Comfort Plus meets the highest demands on a daily basis.



Orthophos® SL 3D
A genuine “all-around” x-ray unit, Orthophos SL 3D produces sharp 2D panoramic images with its DCS sensor and Sharp Layer Technology, as well as full 3D volume flexibility due to its selectable fields of view. Paired with Sidexis 4, it offers even more options for your practice, allowing you to be more efficient than ever before.



Orthophos® XG 3D
A proven hybrid 3D solution with a perfectly designed cylinder volume of 8 cm x 8 cm and a standard resolution of 160 µm, Orthophos XG 3D is precisely tailored to the everyday routines of private practices, such as capturing the patient’s whole jaw in a single span. The field of view is large enough to avoid stitching of several 3D images and negates the need for multiple x-ray exposures, yet it is small enough to be a time-saver in diagnosis.

Technical Overview	Galileos® Comfort Plus	Orthophos® SL 3D	Orthophos® XG 3D
Field of view	15.4 cm spherical imaging volume collimated 15 x 8.5 cm (UJ/LJ)	11 cm Ø x 10 cm height 11 cm Ø x 8 cm height 11 cm Ø x 7.5 cm height 8 cm Ø x 8 cm height 8 cm Ø x 5.5 cm height 5 cm Ø x 5.5 cm height	8 cm Ø x 8 cm height 8 cm Ø x 5.5 cm height 5 cm Ø x 5.5 cm height
Resolution in 3D: isotropic voxel edge size	0.25/0.125 mm	0.16 mm; 0.08 mm in HD mode	0.16 mm; 0.1 mm in HD mode
Scan time/exposure time	14 s/2–5 s	2–5 s; 14 s in HD mode	2–5 s; 14 s in HD mode
X-ray generator kV mA	98 3–6	60–90 3–16	60–90 3–16
Effective dosage (ICRP 2007)	27–166 µSv (Ludlow)	15–273 µSv (Ludlow)	13–166 µSv (Ludlow)
Space requirements Min. space requirements (depth x width x height)	61" x 63" x 89" minimum values 58" x 53" x 89"	56" x 51" x 89" (PAN), 56" x 85" x 89" (CEPH) minimum values pan 55" x 48" x 89" minimum values ceph 55" x 78" x 89"	56" x 51" x 89" (PAN) minimum values pan 55" x 48" x 89"
Min. door width	At least 26" for installation	At least 26" for installation	At least 26" for installation
Weight	X-ray unit approx. 308 lbs	X-ray unit approx. 243 lbs	X-ray unit approx. 243 lbs
Technical specifications			
User interface	EasyPad	EasyPad	EasyPad
Patient positioning	Standing/seated, chin rest/bite block, forehead support and head fixation device	Standing/sitting, chin support/ bite block, occlusal bite block with automatic patient positioning, universal bite block with colored stop positions	Standing/seated, chin rest/bite block, occlusal bite block for automatic patient positioning for 2D panoramic radiography
Wheelchair accessible	Yes	Yes	Yes
Software	■ Sidexis 4 – Image processing and management software ■ Galileos Implant – Implant planning software ■ CEREC® integration– Simultaneous prosthetic and surgical planning ■ SICAT Function (optional)	■ Implant ■ Sidexis 4 Image and management software ■ Galileos Implant Software ■ CEREC Integration – Simultaneous prosthetic and surgical planning	■ Sidexis 4 – Image processing and management software ■ Galileos Implant – Implant planning software (optional) ■ CEREC® integration– Simultaneous prosthetic and surgical planning (optional)
Views	Ceph lat., Ceph p. a./a. p., freely tiltable 2D slices, PAN with 3D slice navigation, TSA, LSA, axial, sagittal, coronal, 3D model, implant-oriented, high resolution detail volumes	Ceph lat., Ceph p. a./a. p., freely tiltable 2D slices, PAN with 3D slice navigation, TSA, LSA, axial, sagittal, coronal, 3D model, implant-oriented, high resolution detail volumes	Ceph lat., Ceph p. a./a. p., freely tiltable 2D slices, PAN with 3D slice navigation, TSA, LSA, axial, sagittal, coronal, 3D model, implant-oriented, high resolution detail volumes
Packages	Elite Function Standard	Implant Airway and Implant	—
Retrofit options	Galileos FaceScan SICAT Function	Airway Volume, Ceph	Implant
2 Day Clinical Training	2 Clinicians	1 Clinician	1 Clinician

2D programs with
Orthophos® XG 3D and Orthophos® SL*

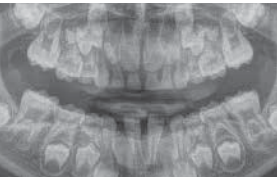
Panoramic



P1 orthoradial radiation



P2 without ascending rami



- P10 pediatric panorama,
beam field reduced in
height and length
- Standard exposure
 - With a constant magnification of 1.25
 - Modified focal path for the constant magnification program (PIC) is also ideal for large patients
 - With artifact reduction

Optional panning
UJ, LJ, right, left, individual quadrants

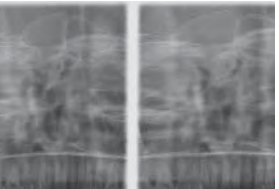


- P12 thick slice in anterior
tooth region
- Optional panning**
UJ, LJ
- Quickshot option for all PAN programs
 - Automatic adjustment of the rotation curve to the jaw width
 - Automatic positioning with occlusal bite block

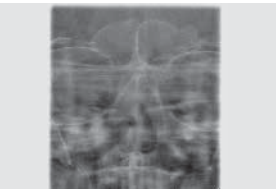
Sinus



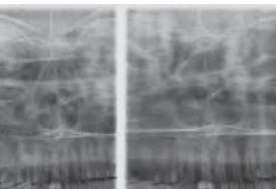
S1 maxillary sinuses
in one image



S2 maxillary sinuses
in two images

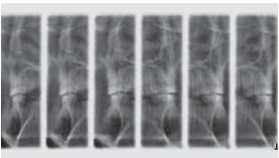


S3 maxillary sinuses
in one image (linear)



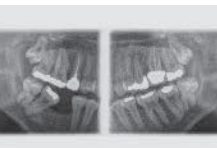
S4 maxillary sinuses
in two images (linear)

Multislice in posterior tooth region

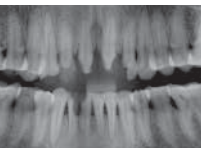


MS1

Bitewing



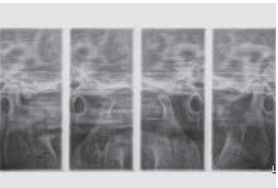
BW1



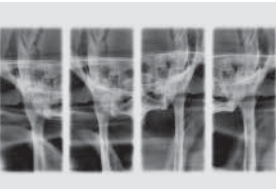
BW2 anterior tooth
region

Optional panning
right, left

Temporomandibular joint

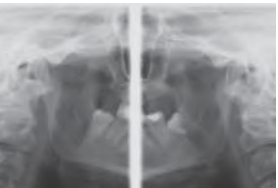


TM1 lateral

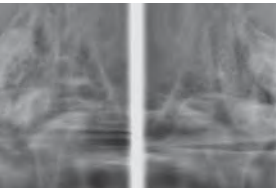


TM2 axial

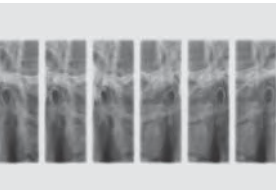
- Adjustable radiation angle**
- with open and closed occlusion
 - with a slice position



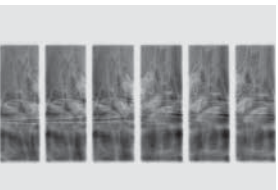
TM3



TM4



TM5



TM6

*In contrast to XG 3D, Orthophos SL does not have the following programs: TM2, TM4, TM5, TM6, MS1, S2, S3

Sidexis 4 Software

System Requirements		
Server PC	Minimum requirements	Recommended requirements
Operating system	<ul style="list-style-type: none">• Windows 7 Professional • Ultimate (64 bit)*• Windows 8 Pro (64 bit)*• Windows 8.1 Pro (64 bit)*• Windows Server 2008 (32 or 64 bit)• Windows Server 2008 R2 (64 bit)• Windows Server 2012 (64 bit)• Windows Server 2012 R2 (64 bit)	<ul style="list-style-type: none">• Windows Server 2008 (64 bit)• Windows Server 2008 R2 (64 bit)• Windows Server 2012 (64 bit)• Windows Server 2012 R2 (64 bit)
RAM	≥4GB	≥8GB
CPU	≥2 GHz DualCore	≥2.3 GHz QuadCore processor with 64 bit (x64)
Hard disk	>675GB	> 1TB
	During operation it must be ensured that there is always sufficient hard disk space available.	
Workstation PC**	Recommended for 2D	Recommended for 3D
Operating system	<ul style="list-style-type: none">• Windows 7 Professional, Ultimate (32 or 64 bit), also under Bootcamp*• Windows 8 Pro (64 bit)• Windows 8.1 Pro (64 bit)	<ul style="list-style-type: none">• Windows 7 Professional, Ultimate (64 bit), also under Bootcamp*• Windows 8 Pro (64 bit)• Windows 8.1 Pro (64 bit)
RAM	≥4GB	≥8GB
CPU	≥2 GHz DualCore	≥2.3 GHz QuadCore processor with 64 bit (x64)
Graphics card†	≥512MB	≥1GB
DirectX	DirectX 9.0c	DirectX 10 with WDDM 1.0 or higher driver
Hard disk	≥5GB	≥5GB

*System requirements of the hardware used may vary. More information at www.sirona.com/Sidexis4-system_requirements
**Certain requirements may change depending on the x-ray system used.
†The installation on a domain controller is not cleared.



X-ray Cabinet (Optional)
Organize bite blocks, hygiene covers, service kit, user manual, support rods, and more.



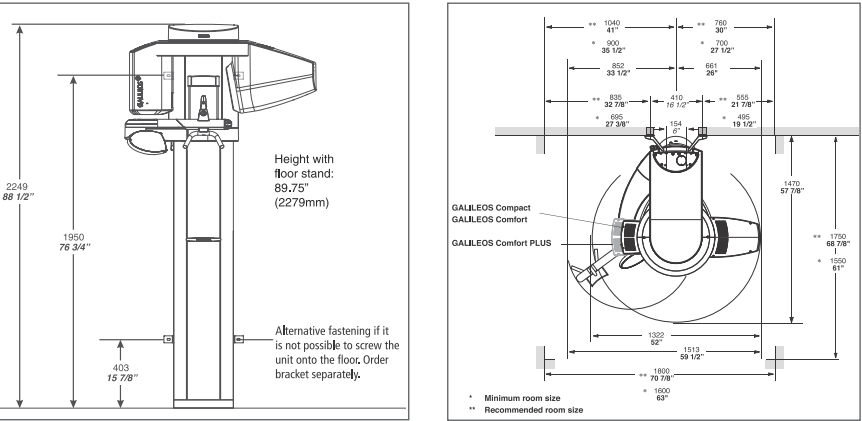
PC Cabinet (Optional)
Can be added to existing Orthophos® and Galileos® installations; No unit modifications necessary.



Wheelchair Accessible (Optional)
Individual patient positioning even for wheelchair users.

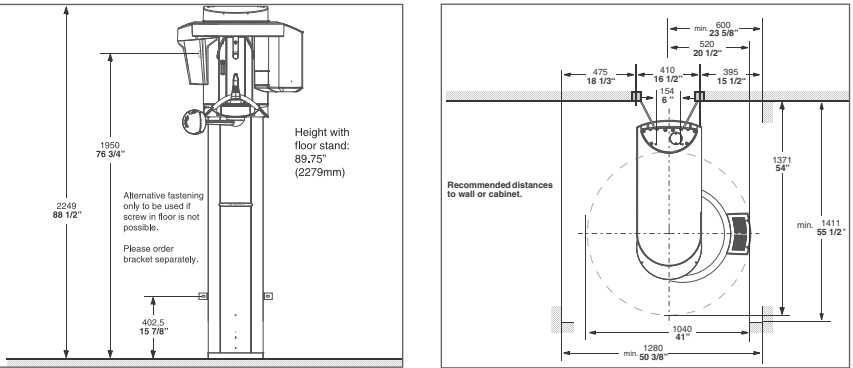
Dimensions for Galileos®

Designed to fit your workflow and your practice.



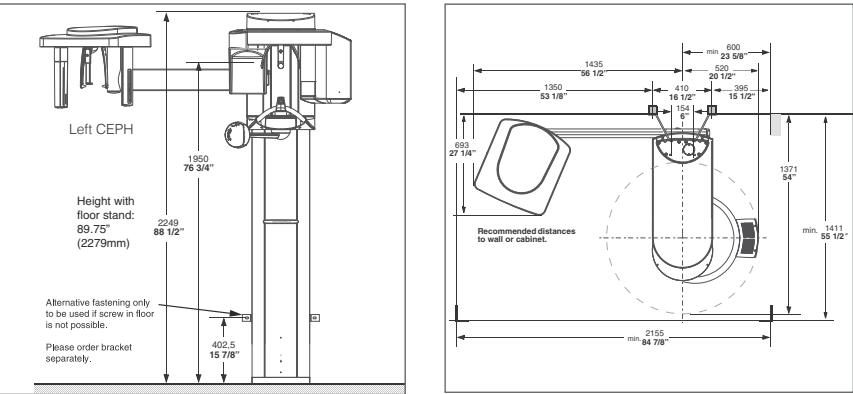
Dimensions for Orthophos®

Flexible x-ray imaging that accommodates any size practice.



Space requirements

The Orthophos SL 3D and XG 3D require a space of 50.4" x 55.6" (1280 x 1411 mm)



Space requirements with ceph arm

With the ceph arm (mounted on the left or right), the space requirement increases to 84.8" x 55.6".

Dentsply Sirona

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Procedural Solutions

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