



This product is available through:

JRT Associates

800-221-0111



Pro-Dent CT mk II

The new Pro-Dent CT mk II phantom is a versatile quality control tool of dental Cone-Beam CT, Dental Volume Tomography (DVT) and other 3D imaging devices according to the Radiation Protection Report no 172 by SEDENTEXCT.

The phantom consists of a main PMMA cylinder that houses modules with different test objects. Thanks to this design, you can perform tests with devices with a small FOV at different positions in the 160 mm phantom.

































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Technical data (can be modified to customer specifications):

- · diameter: 160 mm
- made of PMMA (1.19 g/cm³)
- total length: 170 mm
- noise / uniformity section:
 - uniform PMMA part of the phantom
- geometric distortion section:
 - an array of 2.0 mm diameter, 3.0 mm long holes uniformly pitched at 10.0 mm intervals
- slice geometry section:
 - 20 mm thick module with two pairs of aluminum ramps and empty rods in vertexes of a square for detailed evaluation of slice thickness and geometry and laser position verification
- · 5 layer modules section with modules containing
 - Linear Spread Function (LSF) PTFE / PMMA interface
 - Point Spread Function (PSF) 0.25 mm stainless steel wire in air
 - XY high contrast resolution (aluminum/polymer) 1.0, 1.7, 2.0, 2.5, 2.8, 4.0, 5.0 LP/mm
 - Z high contrast resolution (aluminum/polymer) 1.0, 1.7, 2.0, 2.5, 2.8, 4.0, 5.0 LP/mm
 - 6 low-contrast groups of 1.0, 2.0, 3.0, 4.0, 5.0, 6.0 mm rods made of: aluminum, PTFE, POM-C (delrin), PE-300, air and water emulating epoxy; background made of PMMA
 - 10 mm rods made of aluminum, PTFE, POM-C (delrin), PE-300, air and water emulating epoxy suspended in PMMA - pixel intensity / HU values samples
 - stacked 20 mm diameter contrast-to-noise discs made of aluminum, PTFE, POM-C (delrin), PE-300 and air suspended in PMMA
 - three 5.0 mm diameter titanium rods embedded in PMMA - beam hardening artefacts
- · positioning aids on the outside surface of the phantom
- test stand with spirit level for accurate placing of the phantom in the test position
- folding base for test stand positioning on the X-ray unit's chair
- convenient, portable case for storing and transporting the phantom
- · optional additional homogeneity disc

Product features:

- · Complies with:
 - Radiation Protection no 172 report by the SEDENTEXCT
 - IEC 61223-3-4 and IEC 61223-3-5
- CE certified
- · the Manual provides detailed guidelines for carrying out each test, results assessment and registration











































