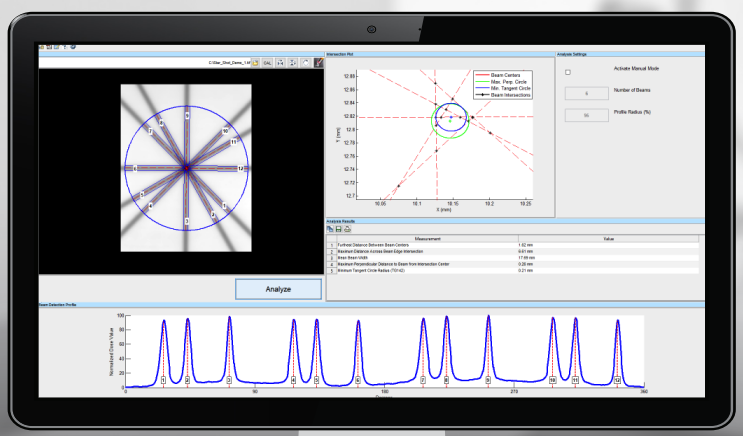
AS A MEDICAL PHYSICIST, YOU'RE EFFICIENT IN YOUR WORKFLOW, PRECISE IN YOUR MEASUREMENTS, AND TRUSTED IN YOUR FIELD.

SHOULDN'T YOUR QA SOFTWARE BE THE SAME?



For over 30 years, the RIT Family of Products have offered an impressive range of convenient software packages that span from basic testing to the most complex analyses in Medical Physics.

RIT®

RADIOLOGICAL IMAGING TECHNOLOGY®

MACHINE QA SOLUTIONS

RIT provides extensive machine QA capabilities, including comprehensive software packages that can be used to perform a full suite of measurements in accordance with TG-142 (including MPPG 8.a), TG-148, and/or TG-135 recommendations. RIT's automated routines allow you to perform daily, monthly, and annual QA with efficiency and precision, all while giving you confidence knowing your delivery performance is optimized.

TG-142: LINEAR ACCELERATORS

RIT is the single-vendor solution that performs and trends every test recommended in TG-142 and Medical Physics Practical Guideline (MPPG) 8.a, allowing for comprehensive quality assurance of Varian, Elekta, and all linear accelerators with confidence and ease, using your EPID and RIT software. Several packages feature RIT's popular 3D Winston-Lutz Isocenter Optimization routine that will optimize your SRS/SBRT delivery.

TG-148: HELICAL TOMOTHERAPY®

RIT offers a comprehensive test suite for helical TomoTherapy® and Radixact® machines, in accordance with TG-148. These include Static & Rotational Output Consistency, Jaw Centering and Alignment, Overhead Laser Positioning, Interrupted Treatment, and all others recommended for daily, monthly, and annual QA. The software will also analyze image quality using the TomoTherapy Cheese phantom.

TG-135: CYBERKNIFE® ROBOTIC RADIOSURGERY

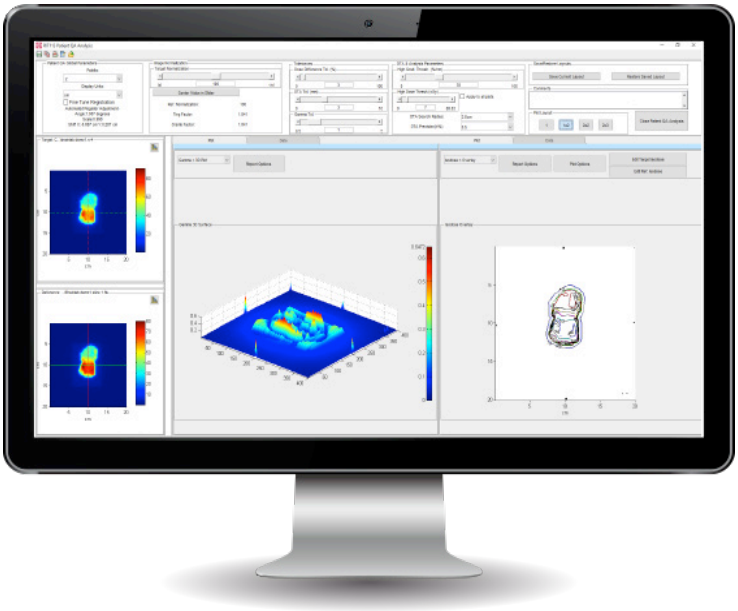
RIT provides a comprehensive test suite for CyberKnife® and all robotic radiosurgery, in accordance with TG-135, which includes five fully automated QA tests: End-to-End, AQA, Iris, Laser Coincidence, and MLC (Garden Fence) for the M6 multi-leaf collimator. The software eliminates the need for manual manipulation, drastically reducing the time required to perform these tests.

CyberKnife®, TomoTherapy®, and Radixact® are registered trademarks of Accuray, Inc.

PATIENT QA SOLUTIONS

RIT was the first company to develop software for intensity-modulated radiation therapy (IMRT) analysis. RIT continues to lead the industry with automated patient QA software that provides clinical physicists with the tools needed to analyze this advanced cancer treatment, ensuring rapid results without compromising measurement precision.

AUTOMATED PATIENT QA MEASUREMENTS



- RIT's patented* Plan-Based Calibration
- Distance-to-Agreement (DTA)
- Proportion Passing Plot
- Centroid Measurement
- Composite Analysis
- Van Dyk's Analysis
- Gamma Function
- IGRT Alignment
- Isodose Curves
- Subtraction
- Addition
- Profiles
- TomoTherapy® Registration
- CyberKnife® Anthropomorphic Phantom QA

*Patents: EP 1683546, CA 2567197, JP 4366362, JP 4838161, US 7024026, US 7233688, US 7639851, and US 7680310.

FULLY-AUTOMATED BATCH ANALYSIS

Use RunQueueA to automate your patient QA. Perform fast, precise batch analysis with an automated QA checklist by setting up scripts for any repetitive workflows. RunQueueA maximizes the efficiency and consistency of your analyses by streamlining entered values between multiple users at the same or different sites. In seconds, each field of the plan will be automatically analyzed. Easily export the results to a customizable PDF report to display your most significant data.

RunQueueA

MACHINE QA SOLUTIONS

As part of RIT's comprehensive Machine QA capabilities, RIT software maximizes the accuracy of quality assurance for multi-leaf collimators on any linear accelerator. The software allows users to track MLC performance over time and have confidence that patient treatments are proceeding as planned.

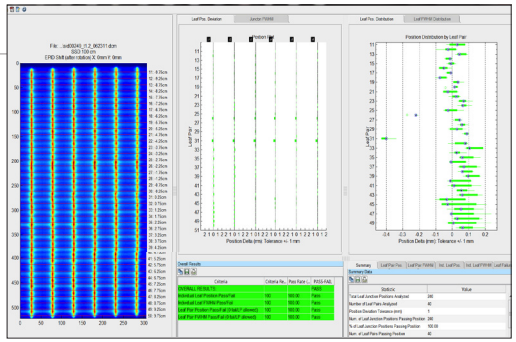
VARIAN MLC

- **EPID Picket Fence Test:** Automated classic picket fence test
- **Automated Varian RapidArc® Tests:** Analyzes images taken at any distance from EPID, Film, or CR
- **Varian Leaf Speed Test:** Measures the consistency and accuracy of Varian MLC leaf speeds as they move across an imager, without the use of log files
- **Varian Halcyon® MLC Analysis:** Perform MLC QA, including a picket fence and comprehensive RapidArc® analysis of the Halycon® machine.

ELEKTA MLC

- **Hancock Tests for Elekta Machines:** The 2-Image Test without backup jaws, 4-Image Test without backup jaws, and 6-Image Test with backup jaws use the Elekta iView™ imager to automatically measure leaf position vs. isocenter position and jaw leaf setback measurement, if applicable.
- **Elekta Leaf Speed Test:** Aligns 2 images to analyze the consistency of the leaf speed for Elekta iView™ and Agility™

ADDITIONAL MLC COMPATIBILITY



- **Accuray® CyberKnife® M6 MLC Test:** The fully-automated "Garden Fence MLC Test" for the M6 multi-leaf collimator detects any leaves, eliminating the need for leaf templates.
- **Brainlab® m3 Micro MLC**
- **Siemens® MLC:** RIT software is compatible with the Artiste™, ONCOR™, and PRIMUS™ linacs.
- **Other MLC Tests:** Automated tests include the Generic Picket Fence Test, Bayouth MLC Test, TG-50 Picket Fence Test, MSK Leaf Test, Varian DMLC Test patterns, and MLC Transmission analysis.

Agility™ and iView™ are trademarks of Elekta AB. RapidArc® and Halcyon® are registered trademarks of Varian Medical Systems, Inc. CyberKnife® is a registered trademark of Accuray, Inc. ARTISTE™, ONDOR™, and PRIMUS™ are trademarks of Siemens Medical Solutions USA, Inc.

IMAGING QA SOLUTIONS

RIT offers a range software packages for Imaging QA/QC, from specific routines following task group recommendations, to a full suite of one-click, instant phantom analyses of therapeutic and diagnostic images. All products come equipped with tracking, trending and automation tools designed to optimize your workflow.

SPECIFIC MODULES & PHANTOMS

MV (EPID) Imager

- EPID Phantom
- PTW EPID QC Phantom
- Las Vegas Phantom
- Standard Imaging QC-3 Phantom

CBCT/MVCT

- CATPHAN® 504 - Varian
- CATPHAN® 604 - Varian
- CATPHAN® 503 - Elekta XVI
- Siemens MVCT

Electron Density

- CIRS 062 Phantom
- CIRS 062A Phantom
- CIRS 062M Phantom
- Gammex 467 Phantom

Planar kV Imaging

- DISC Plus Phantom
- IBA Primus® L Phantom
- PTW NORMI® 4 Phantom (20 x 20 cm & 30 x 30 cm)
- Leeds TOR-18 FG Phantom
- Standard Imaging QC-kV1 Phantom

Specialized Modules

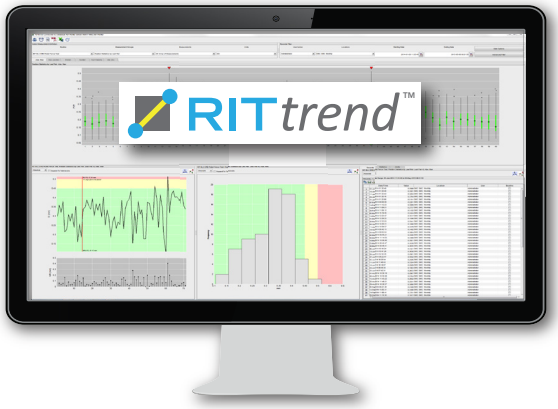
- Standard Imaging ISOCube Phantom
- TomoTherapy Cheese Phantom
- Penta-Guide Phantom

IMAGING QA FEATURES

Tracking & Trending: RIT*trend*™ is the all-in-one statistical database solution for all of your department's measurements. Export full reports of all imaging tests with a single click, and automatically track and trend results over time.

Complete Automation: Use Cerberus to perform hands-free, automated phantom analysis. After a simple configuration, Cerberus automatically monitors folders, pin-points files, and analyzes them in the background of your machine.

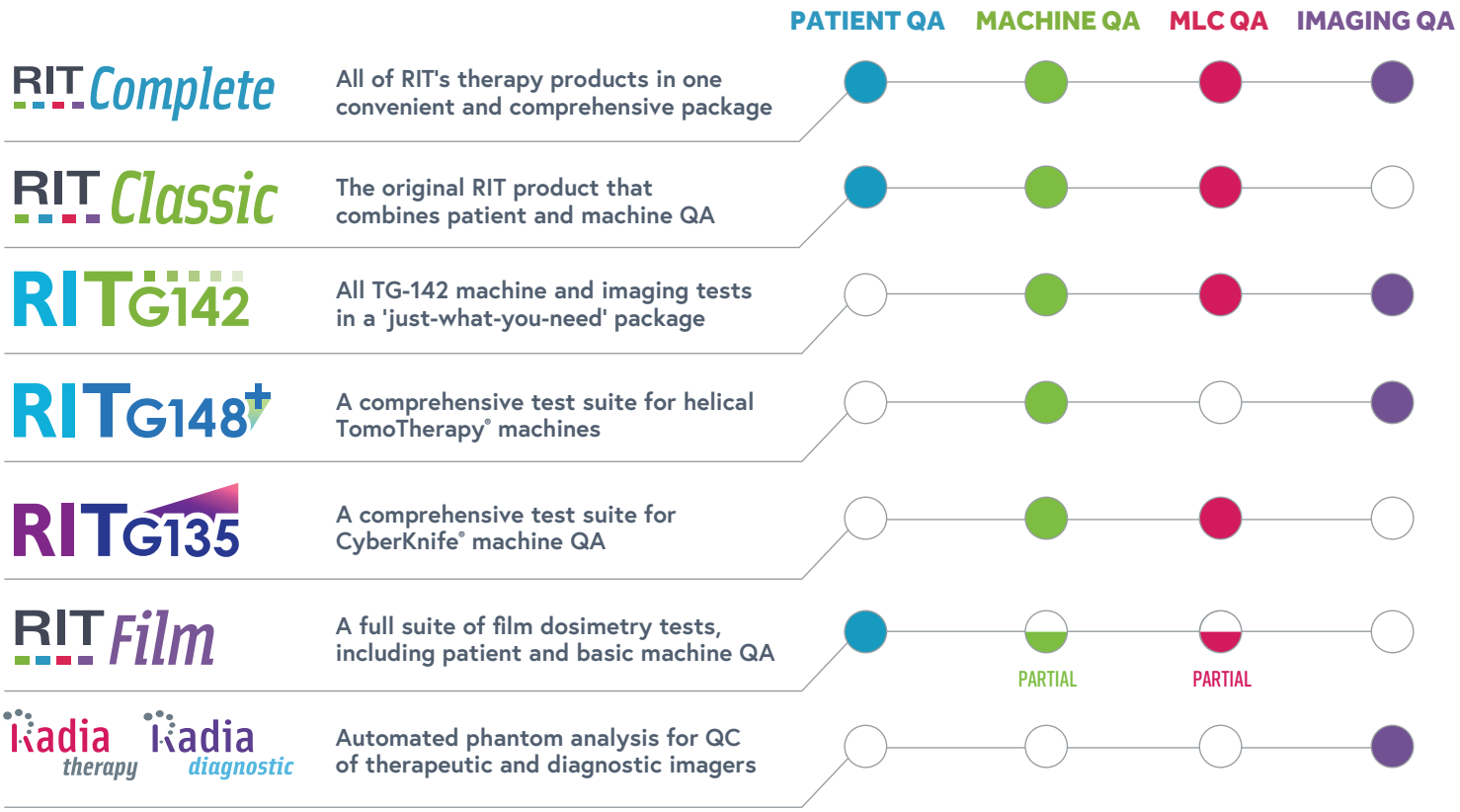
Tolerance Customization: RIT's Tolerance Manager sets tolerance values and pass/fail criteria for every measurement used in all automated phantom analyses. Preference profiles can be precisely tailored to each individual machine in use.



CATPHAN® is a registered trademark of The Phantom Laboratory. NORMI® is a registered trademark of PTW. Primus® is a registered trademark of IBA.

THE RIT FAMILY OF PRODUCTS

RIT designs QA solutions for every medical physicist. Choose the software package that best suits your needs:



CONTACT RIT TO FIND YOUR PERFECT SOFTWARE PACKAGE

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