

QRM-CTDI-CTWATER®

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A WATER-equivalent dosimetry phantom, traced back on the standards for CTDI evaluation in Computed Tomography.

QRM-CTDI-CTWATER® dosimetry phantom is manufactured from CTWATER®, a proprietary resin which exhibits the same x-ray attenuation characteristics as liquid water in the range of 80 kV to 140 kV tube voltage.

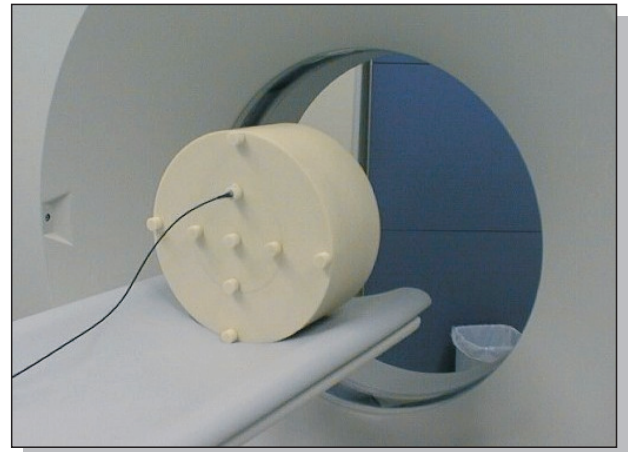
The phantom is constructed in a modular fashion with a smaller inner cylinder which tightly fits into a larger outer cylinder. Both cylinders offer four through holes near the perimeter to accommodate standard CT dose probes. Supplied are nine massive rods, made from CTWATER®, to plug the holes not in use, and adapter plugs to house diverse pencil shaped ion chambers. Further adapter plugs can be manufactured on customers specification.

Specifications

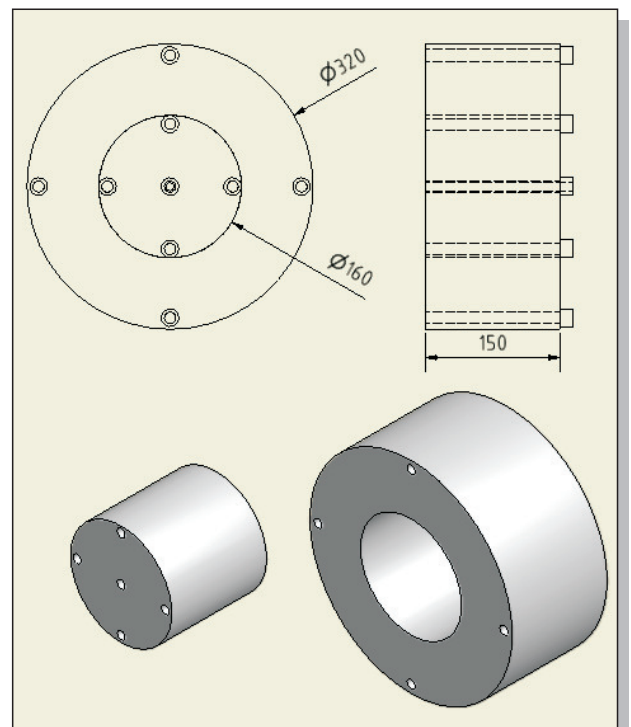
Base materialCTWATER®
 diameter body 32 cm
 diameter head16 cm
 depth15 cm
 hole positions according to [2, 3]
A separate plug housing your preferred ion chamber will be included!

References

- [1] Evaluation and comparison of water-equivalent CTDI dosimetryphantoms
 Erb, J.; Schmidt, M.; Schmidt, B.; Kalender, W.A.
 Engineering in Medicine and Biology Society, 2000. Proceedings of the 22nd Annual International Conference of the IEEE
 Volume 1, Issue , 2000 Page(s):102 - 105
- [2] Department of Health and Human Services, Food and Drug Administration. 21 CFR Part 1020: Diagnostic x-ray systems and their major components; amendments to performance standard; Final rule. Federal Register, 49, 171 (1984)
- [3] IEC 1223-2-6
 Evaluation and routine testing in medical imaging departments. Part 2-6: Constancy tests - X-ray equipment for computed



CTDI-Dosimetry-Phantom



Schematic view of the phantom