

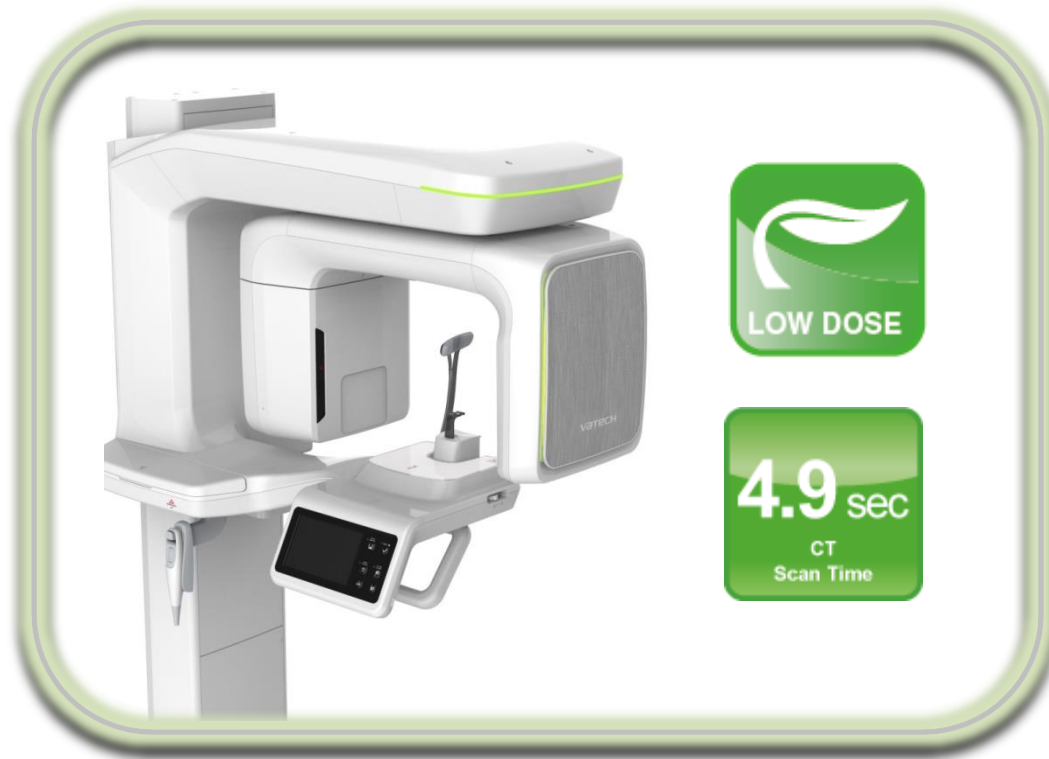
GREEN 16

GREEN INNOVATION FOR
THE NEXT GENERATION



Beyond Green CT

Human-oriented innovation For the next generation.



Time for a change **GREEN 16**

What makes **GREEN**?

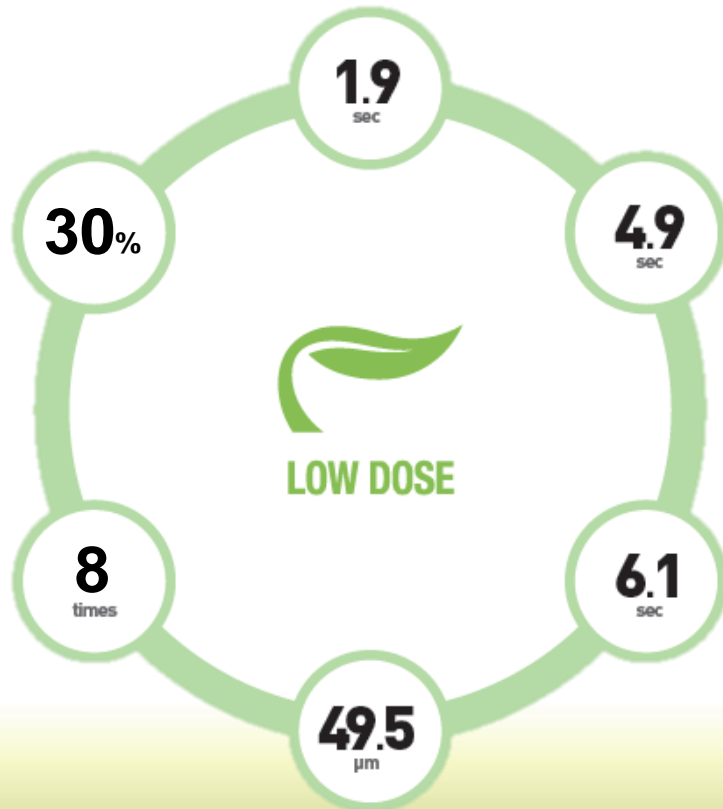
Green technology is not made easily. It is a combination of modern technologies.



If one of the three factors is missing, it is difficult to say that a CBCT is Green .

Since the introduction of the 1st generation of Green, VATECH has been developing the next generation of Green CT and has accumulated studies and datasets for new development. The new achievement, Green 16, is the result of the continuous R&D activities.

Green16 in numbers

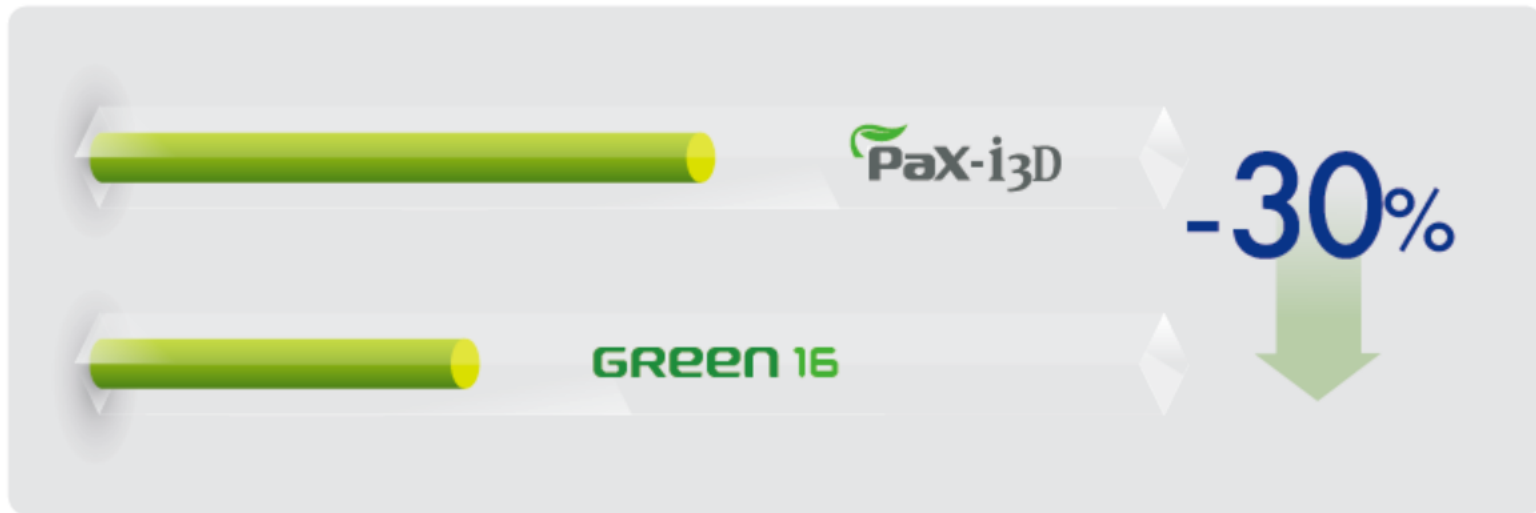


VATECH has developed many technologies that challenge the stereotypes of dental radiography. It has always been believed that low radiation comes with inferior image quality.

However, Green CT™ has successfully been providing clinically diagnosable X-ray scans at low X-ray dose and it is reinforced by Green 16, the 2nd generation of **Green CT™**.

Safe for All, 30% Lower Radiation

Green 16 reduced radiation by 30% more than the low dose PaX-i3D Green.



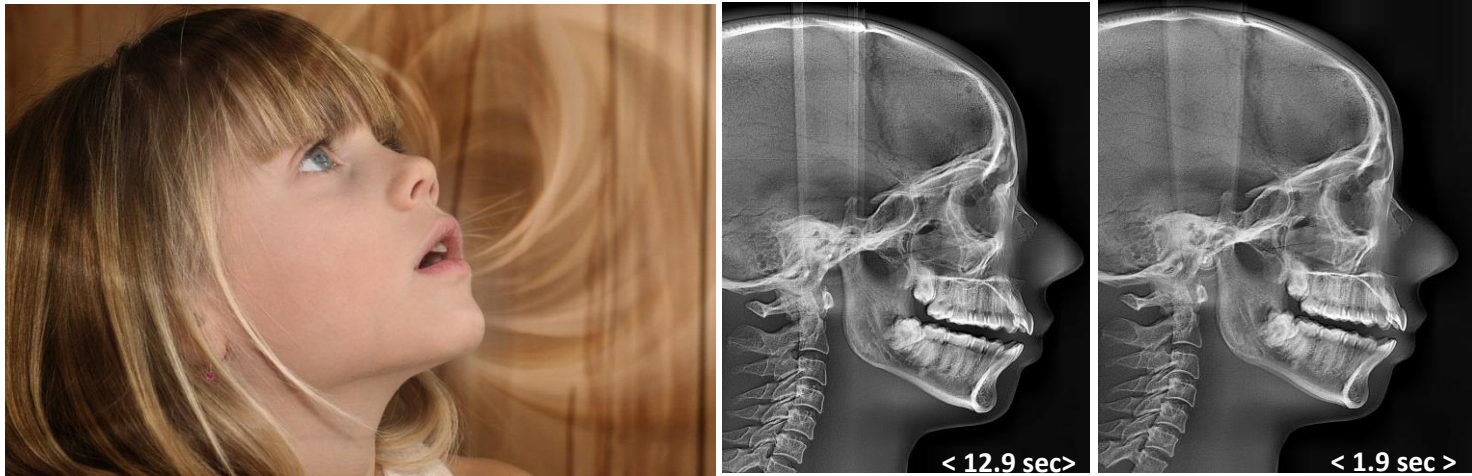
What has been developed at VATECH breaks many conventions in dental radiography.

It was always believed that with low radiation comes inferior image quality, which renders it useless in clinical diagnosis. However, Green16 provides clinically diagnosable X-ray scans at a low X-ray dosage. With low dose X-ray radiography, achieving clinically diagnosable image quality is the new golden-standard.

* Provided information is written on the basis of dose data measured under specified test environment with protocol by the manufacturer may be different from the dose data measured at customer site. This is for reference only. Please contact the authorized representative in your country in case of measurement of your device is necessarily required.

Children are active

1.9 sec ceph would be the best option



“Transient attention is a short-term response to a stimulus that temporarily attracts/distracts attention. Researchers disagree on the exact amount of human transient attention span; some say it may be as short as “8 seconds”

< Resources : iTechPost Sep 26, 2016 03:00 >

Even for adults, it is not easy to stand still when paying attention to one thing for 8 seconds.

This means that it is almost impossible for children to be focused without movement during 12 seconds of Cephalometric scanning time.

The shortest 1.9 sec ceph scanning time always reduces the movement of children as well as adults.

Children are our top priority

4.9 sec CBCT would be the best option



Everyone knows CBCT has become essential for diagnosis.
What about in Pediatric?

* Source: Survey result from IAPD

- ✓ Ectopic eruption
- ✓ Trauma surgery
- ✓ Supernumerary teeth



*Children can't hold themselves still for a long time. This results in a blurry image.
What about 4.9 sec CBCT Scan?*

Devoting ourselves to human health care, VATECH goes forward from Green to Green16 with minimum radiation based on shortest CBCT scan time.

Regular check-ups are crucial for dental health

6.1 sec Pano would be the best option
How much patience does a child have?



Is it possible for a child with a toothache to hold still during a 10-12 sec Pano scan time?
Green 16 has a pano mode which is specially designed for children's safety with **6.1 sec** scanning time.

Innovative detector for ensured image quality

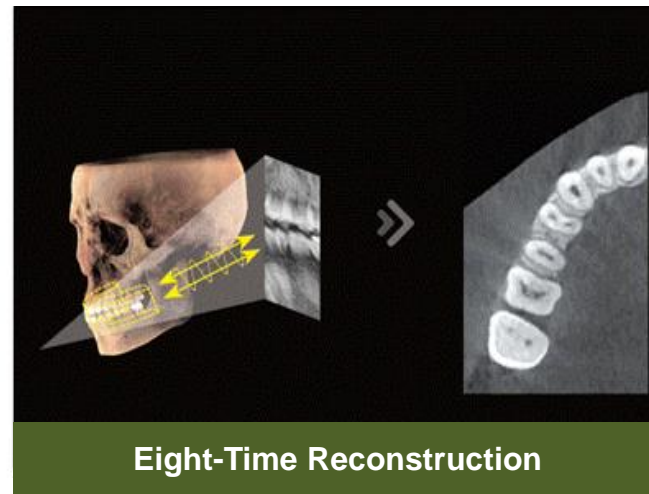
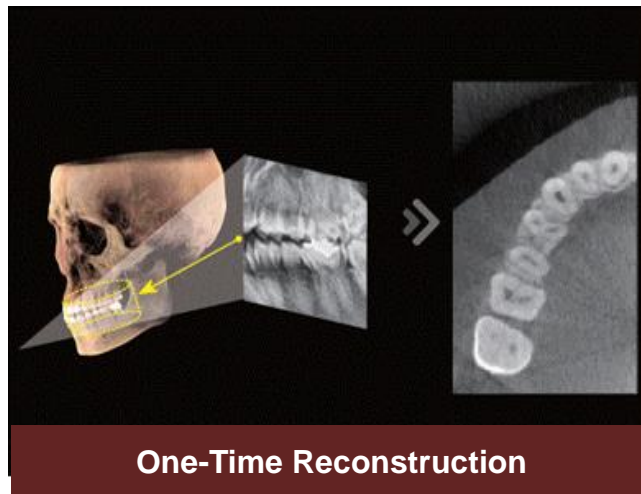
Green 16 utilizes a 49.5 μ m high resolution CMOS X-ray sensor.



It is the smallest pixel/high resolution dynamic X-ray sensor for CBCT currently available on the market. For X-ray sensors, such a small pixel requires consistent, precise manufacturing, even a single defect at a microscopic level can render the entire imaging array defective. For most manufacturers this has proven to be cost prohibitive and continues to be; unless the precision in manufacturing will advance to make this a reality.

Achieve the goals set for investing in a **3D X-ray machine**

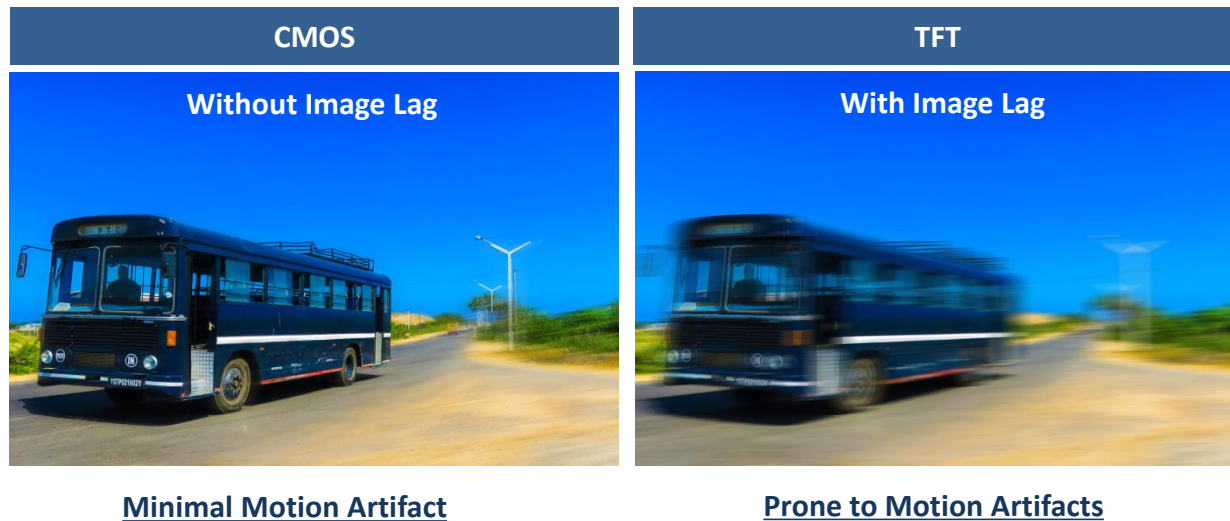
Iterative Reconstruction for high quality image



VATECH replaced conventional reconstruction algorithm with the medical reconstruction algorithm. Simply put, **it repeats the reconstruction process 8 times and it produces high quality image as the result.** Under the same exposure condition, the image reconstructed using this method has significantly better image quality with reduced noise and better contrast resolution.

Achieve the goals set for investing in a 3D X-ray machine

Green16 utilizes CMOS X-ray sensor



- Higher readout speed & Minimized ghosting on the images
- Faster CT scanning
- Higher electrical charge mobility & Lower noise

Familiarize with a **new 3D software** in a minimal time

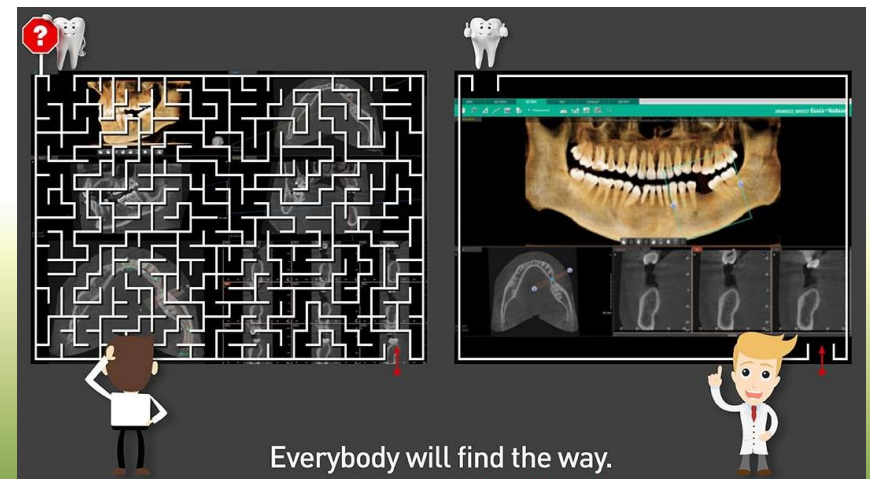
Are you trained well enough to use 3D?

There are some advanced features that you must do that are barriers to using CBCT properly.

- ✓ Orienting all axes; Axial, Sagittal, Coronal
- ✓ Drawing panoramic curve for every case
- ✓ Dealing with too many buttons and functions

To make the most of your investment, you need to be familiar with 3D and use it freely to expand your practice.

However, the above steps can hinder you from reaching success.



Familiarize with a **new 3D software** in a minimal time

What if you no longer needed to do these difficult steps?

- ✓ Orienting all views; Axial, Sagittal, Coronal
- ✓ Drawing panoramic plane for every case
- ✓ Dealing with too many buttons and functions

One-Click Sectioning

What can One-Click sectioning do for you?

(Stress free) Easy to access

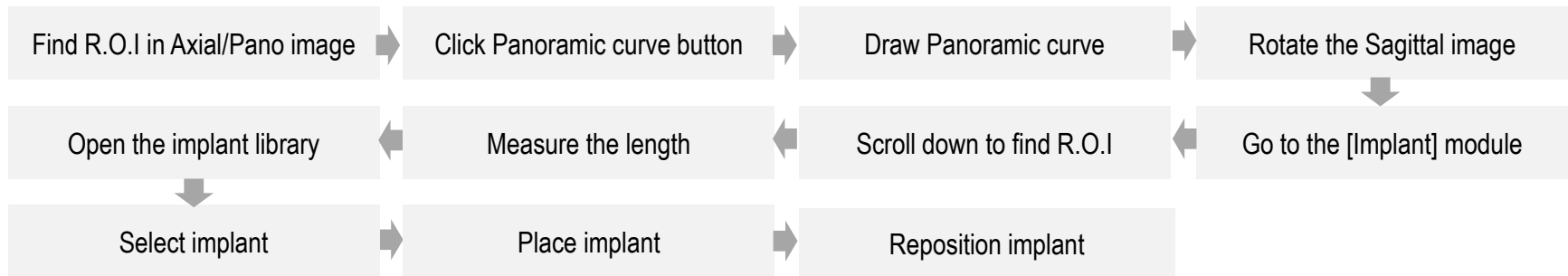
5-second sectioning is possible because Ez3D-i provides volume panoramic image. Without getting stressed out, you can access and utilize 3D in any case.

Time Saving

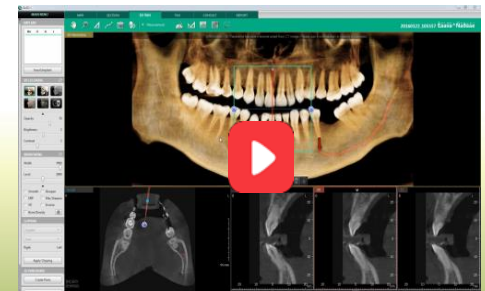
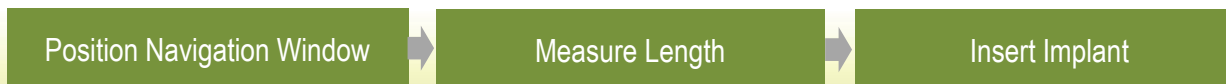
Advanced required steps for making diagnostic plans can be done within a few seconds. It dramatically saves you time to see more patients, and makes it easy for your staff to learn as well.

Familiarize with a **new 3D software** in a minimal time

What about the implant simulation process?

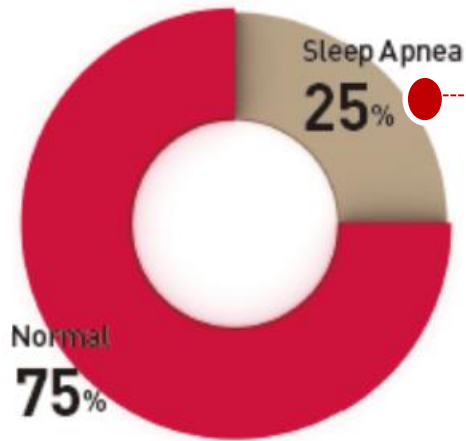


VS.

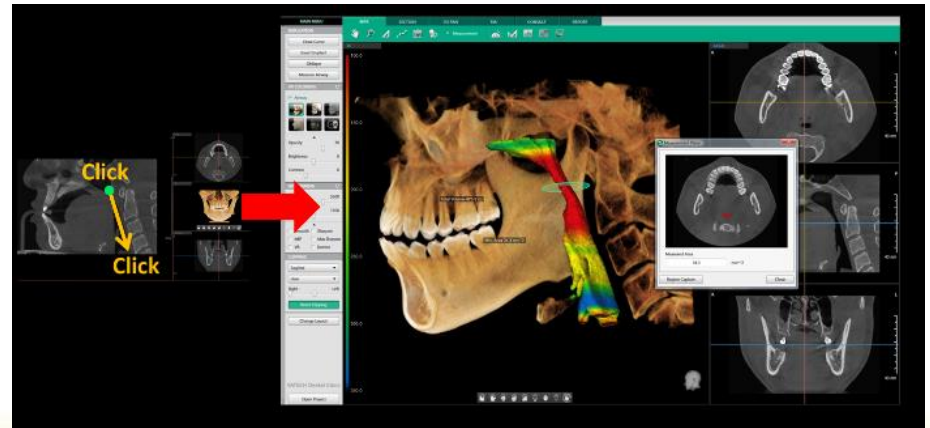


Ez3D-i enables **Airway analysis**

Treatment for Sleep Apnea, became an additional source of income in dental clinics



Sleep apnea patients have considerable differences such as size and position of the mandible, airway space, size of the tongue and the soft palate compared to patients without sleep apnea, making measurement of the airway volume necessary.



Ez3D-i's Measure Airway function provides accurate diagnostic information for the airway, which can then be used to diagnose and/or plan treatment for patients with sleep apnea syndrome.

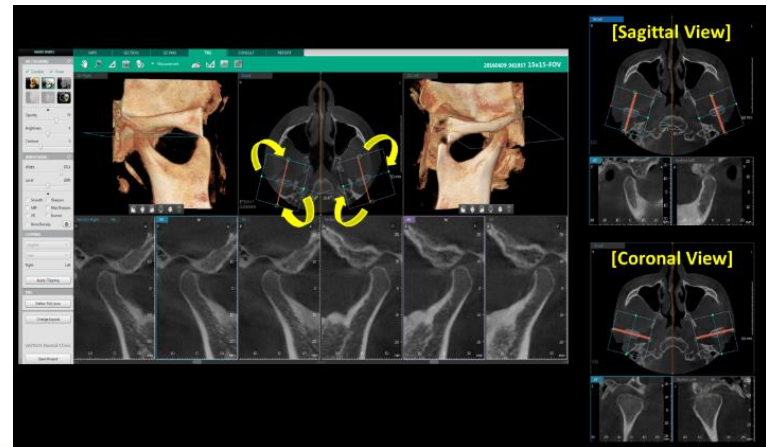
The measured airway is also displayed in 3D, providing the user with a powerful visualization tool.

Ez3D-i enables **TMJ analysis**

Simultaneous Analysis for both TMJ



TMD (Temporo Mandibular joint Disorder) can cause pain in the jaw joint of your patients. It can be caused by trauma such as grinding the teeth (bruxism) and clenching. These habits can change the alignment of teeth and cause the pain in the TMJ and facial muscles when chewing.



Ez3D-i's TMJ view provides a viewing layout optimized for the simultaneous analysis of TMJ regions, allowing users to quickly diagnose TMJ disorder as well as other common patient conditions such as cholesteatoma and chronic sinusitis.

Improve the **accuracy** of implant treatment planning

Benefits of ART-V



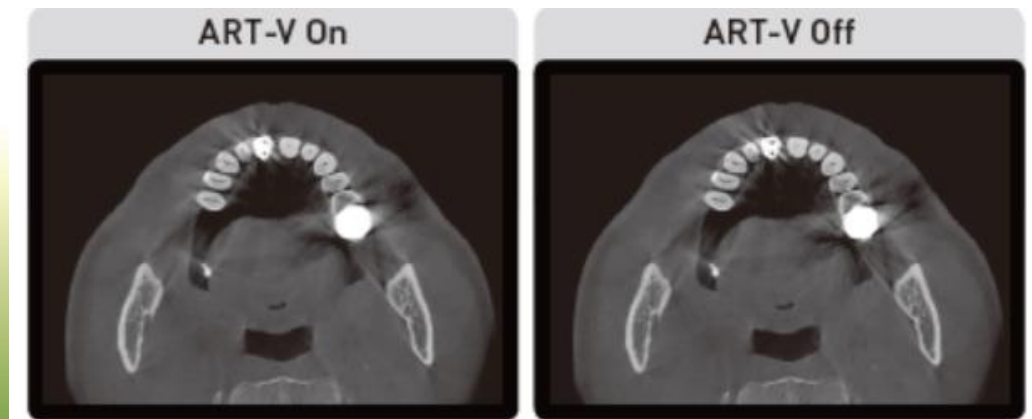
Improve the accuracy with ART-V

- Clear images give you less stress and more confidence
- Leads to accurate diagnosis for implant planning
- No extra discomfort to create surgical guide



Efficient Workflow

- ART-V Solution automatically activates the function according to patients' dental conditions



* ART-V : Artifact Reduction Technology from VATECH

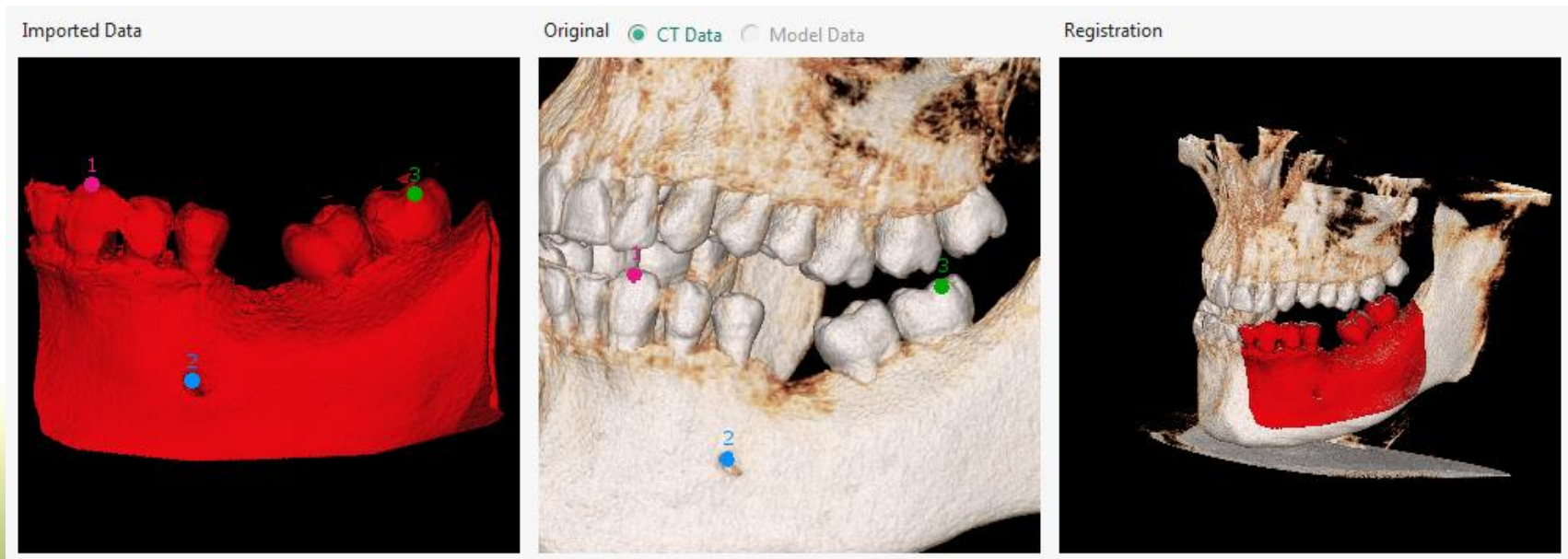
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3D Model Scan enables for **ease of management**

3D Scanning for Model

✓ Digitized One-stop Clinic

- 3D model scan enables to store plasters as digital models



Specification

Function	CT + Pano + Ceph + Model Scan	
Focal Spot Size	0.5 mm (IEC60336)	
CT FOV Size	16x9 / 12x9 / 8x9 / 5x5	
Voxel Size (mm)	16x9	0.2 / 0.3
	12x9	0.2 / 0.3
	8x9	0.12 / 0.2
	5x5	0.08 / 0.12
Scan Time (sec)	Pano	14.1 / 7.0 (Optional with Magic PAN)
	Ceph	3.9 / 1.9
	CBCT	9.0 (16x9 ~ 12x9) / 4.9 (5x5~8x9)
Gray Scale	14 Bit	
Tube Voltage / Current	60 - 99 kVp / 4 ~ 16 mA	
Weight	Without CEPH unit	134 kg (295.4 lbs - without the Base)
		187kg (412.3 lbs - with the Base)
	With CEPH unit	159 kg (350.5 lbs - without the Base)
		212 kg (467.4 lbs - with the Base)
Dimensions	Without CEPH unit	1125 mm (L) x 1488.7 mm (W) x 2335.5 mm (H)
	With CEPH unit	1874.1 mm (L) x 1488.7 mm (W) x 2335.5 mm (H)

*The specifications are subject to change without prior notice.



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