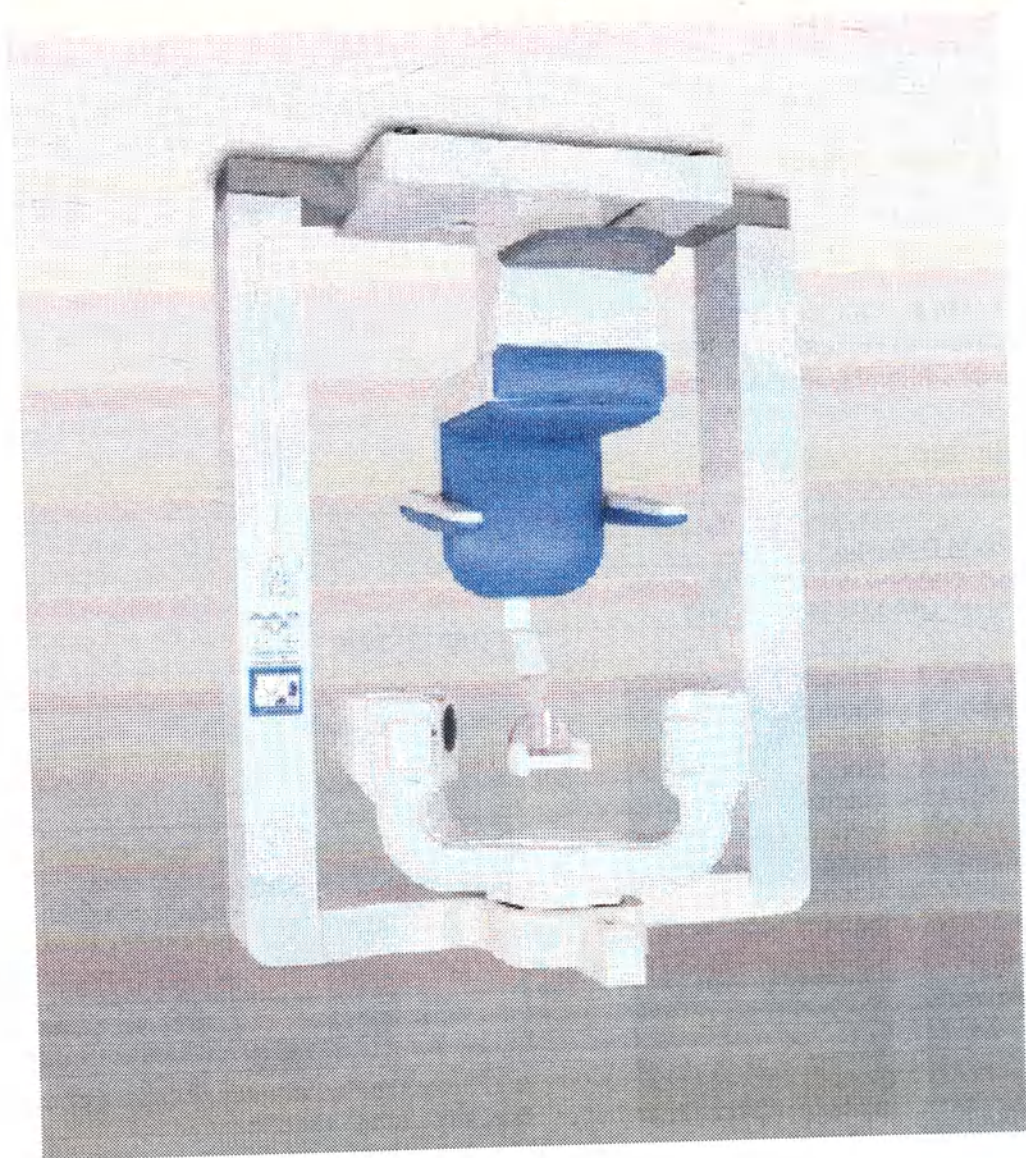
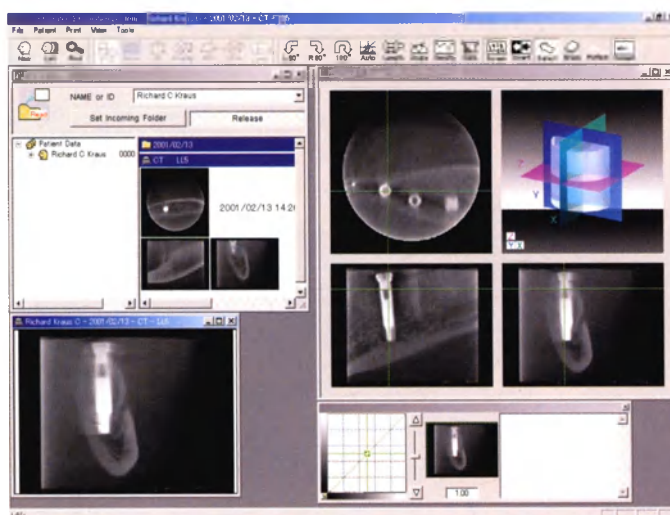
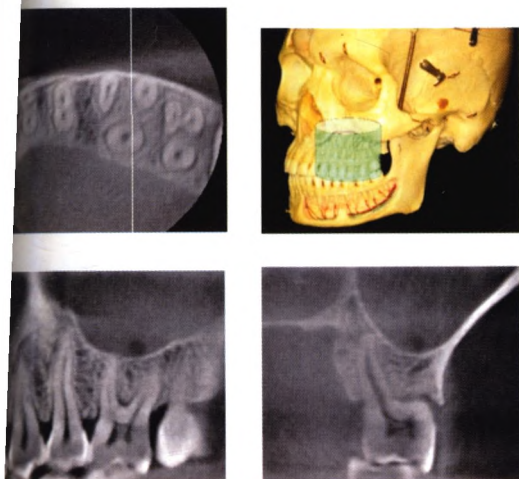




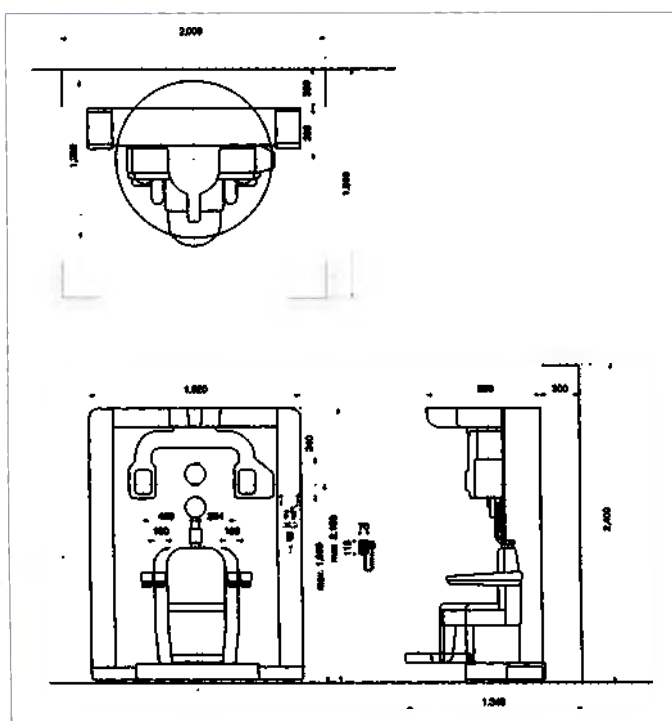


Images provided by: Drs. Koji Shinoda and
Shinori Arai, Department of Radiology, Nihon
University School of Dentistry

Clinical Application

For 3 dimensional diagnostic and examination
images of the dento-maxillofacial region.
For fluoroscopic images of TMJ.

Dimensions



Trade Name	3DX Multi-Image Micro CT
Model	MCT-1
Power Consumption	2.0 kVA
X-ray Head	
Tube Voltage	60 ~ 80 kV
Tube Current	1 ~ 10mA
Size of Focal spot	0.5 mm x 0.5 mm
Exposure Time	17 sec. (maximum)
Size of Imaging Area	Diameter ϕ 40 x 30 mm, Cylindrical Area (Limited imaging area)
Resolution	
Voxel size	0.125 mm x 0.125 mm x 0.125 mm
Slice Width	1.0 mm
Reconstruction time	5 min. (maximum) with Pentium IV Processor 1.5 GHz
Outer Dimensions	
Main Unit Width	Width 1,620 mm x Depth 1,200 mm x Height 2,080 mm
Control Box Width	Width 70 mm x Depth 40 mm x Height 115 mm
Layout Area	1.944 m ²
Weight	Approx. 400 kg

Innovative Product from
J.MORITA MFG.CORP.
Kyoto Japan

Dento-Maxillofacial Limited Cone-beam Super High Resolution CT 3DX MULTI-IMAGE MICRO CT



**The dream of 3 D Diagnosis and Examination comes true
- with Super High resolution**



Finally the dream of 3 dimensional images for diagnosis and examination is available with 3DX Multi Image Micro CT. 3 dimensional images of 3DX make precision diagnosis possible for implant, apical abscesses, TMJ disorder and impacted teeth etc., which was difficult with conventional 2 dimensional images.

3DX makes diagnosis possible with Super High resolution 3 dimensional images for small lesions within a limited area of the extremely complex morphology of hard tissue of the dento-maxillofacial region.

Resolution : More than 2 line pairs/mm

3 Dimensional X-ray CT

Limited imaging area ($\phi 40 \times 30$ mm)

Low X-radiation and Compact

Super High resolution images in the same short period as Panoramic Radiograph. Low X-radiation and Compact.

Short exposure Time	Approx. 17 seconds
Compact size	1,620 x 1,200 x 2,080 mm



Procedure of Radiograph

Limited Imaging Area, cylindrical shape, is positioned to the region of interest by moving the patient chair laterally, longitudinally and vertically.

Small conical X-ray beam is exposed to high sensitivity Image Intensifier (I.I.) with CCD sensor, while C-ram is rotating 360 degrees around the region of interest for 17 seconds. Digital image is transmitted to computer.

3 dimensional images are generated by reconstruction algorithm after several mathematical data processing and displayed on PC monitor.

