



**Beam Commissioning and Annual QA**  
Phantoms, Detectors & Accessories



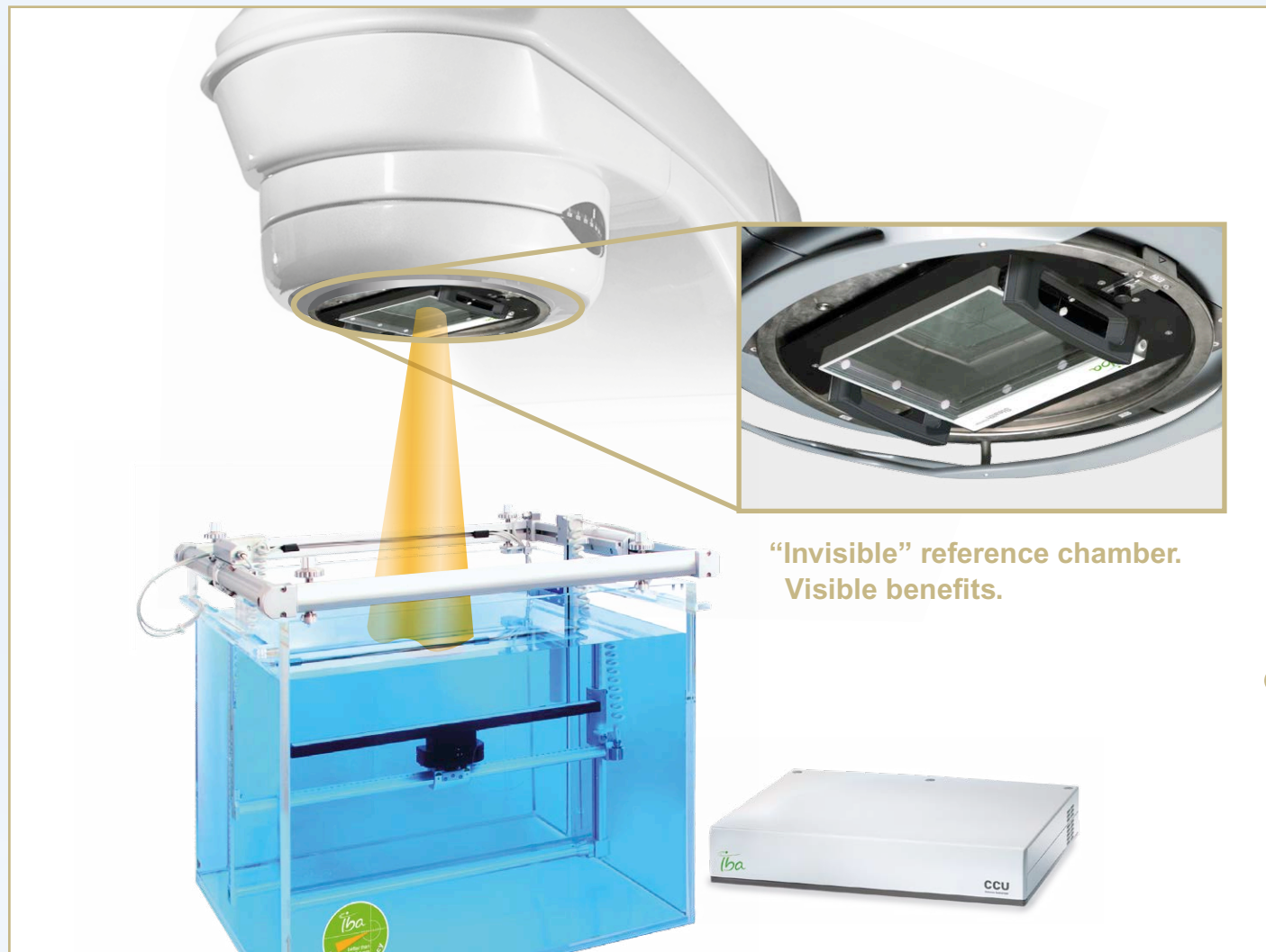
Benefit from efficient and smartly designed beam commissioning & annual QA tools that make your life **EASIEST**.

For **MORE THAN 40 YEARS** IBA Dosimetry has been providing high quality dosimetry equipment and services, with more than **4,000 SATISFIED WATER PHANTOM USERS** worldwide.

Fastest.  
Most accurate.  
Most reliable.

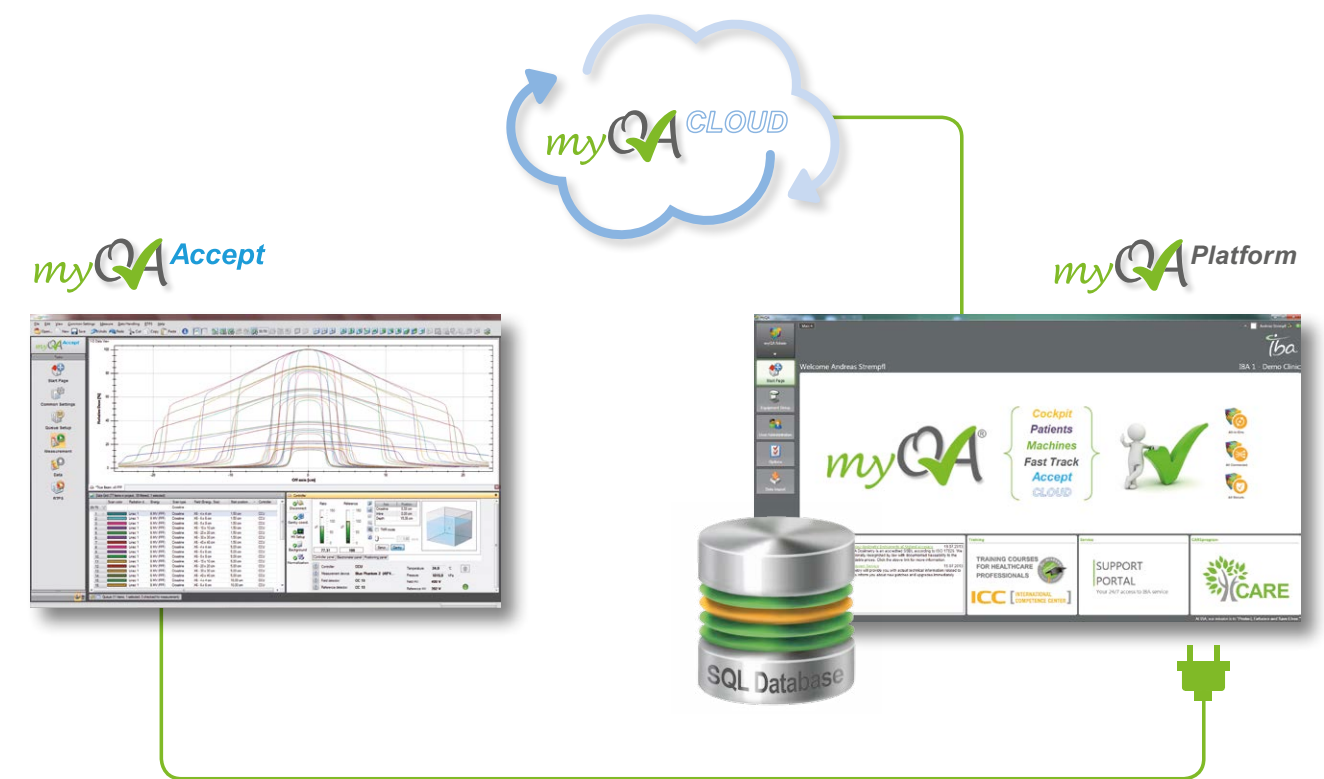


# Blue Phantom<sup>2</sup> System The Gold Standard



## Platform-based Beam Scanning

myQA Accept



- ✓ Connect your myQA Accept software to the myQA Platform
- ✓ Benchmark your scan data anonymously in the myQA Cloud
- ✓ Use your scan data as your reference in myQA Machines

“ The Blue Phantom<sup>2</sup> scanning system with myQA Accept and Stealth Chamber™ is the perfect combination for fast data collection!

I was really surprised how easy it was to attach the Stealth Chamber™ to the LINAC with no need to change or reposition the chamber during the whole commissioning process. This saved us a lot of time. The scan results and the excellent reproducible reference signal quality absolutely satisfied all my needs! ”

Dipl. Phys. Univ. Mathias Dierl

Head of Medical Physics, Radiation Therapy, Medical Center Bayreuth, Germany

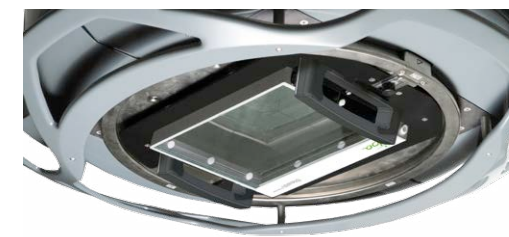
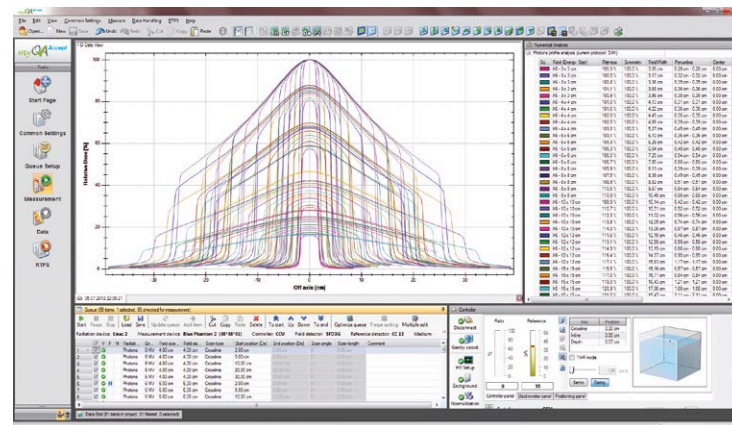


# Blue Phantom<sup>2</sup> System

Find out more online at [iba-dosimetry.com](http://iba-dosimetry.com)

## myQA Accept

- ✓ Menu guided workflows enable easy operations
- ✓ Automatic Queue Generation
- ✓ Adjustable scanning parameters for optimized measurements
- ✓ Analysis of TrueBeam™/FFF Scans



## StealthCHAMBER™

for Small Field Dosimetry

- ✓ “Beam invisible” reference signal chamber
- ✓ Unique efficiency, uncompromised accuracy

NEW



## Lift Table – compact design

- ✓ Lift Table with extended legs can be setup without putting weight on the turntable
- ✓ Water Phantom carriage with manual or electric (telescopic) lifting
- ✓ Convenient and fast positioning of the water phantom incl. leveling frame for vertical and horizontal micro adjustment (electrical version)

NEW

## Adaptive Scan Optimization (ASO)

- ✓ Significantly speeds up continuous and step-by-step scanning
- ✓ Overcomes all other systems' restrictions that compromise speed vs. high resolution scanning
- ✓ Automatic scanning speed adaptation enables optimal accuracy for the different profile segments: Fast scanning where fewer data points are needed



IBA AquaBlue: water treatment for protecting mechanical parts and saving water from decay

## Most accurate detector positioning $\pm 0.1$ mm

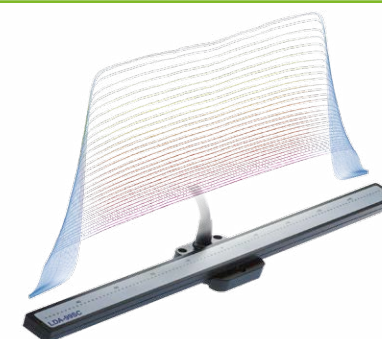
- ✓ The Blue Phantom<sup>2</sup> is calibrated and certified to guarantee high accuracy and responsibility of  $\min \pm 0.1$  mm!
- ✓ Equipped with high-precision sensor technology the superior solution is a non-contact and non-mechanical wear absolute position sensor (vs. typical indirect stepper motor measurements).
- ✓ Unique absolute measurement technology



## 1 minute leveling

- ✓ Intuitive and precise 4-point micro leveling
- ✓ Simply adjust tips of alignment pins with water surface
- ✓ Spare time for redundancy checks required by automated setup procedures

Coming soon!



## 5 times faster data scanning

Dramatically cut your commissioning times with the Linear Diode Array:

- ✓ Complete profile scanning at once
- ✓ High resolution down to 0.5 mm

# Based on the Blue Phantom<sup>2</sup> Technology!

# Link Up Your Blue Phantom Family and Connect.

## Compact footprint

- ✓ 2D high-end water phantom, half the size of Blue Phantom<sup>2</sup> and minimized weight
- ✓ Promotes easy transportation with more efficient use, e.g., for annual checks
- ✓ Optimized for satellite hospitals and commissioning service providers
- ✓ Certified accuracy

## Blue Phantom<sup>COMPACT</sup>



## 3D water phantom system for complete LINAC commissioning & QA

## Blue Phantom<sup>2</sup>



Connects all your IBA water phantoms

## CCU Common Control Unit



## One control unit for all your IBA water phantoms

- ✓ Its compact design integrates a controller and two independent electrometers
- ✓ Simultaneous support of diodes and ionization chambers
- ✓ Built-in pressure & temperature sensor interfaces prepared for automatic Kt, p correction

## Blue Phantom<sup>Helix</sup>



## Commissioning & QA for Tomotherapy<sup>®</sup>

- ✓ 3D water phantom for faster scanning
- ✓ High positioning accuracy and reliability
- ✓ Certified accuracy
- ✓ Efficient measurements & analysis
- ✓ Long-term mechanical stability

# Unique Small Field Dosimetry Solutions

## Stealth<sup>CHAMBER</sup><sup>™</sup>

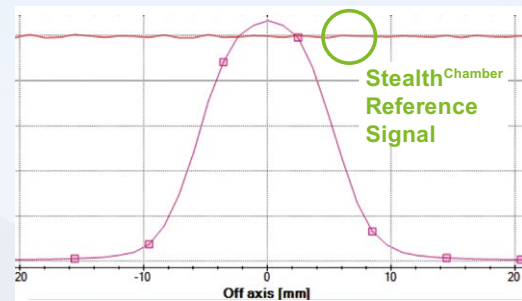
### for Small Field Dosimetry

- ✓ New „perturbation free” reference signal chamber
- ✓ Avoid returning to the LINAC room frequently and repositioning (compared to standard reference chambers)
- ✓ Excellent reproducible reference signal quality, even for SRS/SBRT fields



StealthCHAMBER for stereotactic cones (e.g. BrainLAB Novalis)

Profile of 1x1 cm field size measured with StealthCHAMBER in continuous measurement mode:



“ The new IBA Stealth reference chamber is saving us enormous amounts of time.

The scans we performed with the Stealth Chamber were outstanding. It was very obvious that the scans were much smoother with less disturbance, allowing us to speed up scanning motion. Also, due to the hidden chamber we don't have to go back into the vault to reposition, which saves us additional time. ”

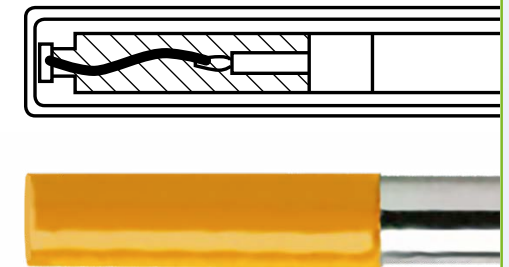
Luis Alberto Vazquez Quino, Phd; Mark Dewese, MS  
Medical Physicists at Mid-South Radiation Physics, Inc.

## RAZOR<sup>FAMILY</sup>

### RAZOR<sup>DETECTOR</sup>

#### High-performance diode detector

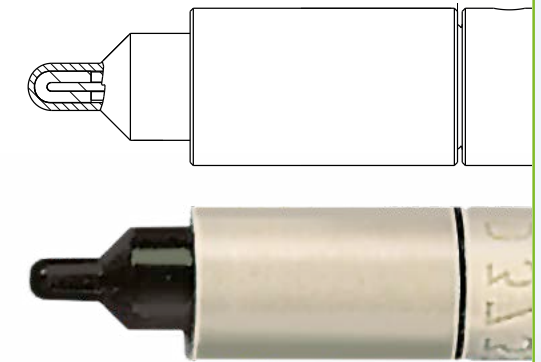
- ✓ Chip size: 0.95 x 0.95 mm; t = 0.5 mm
- ✓ Sensitive area: Ø 0.6 mm
- ✓ For Photon and Electron beams in RT



### RAZOR<sup>CHAMBER</sup>

#### Compact air ionization chamber

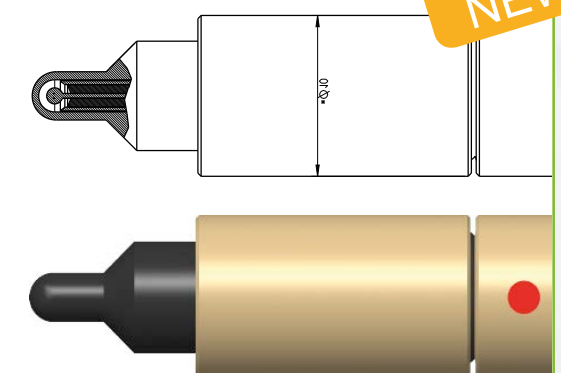
- ✓ Cavity volume: 0.01 ccm
- ✓ Central electrode material: graphite
- ✓ For Photon and Electron beams in RT



### RAZOR<sup>NANOCHAMBER</sup>

#### Smallest available ionization chamber

- ✓ Cavity volume: 0.003 ccm
- ✓ Central electrode material: graphite
- ✓ For Photon and Electron beams in RT



## Technical Specifications

### Blue Phantom<sup>2</sup>

Scanning volume (X/Y/Z): 478 x 478 x 410 mm
Position accuracy: $\pm 0.1$ mm
Position reproducibility: $\pm 0.1$ mm on 3 axes, calibrated and certified
Dimensions (LxWxH): 675 mm x 645 mm x 560 mm
Weight (empty): 45 kg
Wall thickness / material: 15 mm / acrylic
Approximate volume: 200 l

### Blue Phantom Compact

Scanning volume (X/Z): 478 x 410 mm
Position accuracy: $\pm 0.1$ mm
Position reproducibility: $\pm 0.1$ mm on 2 axes, calibrated and certified
Dimensions (LxWxH): 645 mm x 407 mm x 550 mm
Weight (empty): 36 kg
Wall thickness / material: 15 mm / acrylic
Approximate volume: 116 l

### Blue Phantom Helix

Scanning volume (X/Y/Z): 140 x 520 x 200 mm
Position accuracy: $\pm 0.1$ mm
Position reproducibility: $\pm 0.1$ mm on 3 axes, calibrated and certified
Dimensions (LxWxH): 680 mm x 407 mm x 350 mm
Weight (empty): 27 kg
Wall thickness / material: 15 mm / acrylic
Approximate volume: 80 l

### Common Control Unit (CCU)

Time constant: 20 ms
Bios voltage range: $\pm 50$ through $\pm 500$ V
Full scale range: 0.4 nA / 40 nA / 4 $\mu$ A
Main supply: 100 – 240 V AC $\pm 10$ %; 50/60 Hz

Fastest.  
Most accurate.  
Most reliable.

Find out more online at [iba-dosimetry.com](http://iba-dosimetry.com)

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