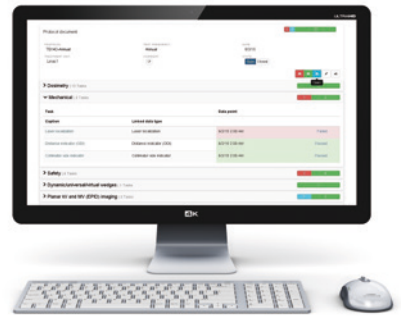
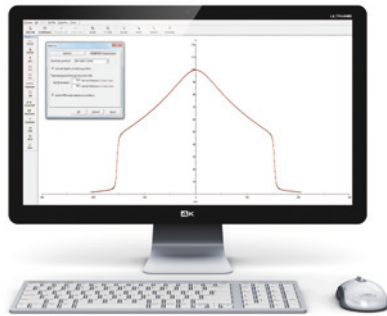


BEAMSCAN®

Software Feature Overview



Setup and Configuration

- ▶ Reduce setup time with BEAMSCAN® Wireless Auto Setup.
- ▶ Customize or create new task lists to automate beam data collection.
- ▶ Set or adjust optimal scanning speed and resolution.
- ▶ Access and effectively manage all detectors and treatment machines from one single location.
- ▶ Shift the effective point of measurement (EPOM) of your field detector according to the dosimetry protocol used.
- ▶ Shift zero point to measure half beam profiles of large fields.
- ▶ Create or customize dosimetry protocols.
- ▶ Change colors, fonts or styles as needed.

Beam Data Acquisition

- ▶ Select a TPS-specific task list for automatic beam data collection.
- ▶ Use the fast scanning mode to cut scan time.
- ▶ Choose from a variety of measurement programs, including TPR/TMR, output factors for any field size or geometry, wedge/tray factors, isodose distributions in different depths or absolute dose.
- ▶ Measure very large beam profiles without tank shift.
- ▶ Overlay a reference curve on a running measurement for online comparison.
- ▶ Check and adjust the beam in real-time.
- ▶ Check and adjust the water level for efficient evaporation control.
- ▶ Automatically calculate measurement depth of profiles based on nominal d_{max} or % PDD value.
- ▶ Repeat a previous measurement at any time with one click.

Data Processing

- ▶ Smooth or average data to remove unwanted noise.
- ▶ Merge half beam profiles.
- ▶ Mirror profiles to correct coordinate system or asymmetry.
- ▶ Add profiles and PDDs for comparison.
- ▶ Shift profiles or PDDs along depth axis to correct measurement depths.
- ▶ Correct CAX of FFF profiles based on user-defined penumbra values.
- ▶ Convert measured ionization curves to absorbed dose to water curves based on international protocols or user-defined R_{50} value.
- ▶ Normalize data to CAX, a specific point or absolute value.
- ▶ Create correction tables for depth- or dose-related corrections.

Beam Data Analysis

- ▶ Evaluate FFF beam profiles.
- ▶ Analyze beam data according to international or vendor-specific dosimetry protocols.
- ▶ Compare scans using 1D Gamma comparison or percentage deviation.
- ▶ Generate tables for TPR/TMR, OCR and output factors.
- ▶ Display, analyze and edit output factors in a 1D or 2D table.
- ▶ Select single scans for detailed analysis.
- ▶ Superimpose scans for a quick visual symmetry check.
- ▶ Calculate TPR/TMR from depth dose measurements.
- ▶ Determine absorbed dose to water according to IAEA TRS-398 or AAPM TG-51 (optional).
- ▶ Convert imported scanned or digital images for comparison or quantitative analysis (optional).

Data Handling and Export

- ▶ Format your beam data for easy import into your TPS.
- ▶ Export your analyzed beam data to Track-it for trending and reporting.
- ▶ Copy and paste selected data points or entire data tables to Excel, ASCII, etc.
- ▶ Customize your printouts with the Print Designer.
- ▶ Print to PDF for archiving and sharing.

Track-it Trending and Reporting

- ▶ Access your analyzed beam data from anywhere in your network, using a standard web browser.
- ▶ Track the current status of your QA tasks (open, skip, pass or fail).
- ▶ Automate reporting by using predefined or custom protocol templates, e.g., AAPM TG-142 Annual QA.
- ▶ Maintain logbooks, e.g., to document service and repair interventions.
- ▶ Update your QA reports automatically with AutoFill.
- ▶ Complete reports offline in the treatment room and synchronize when back online.
- ▶ Add attachments to protocol templates to provide guidance on test procedures.
- ▶ Schedule QA tasks on specific days of the week.
- ▶ View and manage all QA reports conveniently in the Track-it Dashboard.
- ▶ Show trends of selected data to track performance changes over time.

For more information on BEAMSCAN®, visit www.beamscan.de or contact us at info@ptw.de.