

# Pro-CT MINI

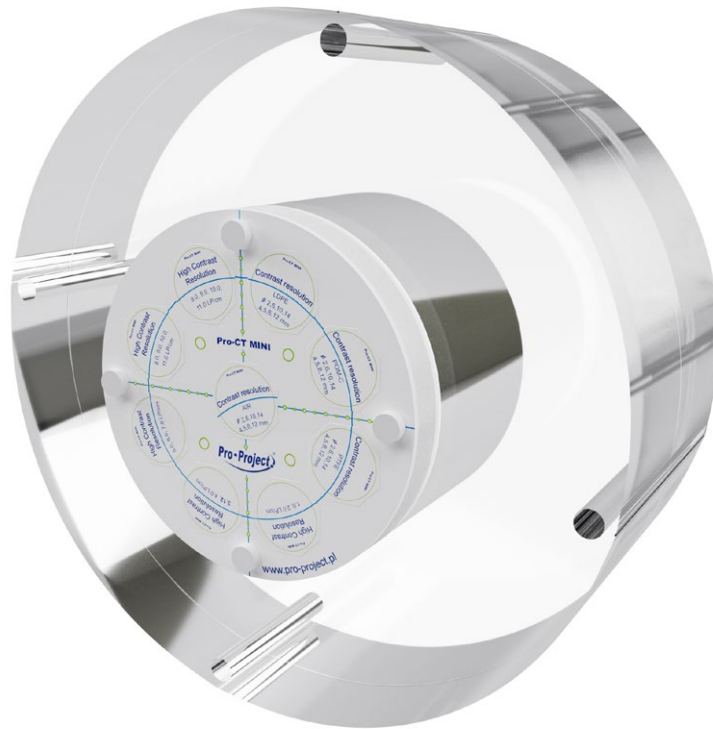
04-403



The Pro-CT MINI phantom is a compact CT image quality testing solution. When connected with Pro-CT Dose it may be used for carrying out acceptance and constancy tests of computed tomography systems according to IEC 61223-3-5 and the AAPM (American Association of Physicists in Medicine) guidelines. This phantom consists of a module 16cm in diameter with positioning aids and recesses for test modules.

Pro-CT Dose the phantom can be used to do the following tests:

- geometric distortion
- CT number (HU) measurement
- noise / uniformity
- artefacts
- MTF
- spatial resolution
- contrast resolution
- low contrast resolution
- slice profile
- alignment
- linearity
- beamwidth



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

- main module:
  - diameter 160 mm
  - thickness 30 mm
  - 9 recesses for test inserts allow customized placement of test objects in space
  - markings for easy and accurate positioning in the CT scanner
  - set of holes on a given depth for testing geometry, distortions and slice position
  - screws and extra plugs for mounting the module on any Pro-CT Dose Phantom (04-319)
- standard test inserts:
  - 5 contrast resolution inserts containing rods made from different materials: LDPE, PTFE, POM-C, air, plastic water equivalent. Diameters of rods in each insert are: 2, 4, 6, 8, 10, 12, 14 mm
  - high contrast resolution inserts containing 11 aluminium test elements for spatial resolution evaluation from 1 to 11 LP/cm
  - 2 geometry modules containing two pairs of aluminium wire ramps whose slope angle tangent is equal to 0.5
  - Linear Spread Function (LSF) insert - PTFE / PMMA interface
  - Point Spread Function (PSF) insert - 0.25 mm tungsten steel wire in air
- optional inserts (04-404):
  - 3 low contrast inserts containing rods with a diameter: 2, 4, 5, 6, 8, 10, 12, 14 mm. The contrast difference between the rods and the surrounding material are 0.3, 0.6 and 1%
  - 3 high contrast resolution inserts containing 19 aluminium test elements for spatial resolution evaluation from 12 to 30 LP/cm
- carrying case

#### Product features:

- complies with:
  - IEC 61223-3-5
  - IEC 61223-2-6
  - AAPM guidelines
- the Manual provides detailed guidelines for carrying out each test, results assessment and registration