

QUART CT_TEC

Automatic CT Image Scoring Software



QUART CT_TEC

Computed Tomography Quality Assurance and Quality Control Software



The unique CT QA/QC software automatically evaluates and displays all parameters that were acquired using the *QUART DVT_AP* test phantom. Only three slice images from the QA data set are required to conduct a complete QA assessment.

Unique in kind, the *CT_TEC* software automatically calculates a figure of merit (system indicator) comprising of geometrical machine data, dose and image related parameters. It thus establishes a direct correlation between measured dose values, image quality parameters and enables objective quality control assessment of a wide variety of CT equipment. The software is

- DIN 6868-161 compliant for CBCT acceptance tests
- IEC 61223-3-5 compliant for CT acceptance tests
- IEC 62220-1-2 compliant for detective quantum efficiency
- IEC 60601-2-44 compliant for CT equipment safety requirements.

Despite its technical character, the software is easy to use. It provides a walk-through function which assists users in carrying out the QC procedure.

The *QUART DVT_TEC* stores the result of each single test in its internal data bank. In addition, a Protocol print-out function is provided for matters of documentation (obligatory hardcopy) or general reference.

Test Parameters

- _ Nyquist Frequency (NF)
- _ Contrast
- _ Noise
- _ Contrast-to-Noise Ratio (CNR)
- _ Homogeneity / Image Uniformity
- _ Spatial Resolution / Modulation Transfer Function (MTF) at 10% & 50% modulation
- _ Modulation Transfer Function (MTF) as per IEC 62220-1-2
- _ CT Numbers / Hounsfield Units
- _ Z-Axis Resolution / NF and MTF in Axial Direction
- _ Artefacts, Image Flaws, etc.
- _ System Indicator / Acceptance Indicator (Figure of Merit)
- _ Patient / Phantom Positioning Accuracy
- _ Additional QA/QC related tests such as geometry and distance measurements etc. to be conducted in an external DICOM viewer

General Features

- _ One-click fully automated image evaluation
- _ Quick and easy server registration for end-users available 24/7
- _ Developed for ease-of-use

