

## Dental CBCT / DVT QA/QS Phantom

## QA test phantom for acceptance and constancy testing of dental Conebeam Computed Tomography (DVT) systems.

The QRM-DVT-161 Phantom is designed to perform acceptance and constancy testing in accordance to DIN 6868-161 and QS-RL.

It provides the capability to evaluate imaging performance of dental CBCT equipment (DVT, Digital Volume Tomography).

In accordance with DIN 6868-161 (acceptance testing and DIN 6868-15 (constancy testing) the following image quality metrics can be obtained:

- spatial distorsion in reconstructed volume
- in-plane resolution (MTF)
- acceptance indicator
- uniformity indicator

The phantom consists of 4 sections. The main section (20 mm height) contains the PVC test insert to evaluate spatial resolution, contrast to noise ratio and the acceptance indicator. A second section (plain, 20 mm height) is used to measure noise and homogeneity. For the ease of use the two sections are fixed together. In addition two optional scatter sections are in the

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## **Technical Specifications:**

Diameter (xy):	160 mm
Height (z):	150 mm
Body:	PMMA
Design:	4 slabs of different thicknesses: 1 main slab with PVC test insert (20 mm) 1 plane slab (fixed to main slab) (20 mm) 2 scatter slabs (50 & 60 mm)

Automated evaluation software available seperately or bundeld with the phantom:

**ImpactIQ Wizard** is a software tool allowing fast and quantitative assessment of image quality in X-ray computed tomography. The software is dedicated to evaluate Image quality parameters of dental CBCT (DVT) in accordance with DIN 6868-161 and -15 and other standards.





Acrylic DVT/CBCT QA Phantom



Phantom set includes solid case



Main test section of the phantom set