BEAMSCAN®

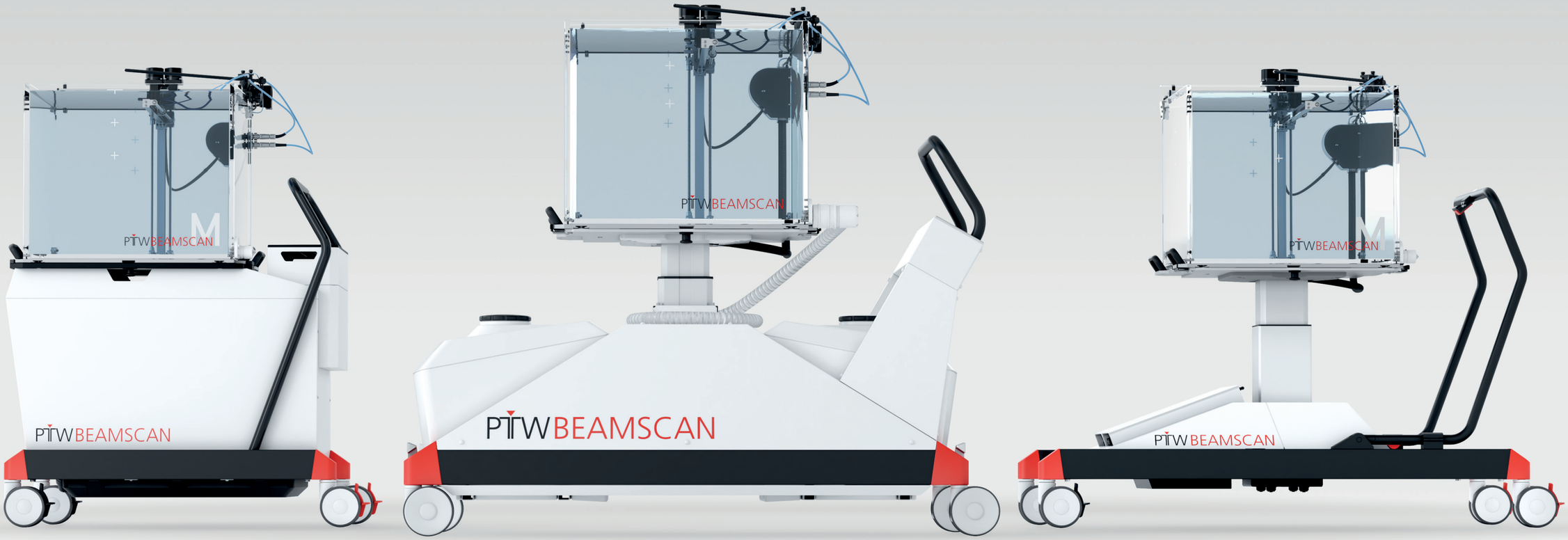
Water Phantoms for Every Site and Every User



PTW THE DOSIMETRY COMPANY

BEAMSCAN® Water Phantoms

Which BEAMSCANNER are you?



Fast Performance. Unmatched Precision. Intelligent Technology.

Automation **Speed** **Precision**

In 1929, PTW launched the first commercial water phantom which allowed for vertical and horizontal movement of the detector. It was the first in a line of PTW water phantoms that pushed the limits of technology to enhance the working lives of medical physicists around the world.

Like their predecessor nearly a hundred years ago, BEAMSCAN water phantoms continue to set standards in comfort and technology.

Whether through automation, Wi-Fi or AI, BEAMSCAN uses intelligent technology to improve the quality, accuracy and efficiency of water phantom measurements. No wonder it is trusted and relied on by medical physicists in more than a hundred countries worldwide.

Meet your new BEAMSCAN teammates.
Fit for today, ready for tomorrow.

ptwbeamscan.com

The Space-Saving Ring-Gantry Solution



BEAMSCAN® Ringo

The Ultra-Fast All-in-One Solution



BEAMSCAN® Speedo

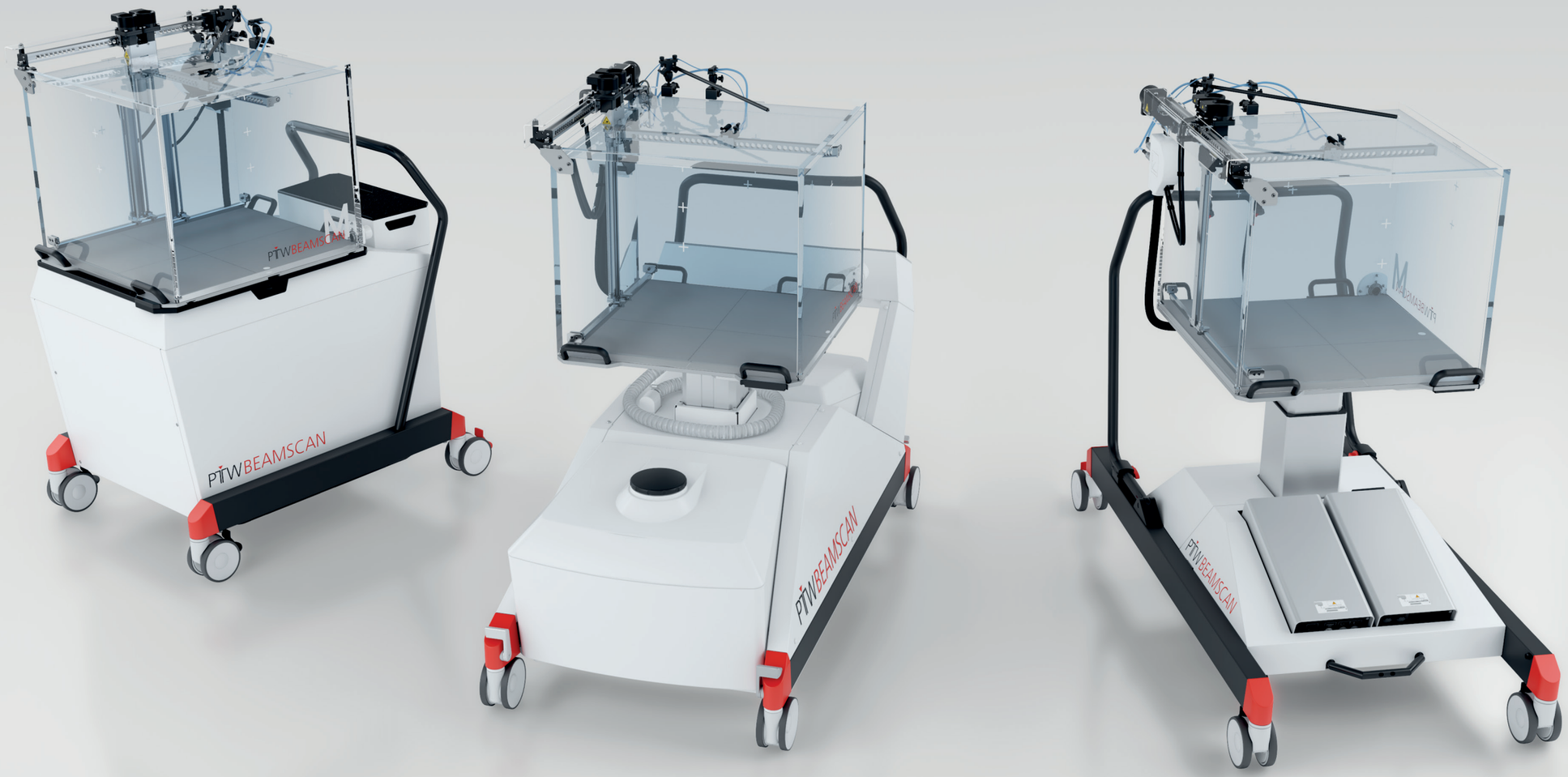
The Mobile, Ultra-Flexible Solution



BEAMSCAN® Mobilo

BEAMSCAN®

Faster Setup. Faster Scanning. Better Results.



… 3-2-1, ready!
BEAMSCAN is ready to scan in a few minutes for every user. All essential setup and alignment procedures are fully automated – water filling, detector positioning, leveling, CAX and rotational correction. The interactive BEAMSCAN Wizard, which is accessible from any smart device, facilitates intuitive, wireless system setup in the treatment room.

The best solution for every site
BEAMSCAN adapts to different user or site needs. Whether you seek all-in-one comfort or flexibility, an in-house or mobile solution, whether you are a small hospital, multi-site facility, or a medical physics consultant – there is a BEAMSCAN that is perfect for you.

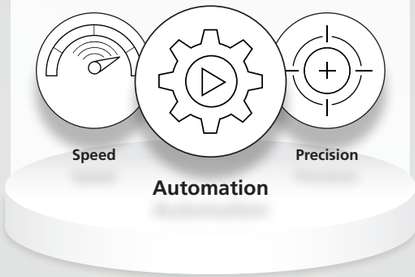
Fit for all major linacs
Highly automated, BEAMSCAN systems can be efficiently used with all major treatment machines without any restrictions – from C-arm to dedicated SRS systems. With its patented TRULEVEL function, BEAMSCAN is the only system capable of virtually leveling the phantom on the couch, requiring no manual or mechanical intervention. This also makes it a perfect choice for ring-gantry linacs.

Ideal for multi-user environments
The fully automated setup, along with the simple clip-in TRUFIX system for accurate positioning of any PTW detector, allows every user, even those lacking experience, to prepare measurements from the start. Measurement data is always comparable and reproducible, independent from the operator.

4

Automated features and practical tools for faster operation and better data

- Wireless auto setup via any smart device
- Patented TRULEVEL – proven high-precision auto leveling
- Fully automatic CAX and rotational correction
- TRUFIX detector clip-in for automatic detector positioning
- Automated water management and water level checks
- Automatic air density correction
- Automatic beam inclination correction
- Automated OF and TPR measurements
- Image-based SSD and isocenter check



Better results, faster.
Innovative functions and practical tools such as automatic setup, task lists, real-time gamma analysis, and AI-powered data processing increase efficiency and enhance accuracy from setup to data analysis.

One system for multiple tasks and applications
Equipped with a host of advanced software functions, BEAMSCAN lets you perform any measurement task with outstanding accuracy and efficiency – from beam data acquisition of standard, off-axis, or large fields to small-field and reference dosimetry measurements.

Fast error-proof system alignment
Unlike other phantoms, BEAMSCAN relies on precise mathematical algorithms to align the system. By eliminating any interaction, BEAMSCAN saves time and ensures highly accurate, reproducible beam data every time it is used.

BEAMSCAN:
Water phantoms for every site and every user. Watch the video.

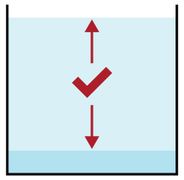
5

BEAMSCAN® Auto Setup

Less Time. Fewer Errors. Better Results.

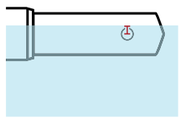
By removing any physical interaction from the setup and alignment process, BEAMSCAN reduces common error sources, delivering highly accurate, reproducible results for all linacs.

01



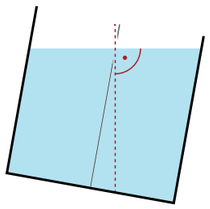
Auto Fill & Full Drain
BEAMSCAN offers fully automatic water filling and phantom alignment. A built-in water sensor ensures that the water level is always correct, every time for every user. It controls the water pump, which automatically fills the water phantom to the correct height and drains it completely thanks to the inclined phantom bottom.

02



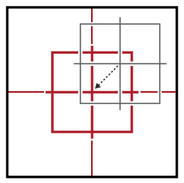
Auto EPOM Positioning
The patented clip-in TRUFIX system automatically positions the effective point of measurement (EPOM) of the field detector exactly to the water surface, ensuring that the detector is always in the correct position for scanning. Detectors can also be quickly exchanged without readjustment.

03



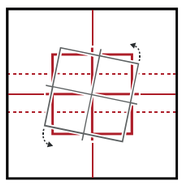
Virtual Leveling on Lift and Couch
Phantom alignment is fully automated for all linac types and without any intervention from the user. The unique, patented TRULEVEL function uses a three-point measurement and mathematical coordinate transformation to align the three scanning axes of the phantom exactly perpendicular and parallel to the water surface – without physically moving the phantom and without any manual adjustments.

04



CAX Correction
The "Beam Center Adjustment" function detects and automatically corrects for CAX shift between the coordinate systems of the water phantom and the linac. To calculate the offset from the central axis, it determines the center of a defined field size by measuring an in-plane and a cross-plane profile at a defined measuring depth.

05



Rotational Correction
The "Auto Field Alignment" function automatically detects and corrects rotation between the coordinate systems of the water phantom and the linac by calculating the rotation angle. To calculate the rotation angle, it measures two off-axis profiles at a defined measuring depth.



Patented TRULEVEL:
High-precision auto leveling on lift and couch. Scan to watch.

BEAMSCAN® Speedo

The Ultra-Fast All-in-One Solution





Ready to scan in under twelve minutes:
Watch the video.

12 min
Ready to Scan

All-in-One

All Major Linacs

On-Site

Overview

As an all-in-one system, BEAMSCAN Speedo comes fully equipped and ready for use, requiring only one cable to be connected. All components – phantom, lift, reservoir, and electronics – are integrated. No installation, no assembly required. With its fully automated setup from water filling to system alignment, BEAMSCAN Speedo is ready to scan in less than twelve minutes for every user.

Along with its optional adapter plate, a precise, entirely automatic phantom alignment on the couch makes the system a perfect match for ring-gantry linacs.

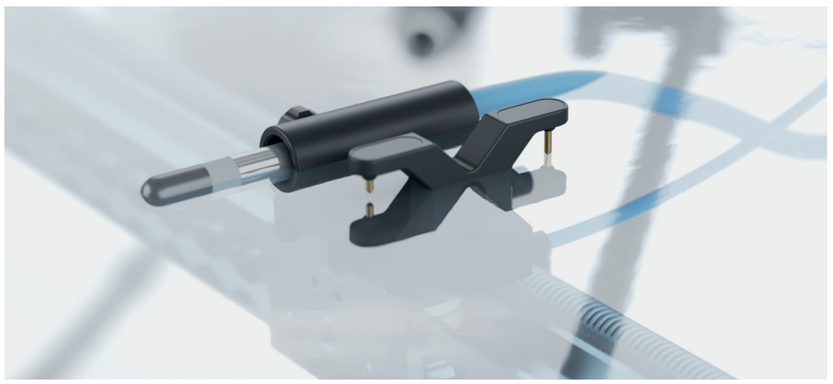
BEAMSCAN Speedo is an efficient allrounder for multi-linac environments looking for maximum speed and comfort, as well as data quality and accuracy in their water phantom.

Best for
Facilities and multi-user departments which operate a wide and varied range of linacs, and use their water phantom primarily in-house or on site.

Tip
Installation-free and fully automated, BEAMSCAN Speedo sets up faster and easier than smaller 1D water phantoms or slab phantoms. Use it with BeamDose software or a UNIDOS electrometer for quick and easy reference dosimetry.

Advantages

- Fully automated setup – ready to scan in less than twelve minutes
- All-in-one design – ready for use out of the box
- TRULEVEL high-precision auto leveling on lift and couch
- Wireless operation and data transfer
- Quick setup and efficient use with all major linac types
- Ring-gantry option
- Intelligent water management (auto fill/full drain, evaporation control)
- Advanced software functions for time-saving operation
- Easy implementation, fast deployment



Automatic evaporation control: A built-in water sensor ensures that the water level is always correct, every time for every user.

BEAMSCAN® Ringo

The Space-Saving Ring-Gantry Solution



Fast Auto Setup **Modular** **Ring Gantry** **Mobile / On-Site**



Mobile reservoir with storage compartments for safe and easy transport of all accessories

Overview

BEAMSCAN Ringo provides an economic, automated water phantom solution for ring-gantry linacs. It comes installed on a compact, easy-to-maneuver reservoir, which stores all accessories in one place for quick transport.

Equipped with handles and a sliding foil, the phantom can be easily moved from the reservoir onto the couch by a single person. Its patented TRULEVEL function allows for fully automatic leveling on the couch, eliminating the need to adjust the phantom manually by reaching into the bore or by using additional tools. All setup tasks from water filling to phantom alignment are performed completely automatically outside and inside the bore.

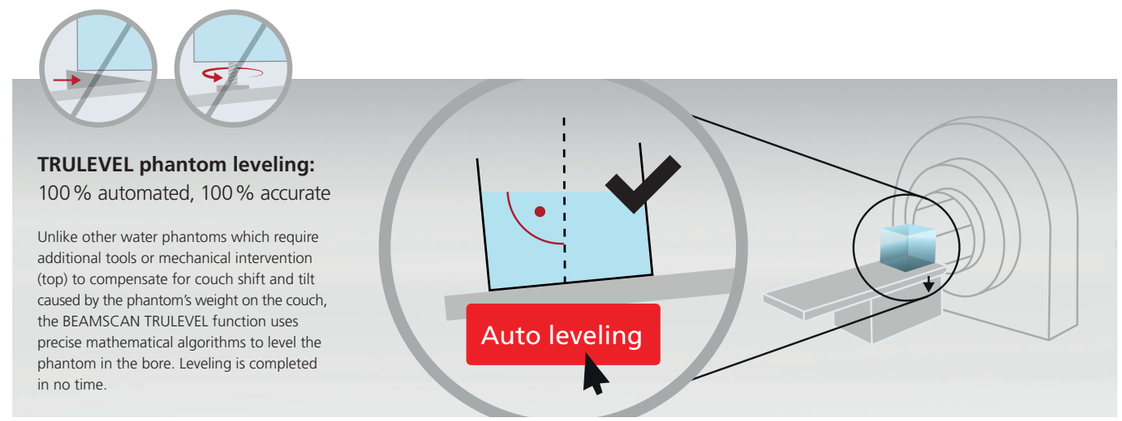
With the smallest footprint of all systems, BEAMSCAN Ringo fits into the tightest treatment and storage rooms while its modular design leaves room for future expansion. As with any BEAMSCAN system, BEAMSCAN Ringo enables fast, easy, and precise operation.

Best for
Clinical sites with exclusively or predominantly ring-gantry linacs that need a dedicated, yet expandable solution.

Tip
Use the new click-fix positioning tool to easily and confidently check the SSD of the phantom inside the bore using the linac imaging systems.

Advantages

- Dedicated, budget-friendly 3D solution for ring-gantry linacs
- Effortless one-person phantom setup on couch
- TRULEVEL high-precision auto leveling on couch without any physical or mechanical intervention
- Wireless auto setup and operation
- Intelligent water management
- Space-saving design with the smallest footprint (0.79 m^2)
- Mobile reservoir with compartment for easy transport and safe storage of all accessories
- Image-based SSD and isocenter check (optional)
- Advanced software functions for time-saving operation
- Optional lift for use with other linac types



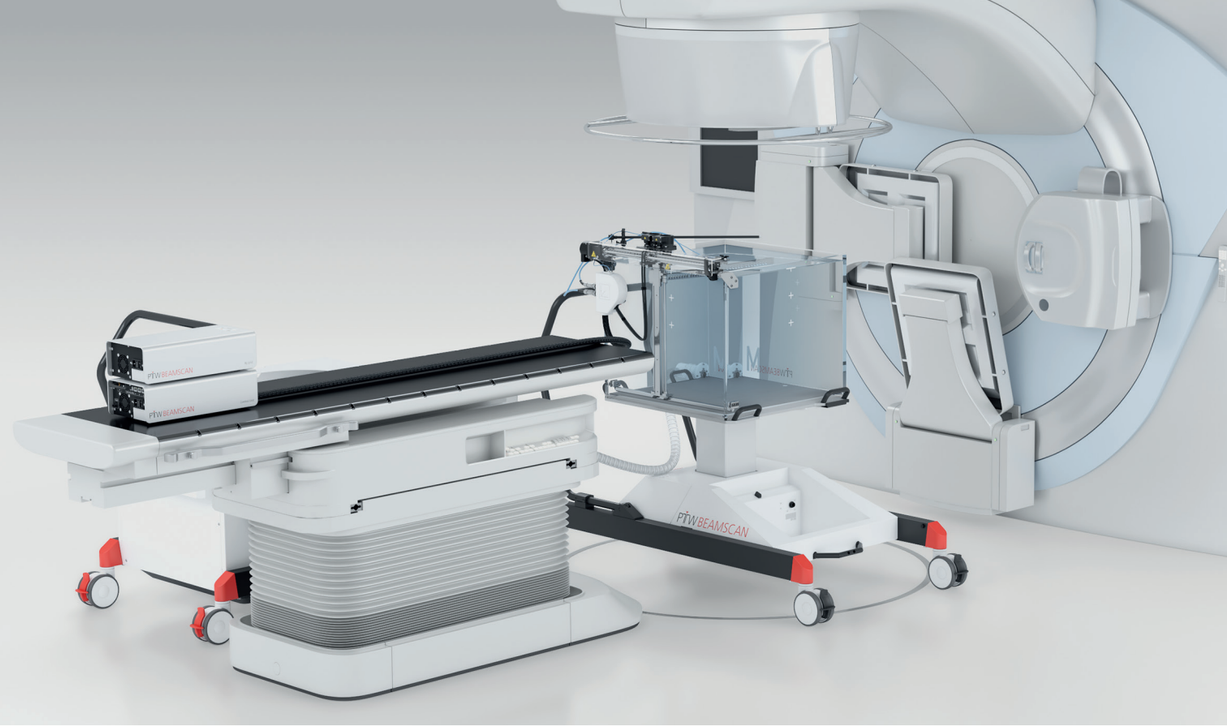
TRULEVEL phantom leveling:
100 % automated, 100 % accurate

Unlike other water phantoms which require additional tools or mechanical intervention (top) to compensate for couch shift and tilt caused by the phantom's weight on the couch, the BEAMSCAN TRULEVEL function uses precise mathematical algorithms to level the phantom in the bore. Leveling is completed in no time.

BEAMSCAN® Mobilo

The Mobile, Ultra-Flexible Solution





Fast Auto Setup | Modular | All Major Linacs | Mobile / On-Site

Overview

Designed and equipped for on-site and mobile use, BEAMSCAN Mobilo is ideal for users looking for a reliable, robust solution that is both safe and easy to transport over short or long distances, while being flexible enough for use on a wide and varied range of linacs.

Its foldable lift, which holds all accessories in place, facilitates movement between and within facilities, and fits into small vans with ease. A compact reservoir with additional storage space allows for fully automated water management. Validated packaging keeps your BEAMSCAN Mobilo safe during transport.

Thanks to its modular design and automated features, BEAMSCAN Mobilo can be used with ease and efficiency in all clinical environments, delivering precise scans significantly faster.

Best for

- Hospital networks or satellite clinics which share equipment
- Medical physics consultants who provide services on a national or worldwide basis

Tip

Need to transport your water phantom over long distances or via external carriers? Use the optional validated transport packaging to ensure your BEAMSCAN Mobilo arrives safely and remains operational wherever it goes.

Advantages

- Maximum flexibility – for various linacs, for on-site and mobile use
- Foldable lift – fits into small vans and stores all equipment
- Long, fixed wheelbase lift – designed for effortless turntable navigation and uncompromised measurement accuracy
- Small-footprint reservoir – easy to move and transport
- Robust, shockproof design, perfect for frequent off-site use
- Validated packaging (optional) for safe air, train, and road transport
- Tool-free installation – quick to install at any site
- Wireless auto setup and operation
- TRULEVEL high-precision auto leveling on lift and couch
- Intelligent water management
- Advanced software functions for time-saving operation

Compact reservoir with additional storage space for quick, easy transport



Robust, foldable lift with storage compartment – perfect for mobile use

BEAMSCAN® Software

Time-Saving Tools to Boost Your Efficiency

Accelerate time to value with your BEAMSCAN water phantom. Discover eight powerful tools in BEAMSCAN software that significantly reduce time in beam data acquisition and analysis.



BEAMSCAN Software:
Download the Feature Overview to explore the software's full capabilities.

1. Online Gamma Analysis
Provides real-time feedback on scan quality by automatically calculating the 1D gamma index of beam profiles and PDDs, ensuring immediate assessment and adjustment.
Your Benefit: Instantly identify and correct errors to maintain high-quality data.

2. TPS Validation
Validates the accuracy of your treatment planning system by comparing TPS data with your BEAMSCAN measurements.
Your Benefit: Ensure your treatment planning system is accurate and reliable, enhancing the safety and effectiveness of patient treatments.

3. Evaporation Control and Automatic TPR Measurements
Controls water evaporation and adjusts water levels automatically during measurements. Also facilitates automatic TPR measurements without the need for manual adjustment.
Your Benefit: Maintain measurement accuracy over long periods and simplify TPR measurements, ensuring reliable data.

4. Scan Time Predictor
Estimates the time required for measurements, helping you manage your schedule efficiently.
Your Benefit: Optimize your workflow and minimize machine downtime, improving overall efficiency.

5. Automated Task Lists
Saves time with ready-to-use, customizable task lists for major treatment planning systems, streamlining repetitive QA tasks.
Your Benefit: Simplify and speed up measurement tasks, freeing up valuable time for patient treatments.

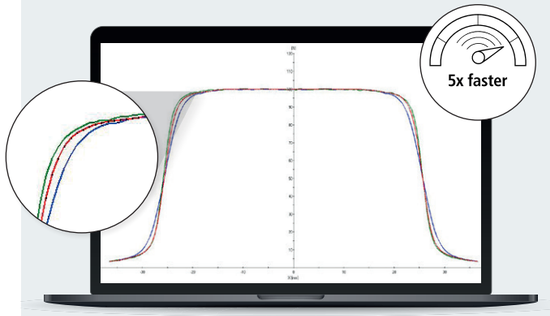
6. Multiple-Scan Comparison
Quickly compares multiple scans using 1D gamma comparison or percentage deviation, with a traffic light summary for easy interpretation.
Your Benefit: Effortlessly monitor and analyze linac performance, ensuring consistent quality.

7. Unique Beam Inclination Correction
Automatically identifies and corrects for beam inclination, enhancing dosimetry accuracy.
Your Benefit: Achieve highly accurate measurements even in challenging small-field dosimetry.

8. Automated Output Factor Measurements
Automatically positions the detector in the dosimetric field center for accurate small-field output factor measurements.
Your Benefit: Obtain precise output factor measurements with minimal effort, ensuring reliable data.

AI-Based Data Processing

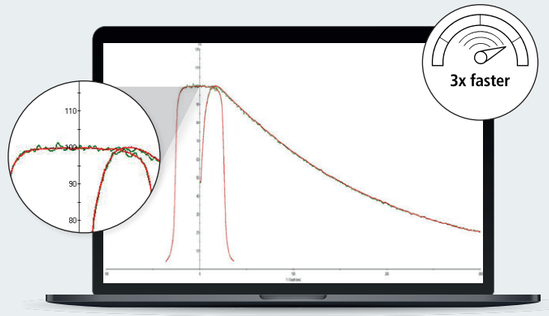
Delivering Accurate Scans Much Faster



microDiamond detector measurement
Semiflex 3D ionization chamber measurement before AI-based correction
AI-processed Semiflex 3D ionization chamber measurement

AI-Based “Deconvolve” Function
Beam profiles of a 5 cm x 5 cm radiation field measured with Semiflex 3D ionization chamber at 10 mm/s scan speed before and after AI-based correction compared to a microDiamond detector measurement at 2 mm/s scan speed.

The AI-based “Deconvolve” function enables distortion-free beam profiles for all field sizes from 2.5 cm to 40 cm at five times faster scanning speeds. It corrects the volume effect in the penumbra region of beam profiles measured with the Semiflex 3D ionization chamber in a one-click operation, achieving an accuracy comparable to that of microDiamond detector measurements.



microDiamond detector measurement before AI-based correction
AI-processed microDiamond detector measurement

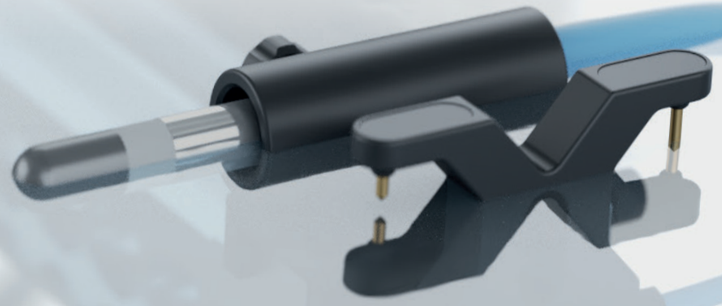
AI-Based “Denoise” Function
Beam profile and PDD measured with microDiamond detector at 20 mm/s scan speed before and after applying AI-based noise reduction.

A higher scanning speed can impact the quality of profile and PDD measurements performed with microDiamond. The AI-powered “Denoise” function compensates for signal noise in microDiamond detector measurements, which can be carried out up to three times faster.

Tip: Increase the scanning speed and apply AI-based correction after scanning to accelerate beam data acquisition.

BEAMSCAN® Detectors

The Right Choice For Any Measurement Task



The patented clip-in TRUFIX® system enables you to quickly mount and exchange detectors without readjustment of the effective point of measurement.



Which detector to use?
Browse the Detector Selector. For detailed specifications, download the PTW detector catalog.

Gy Reference Dosimetry
Q Small-Field Dosimetry
γ Photon Dosimetry
e⁻ Electron Dosimetry

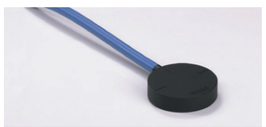


Semiflex 3D [31021]
Vented cylindrical ionization chamber
Volume 0.07 cm³
Field size (2.5 x 2.5) cm² … (40 x 40) cm²,
(3.0 x 3.0) cm² … (40 x 40) cm² ≥ 18 MV
Gy Q γ e⁻

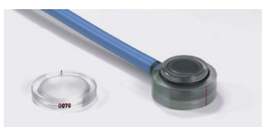
Semiflex [31010]
Vented cylindrical ionization chamber
Volume 0.125 cm³
Field size (3 x 3) cm² … (40 x 40) cm²
Gy Q γ e⁻



Semiflex [31013]
Vented cylindrical ionization chamber
Volume 0.3 cm³
Field size (4 x 4) cm² … (40 x 40) cm²
Gy γ e⁻



Roos® [34001]
Vented plane-parallel ionization chamber
Volume: 0.35 cm³
Field size: (4 x 4) cm² … (40 x 40) cm²
Gy e⁻



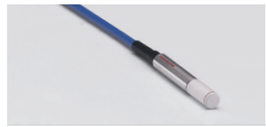
Advanced Markus® [34045]
with protective cap
Vented plane-parallel ionization chamber
Volume 0.02 cm³
Field size (3 x 3) cm² … (40 x 40) cm²
Gy e⁻



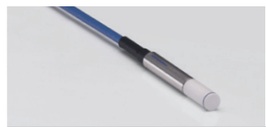
PTW Farmer® [30013]
Vented cylindrical ionization chamber
Volume 0.6 cm³
Field size (5 x 5) cm² … (40 x 40) cm²
Gy γ e⁻



microDiamond® [60019]
Synthetic diamond detector
Volume 0.004 mm³
Field size (1 x 1) cm² … (40 x 40) cm²
Q γ e⁻



microSilicon [60023]
Unshielded diode
Volume 0.03 mm³
Field size (1 x 1) cm² … (40 x 40) cm² for electrons,
(1 x 1) cm² … (10 x 10) cm² for photons
Q γ e⁻



microSilicon X [60022]
Shielded diode
Volume 0.03 mm³
Field size (2 x 2) cm² … (40 x 40) cm²
Q γ



PinPoint® 3D [31022]
Vented cylindrical ionization chamber
Volume 0.016 cm³
Field size (2 x 2) cm² … (40 x 40) cm²
Q γ



PinPoint® [31015]
Vented cylindrical ionization chamber
Volume 0.03 cm³
Field size (2 x 2) cm² … (30 x 30) cm²
Gy Q γ



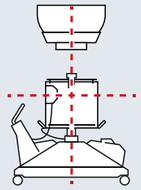
T-REF Chamber [34091]
Reference detector for small fields
Volume 10.5 cm³
Field size max. (5 x 5) cm²
Q γ

BEAMSCAN® Setup

Ready in Minutes

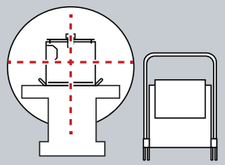
1. Install.

BEAMSCAN® Speedo



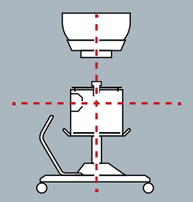
Move the all-in-one BEAMSCAN Speedo under the gantry. Roughly align it to the linac using the in-room lasers, and plug in the power cable.

BEAMSCAN® Ringo



Position BEAMSCAN Ringo near the left or right side of the couch. Raise the couch to the same height and slide the phantom onto it. Place the control units at the far end of the couch, then connect the water hose and cables. Align the phantom to the linac using the in-room lasers.

BEAMSCAN® Mobilo



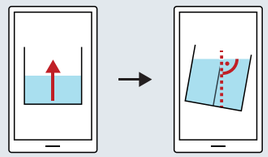
Move the lift with the phantom under the gantry and align it with the linac using the in-room lasers. Position the reservoir on the left (or right) side of the couch. Place the control units at the far end of the couch, then connect the water hose and cables.

2. Start auto setup.

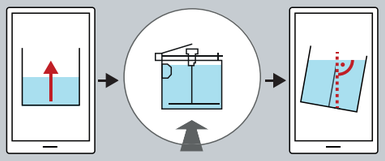


Access the BEAMSCAN Wizard from your smart device and start the auto setup with “Reference Run.”

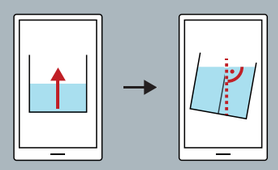
3. Fill and level.



Continue with automatic water filling and phantom leveling.

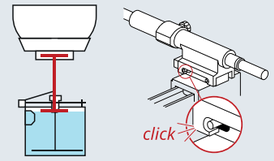


Continue with automatic water filling. Adjust the height of the couch and move the phantom into the gantry. Run the auto leveling function.

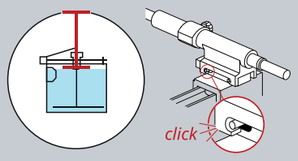


Continue with automatic water filling and phantom leveling.

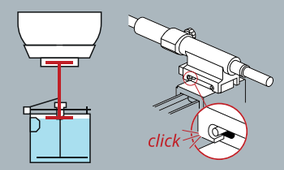
4. Set SSD and mount field detector.



Set the SSD using the click-fix SSD adjustment tool and clip in the TRUFIX holder with your field detector.

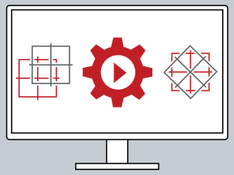


Check the SSD with imaging using the click-fix positioning tool. Clip in the TRUFIX holder with your field detector.



Set the SSD using the click-fix SSD adjustment tool and clip in the TRUFIX holder with your field detector.

5. Complete auto setup in control room.



Start the “Auto Setup” in the BEAMSCAN software. Turn on the linac and complete the two remaining steps of the auto setup: CAX and rotational correction.

Ready to scan for every user







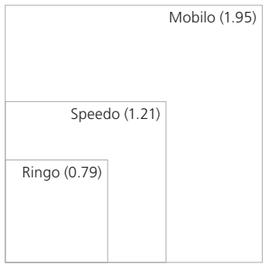
BEAMSCAN® Overview

Description:
Automated 3D Water Scanning Systems with Wireless Auto Setup and Operation

Applications:
Beam Data Commissioning | Linac Acceptance Testing | TPS Validation | Monitor Calibration | Beam Tuning | Linac QA | Reference Dosimetry | Small-Field Dosimetry

Major Guidelines:
IAEA TRS-483 | IEC 60731
AAPM TG-51 | AAPM TG-106

Footprint (m^2)









	Speedo	Ringo	Mobilo
Best for	Facilities and multi-user departments with a wide, varied range of linacs, which use their water phantom primarily in-house or on site	Clinical sites with exclusively or predominantly ring-gantry linacs, which need a dedicated, yet expandable solution	Hospital networks, satellite clinics, or medical physics consultants that share equipment and/or require mobile use of their water phantom
Supported Treatment Machines			
C-arm linac	●	○	●
Ring-gantry linac	○	●	●
SRS linac	●	○	●
GammaKnife®	●	○	●
CyberKnife®	●	○	●
Setup & Operation			
Design	integrated	modular	modular
Auto leveling on lift	●	○	●
Auto leveling on couch	○	●	●
Wireless auto setup via smart device	●	●	●
Wireless operation and data transfer	●	●	●
Setup time	< 6 min	< 6 min	< 6 min
Ready to scan	< 12 min	+ 5 min	+ 5 min
Footprint	1.21 m^2	0.79 m^2	1.95 m^2
Advanced Capabilities			
Reference dose measurements	○	○*	○*
Automatic TPR/TMR measurements	●	●	●
Small-field profiles/PDDs	●	●	●
Automatic small-field output factor measurements	●	●	●
Off-axis profiles	●	●	●
Large-field profiles/PDDs	●	●	●
Single-point dose measurements	●	●	●
Image-based SSD and isocenter check	○	○	○

Availability: ● included ○ optional – not available or integrated

	Speedo	Ringo	Mobilo
Key Components			
Motorized 3D Water Phantom M	●	●	●
Water, Temperature and Pressure Sensors	●	●	●
All-in-One Lift with Reservoir	●	–	–
BEAMSCAN Lift	–	○	●
BEAMSCAN Reservoir	–	●	●
BEAMSCAN Control Unit	–	●	●
BEAMSCAN RL Unit	–	●	●
Remote Wireless Access	●	●	●
WLAN/LAN Interfaces	●	●	●
TRUFIX BS Detector Positioning System	●	○	○
BEAMSCAN Electrometer (IEC 60731)	●	●	●
Semiflex 3D Field/Reference Detectors	●	○	○
BEAMSCAN Software	●	●	●
Water Vapor Permeable Dust Cover	●	●	●
Options			
Radiation Detectors	○	○	○
T-REF Reference Detector for Small-Field Measurements	○	○	○
Ring-Gantry Option	○	●	●
Reference Dosimetry	○	○*	○*
Optional Accessories			
Smart Device (e.g., iPad mini)	○	○	○
Universal Detector Holder	○	○	○
BEAMSCAN Lift	–	○	●
BEAMSCAN Reservoir	–	●	●
Validated Transport Packaging	–	○	○
Connecting Systems	BNT, TNC, M	BNT, TNC, M	BNT, TNC, M
Services*			
BEAMSCAN Preventive Maintenance	○	○	○
Installation/Implementation Services	○	○	○
Dosimetry & QA Training Courses	○	○	○

* Not all services and options are available in each country.
To check availability, contact your local PTW representative.

Availability: ● included ○ optional – not available or integrated

Technical Specifications

BEAMSCAN

Description	Integrated system comprising 3D water phantom with moving mechanism, water and temperature sensors, high-precision electrometer, carriage with built-in lift, reservoir, and Wi-Fi for wireless auto setup and data transfer. Optionally available: Ring-Gantry Upgrade, Mechanical Positioning Device.
Dimensions	1550 mm (L) x 780 mm (W) x 1280 mm (H)
Weight	226 kg
Interfaces	Wi-Fi, LAN, USB
Power supply	AC 100-120 V / 220-240 V, 50-60 Hz

Phantom

Material	PMMA
Scanning range	500 mm (L) x 500 mm (W) x 400 mm (H)
Wall thickness	15 mm
Drive mechanism	Motorized 3D scanning arm
Scanning mode	Continuous, step by step
Scanning speed	up to 20 mm/s
Minimum step size	0.1 mm
Positioning accuracy	≤ 0.1 mm
Reproducibility	≤ 0.05 mm
Dimensions	750 mm (L) x 650 mm (W) x 700 mm (H)
Weight	57 kg

Electrometer

Channels	2
Resolution	10 fA
Chamber voltage	-400 V, ..., 400 V programmable in 1 V increments
Dynamic range	2 pA, ..., 500 nA in three ranges
Time constant	10 ms in all ranges
Non-linearity	≤ ± 0.5 % acc. IEC 60731
Long-term stability	≤ ± 0.5 % p.a. acc. IEC 60731
Repeatability	≤ ± 0.5 % acc. IEC 60731

Lift

Moving range	500 mm
Minimum step size	< 1 mm

Reservoir

Pumping/draining time	6 min / 7 min
Tank capacity	196 l

TRUFIX®

Description	Patented clip-in detector mounting and positioning system for BEAMSCAN systems
Components	Detector holders and thimbles, SSD adjustment tool, positioning tool for image-based isocenter check

BEAMSCAN M

Description	Modular system comprising 3D water phantom with moving mechanism, water and temperature sensors, control unit with built-in high-precision electrometer, and Wi-Fi for wireless auto setup and data transfer, ring-gantry adapter plate, and optional lift and reservoir.
Interfaces	Wi-Fi, LAN, USB
Power supply	AC 100-120 V / 220-240 V, 50-60 Hz

Phantom M

Material	PMMA
Scanning range	500 mm (L) x 500 mm (W) x 400 mm (H)
Wall thickness	15 mm
Drive mechanism	Motorized 3D scanning arm
Scanning mode	Continuous, step by step
Scanning speed	up to 20 mm/s
Minimum step size	0.1 mm
Positioning accuracy	≤ 0.1 mm
Reproducibility	≤ 0.05 mm
Dimensions	750 mm (L) x 650 mm (W) x 700 mm (H)
Weight	57 kg

BEAMSCAN Control Unit

Description	Control unit with built-in precision electrometer and Wi-Fi for wireless auto setup and data transfer
Dimensions	420 mm (L) x 200 mm (W) x 120 mm (H)
Weight	7 kg
Interfaces	LAN, Wi-Fi, USB

Built-in electrometer

Channels	2
Resolution	10 fA
Chamber voltage	-400 V, ..., 400 V programmable in 1 V increments
Dynamic range	2 pA, ..., 500 nA in three ranges
Time constant	10 ms in all ranges
Non-linearity	≤ ± 0.5 % acc. IEC 60731
Long-term stability	≤ ± 0.5 % p.a. acc. IEC 60731
Repeatability	≤ ± 0.5 % acc. IEC 60731

BEAMSCAN Lift

Description	Foldable lifting carriage with storage compartment for accessories
Moving range	500 mm
Minimum step size	< 1 mm
Dimensions	1460 mm (L) x 790 mm (W) x 1030 mm (H)
Weight	85 kg

BEAMSCAN Reservoir

Description	Water reservoir with push bar, phantom mounting plate, and storage compartment
Pumping/draining time	6 min / 7 min
Capacity	220 l
Dimensions	1010 mm (L) x 780 mm (W) x 1070 mm (H)
Weight	100 kg

BEAMSCAN RL Unit

Description	Integrated lift and reservoir control
Dimensions	420 mm (L) x 200 mm (W) x 120 mm (H)
Weight	6 kg



Making Radiation Safer.

PTW is a global market leader for dosimetry and quality control solutions in radiation medicine, serving the needs of medical radiation experts in more than 160 countries worldwide. Starting with the famous Hammer dosemeter in 1922, the German manufacturer is the pioneer in medical radiation measurement, known for its unparalleled quality and precision.

For PTW, making medical radiation safer is both a passion and lifetime commitment. The family-run, high-tech company operates the oldest and largest accredited calibration laboratory in the field of ionizing radiation and established THE DOSIMETRY SCHOOL to globally promote the exchange of knowledge in clinical dosimetry.

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PTW THE DOSIMETRY COMPANY