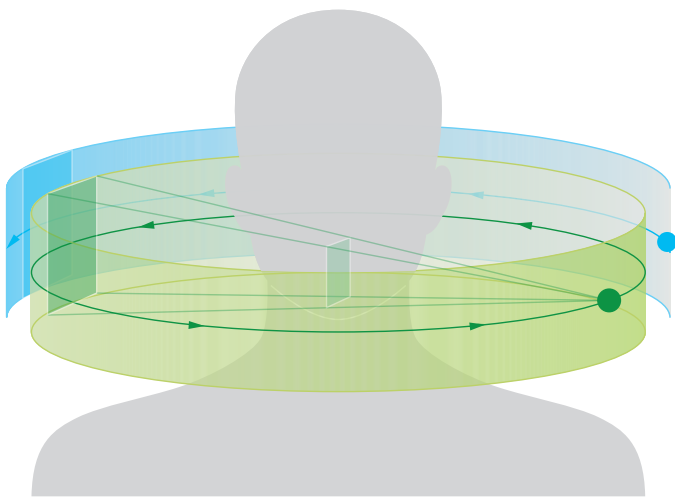





*3D imaging is a safe and effective tool for a fast and thorough diagnosis.*



*Obtaining a 3D image is quick and easy. Scans are generally between 10 and 20 seconds.*

Thinking ahead. Focused on life.   
MORITA

## Dental X-Rays With Digital 3D Technology



### Dose Reference Information:

Effective dose is calculated in accordance with the ICRP Pub.103 2007 for Exposure of the Mandibular Molar Region with Morita's recommended loading factor (80kV, 3mA, 9.4 sec., Ø 40 x H 40 mm).

Panoramic comparison is made to the Veraviewepocs film (75kV, 8mA, 16 sec.).

Cosmic radiation reference: *Radiation Dose and Dose Rate*. National Aeronautics and Space Administration website, available at: [spacemath.gsfc.nasa.gov](http://spacemath.gsfc.nasa.gov).

## Advanced 3D Technology

Our goal is to provide you with the best, most accurate, and thorough diagnosis possible. Recent technological breakthroughs have allowed us to make major advances in our ability to achieve that goal. CBCT (Cone Beam Computed Tomography), also referred to as 3D, is a technology similar to CAT scans in that it will give us a 360 degree, three-dimensional view of the area we are examining.

Previously, we were limited to a two-dimensional picture of a three-dimensional problem. There were many things we could not see because dental X-rays did not have the resolution to show them. Despite our best efforts, we were forced to infer, project, surmise, calculate, and interpret. Often, we could only give our best educated guess based on what we could see on the X-ray. Additionally, X-rays were often not sensitive enough to show very small problems or early warning signs of complications.

That has all changed significantly with the advent of CBCT. With its extremely high resolution and low radiation, it has literally changed our world with respect to what we can now see. CBCT imaging offers a large volume of information and subtle details that simply cannot be obtained by any two-dimensional X-ray, whether intraoral or panoramic.

One 3D scan will allow us to examine the region of interest at a high resolution from many different perspectives. Clinical studies support this technology's improved diagnostic capabilities. We are very proud of CBCT and feel strongly that this state-of-the-art technology will allow us to provide our patients with the very highest level of care possible today.

## Maximum Patient Safety

Taking the image is very simple. The scan generally takes between 10 and 20 seconds and the images are transferred directly to a computer.

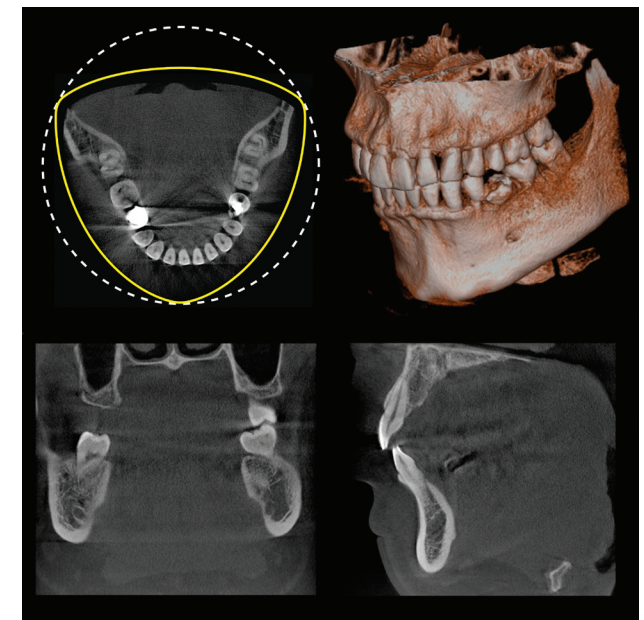
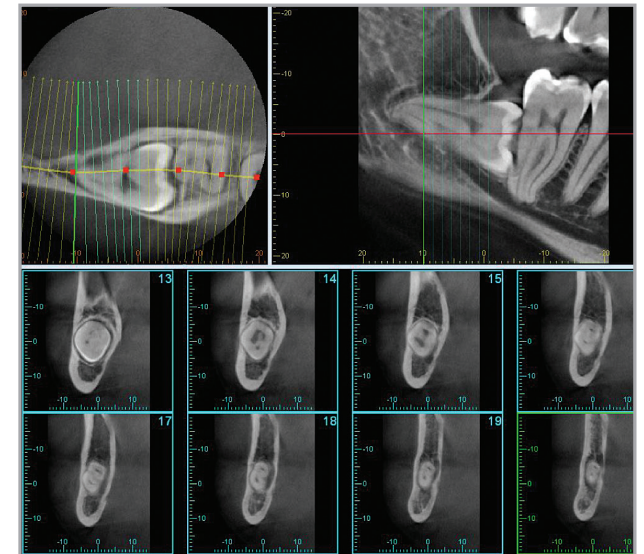
A common question is the amount of radiation that is emitted in obtaining this type of image. In an effort to provide the best care and lowest radiation dose possible, we selected a unit by Morita. Their machines offer extremely low radiation dose. Below are a few comparisons for typical scans.

40 x 40 mm:

- Less than a medical chest X-ray
- Less than 1 standard panoramic X-ray
- Less than the amount of radiation absorbed during a flight from Los Angeles to New York (cosmic radiation)

100 x 80 mm:

- Less than a medical chest x-ray
- Less than the amount of radiation absorbed during a flight from New York to Asia



*Reuleaux Full Arch Field of View, indicated in yellow, is a Morita technology that can reduce exposure due to its unique shape.*