Full Range of MR Solutions from IEL endorsed by MR Manufacturers

IEL provide a range of MR Solutions, covering all aspects of QA for MR based planning and treatment as well as patient alignment and fixation. These products come from the leading manufacturers in this field, many of which have been endorsed by the MR manufacturers for use with their equipment.

Included in this range are Sun Nuclear QA solutions for MR-based radiotherapy for both Patient QA and Machine QA, compatible with Elekta and ViewRay® technologies such as;

ArcCHECK™ - MR, the ArcCHECK is the world’s most selected independent 4D measurement array.

The IC Profiler MR which supports real-time beam analysis in the presence of magnetic fields. IC Profiler-MR is used by Elekta and ViewRay® development and engineering teams and is compatible with cobalt and linac-based treatment delivery systems. It is also compatible with the ViewRay designed couch mounted stand.

Daily QA3™ - MR sets the standard for efficient and powerful routine QA. A single beam measurement results in five beam quality checks. Accepted data is automatically written to a database in real time, where it is available for trending, review and analysis. It’s that simple and that powerful.

The CIRS MRgRT Motion management QA phantom is designed to address the integration of MR imaging in radiation therapy real time motion management. This phantom is MR safe due to the use of piezoelectric motors and non-ferro-magnetic materials. The two piezoelectric motors move a cylindrical insert, which contains a tracking target, through a gel/liquid fillable body by rotating it independently from the motion in the Inferior-Superior direction.

The CIRS ViewRay dynamic phantom is used to validate the unique capabilities of the ViewRay system to track and deliver a gated treatment based on real-time MRI imaging. Dosimetry
capabilities of the phantom enhance the validation of the ViewRay system from the planning phase to the final stage of gated treatment delivery.

The Large Field MRI distortion phantom (CIRS 604) was designed for assessment of MR image distortion in planning, and the MRI Distortion Phantom for SRS (CIRS 603a) was designed for the same purpose in radiosurgery. They are useful tools for verifying image fusion and deformable image registration algorithms used in various treatment planning systems. The phantoms’ 3D grid of large size and equal spacing in all three orthogonal dimensions makes the 604 suitable for distortion QA of large bone MRI and CT scanning for distortion-free imaging. It can be filled with various signal generating solutions for use in magnetic resonance imaging. Contrast of the grid-liquid interface varies under computed tomography depending on the liquid used for generating MRI background signal.

The Gammex Micro+ and Micro+MR remote adjustable fixed lasers enhance patient alignment workflow and accuracy with an elegant, all-in-one platform. Remotely controlling laser positioning with ease, to an accuracy of 0.15mm.