



This product is available through:

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**UNMATCHED<sup>®</sup>**  
**SOLUTIONS**  
**FOR**  
**QUALITY**  
**CONTROL**

## Pro-Dent CT

01-301

The **Pro-Dent CT phantom** is an innovative solution for **quality control of dental tomography systems and other X-ray devices with 3D function.**

It was developed in cooperation with leading producers of dental tomography units. The size of the phantom corresponds to a human skull (15cm in diameter) and **all test patterns are located in the area matching the maxilla.** This enables a reliable and quick testing of X-ray devices, even with a limited field of visualization. Also, **quality is evaluated in the clinically essential region.**

**With the Pro-Dent CT you can do the following tests:**

- image geometry
- pixel (matrix) size
- artefacts, noise
- homogeneity
- linearity
- contrast
- high-contrast resolution
- low-contrast resolution (contrast sensitivity)

**Technical data (can be modified to customer specifications):**

- main test module dimensions:  $\varnothing$  150 mm, 40 mm thickness, containing:
  - four sensitometric samples  $\varnothing$  20 mm made of: PTFE (teflon), POM C (polyoxymethylene), PE 300 (polyethylene) and air
  - four  $\varnothing$  3 mm rods, filled with air, placed in vertexes of a square (side length 50 mm)
  - seven low contrast rods of a different diameter: 2, 3, 4, 6, 8, 10, 12 mm, filled with a substance whose density is 3% different from the body of the module
  - seven high contrast patterns for line pair resolution evaluation, from 10 to 16 LP/cm
  - three beads:  $\varnothing$  0.2, 0.25, 0.3 mm
- optional  $\varnothing$  150 mm, 20 mm thick geometry module with two pairs of aluminum ramps, empty rods in vertexes of a square and positioning markers for detailed evaluation of image geometry and laser position verification (01-302)
- additional smaller homogenous cylinder filled with a substance of a density similar to water:  $\varnothing$  150 mm, 30 mm in thickness
- additional larger homogenous cylinder filled with a substance of a density similar to water:  $\varnothing$  150 mm, 130 mm in thickness
- test stand with a table for placing the phantom in the test position
- convenient, portable case for storing and transporting the phantom



**Product features:**

- complies with:
  - 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

