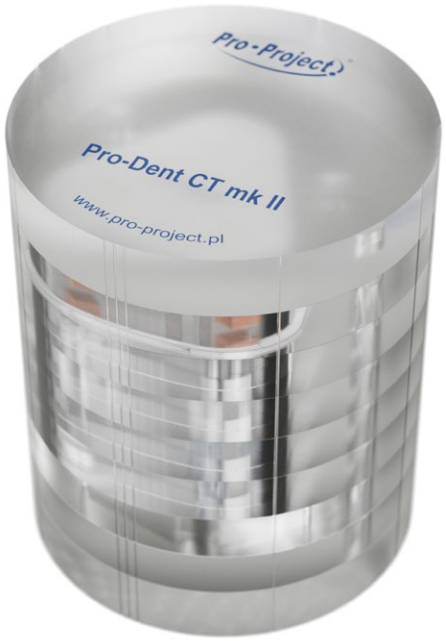
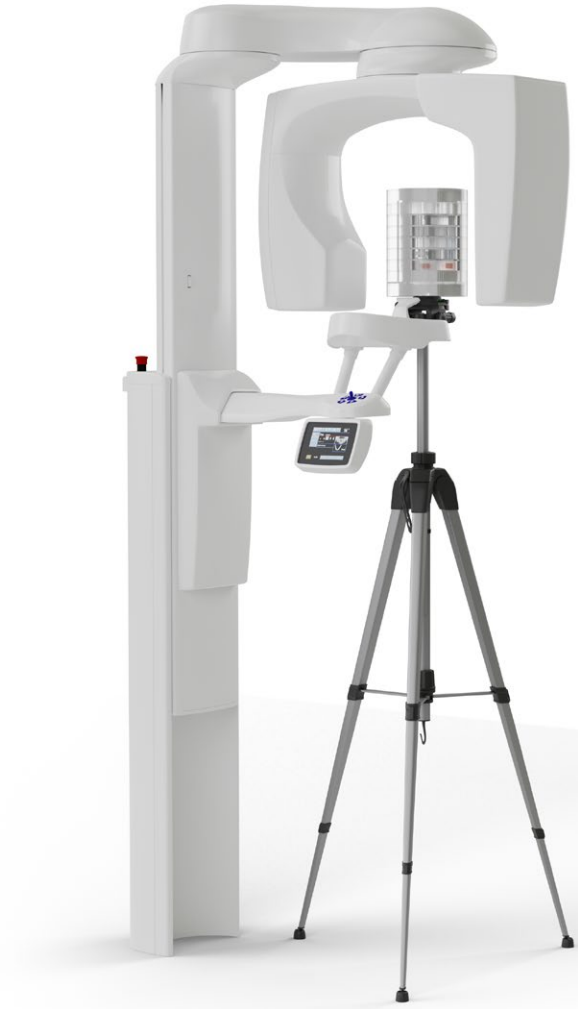
Pro-Dent CT mk II

01-501



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.

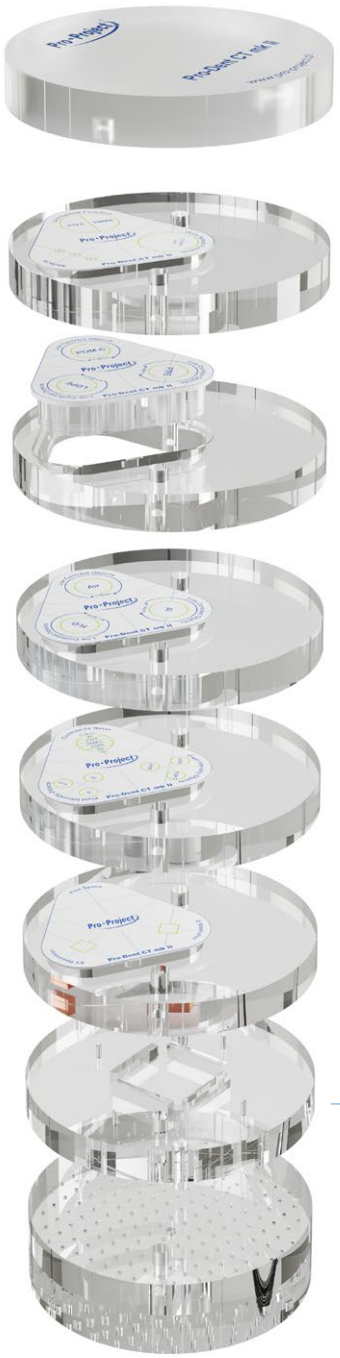
The phantom consists of a main PMMA cylinder that houses modules with different test objects. Thanks to this design, you can perform tests with devices with a small FOV at different positions in the 160mm phantom.



Accessories

- 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

Technical data (can be modified to customer specifications)



General

- diameter: 160 mm
- made of PMMA (1.19 g/cm³)
- total length: 170 mm
- positioning aids on the outside surface of the phantom

Noise / uniformity section

- uniform PMMA part of the phantom

5 layer modules section with modules containing

- Linear Spread Function (LSF) PTFE / PMMA interface
- Point Spread Function (PSF) - 0.25 mm tungsten 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

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

Geometric distortion section

- an array of 2.0 mm diameter, 3.0 mm long holes uniformly pitched at 10.0 mm intervals

Product features:

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