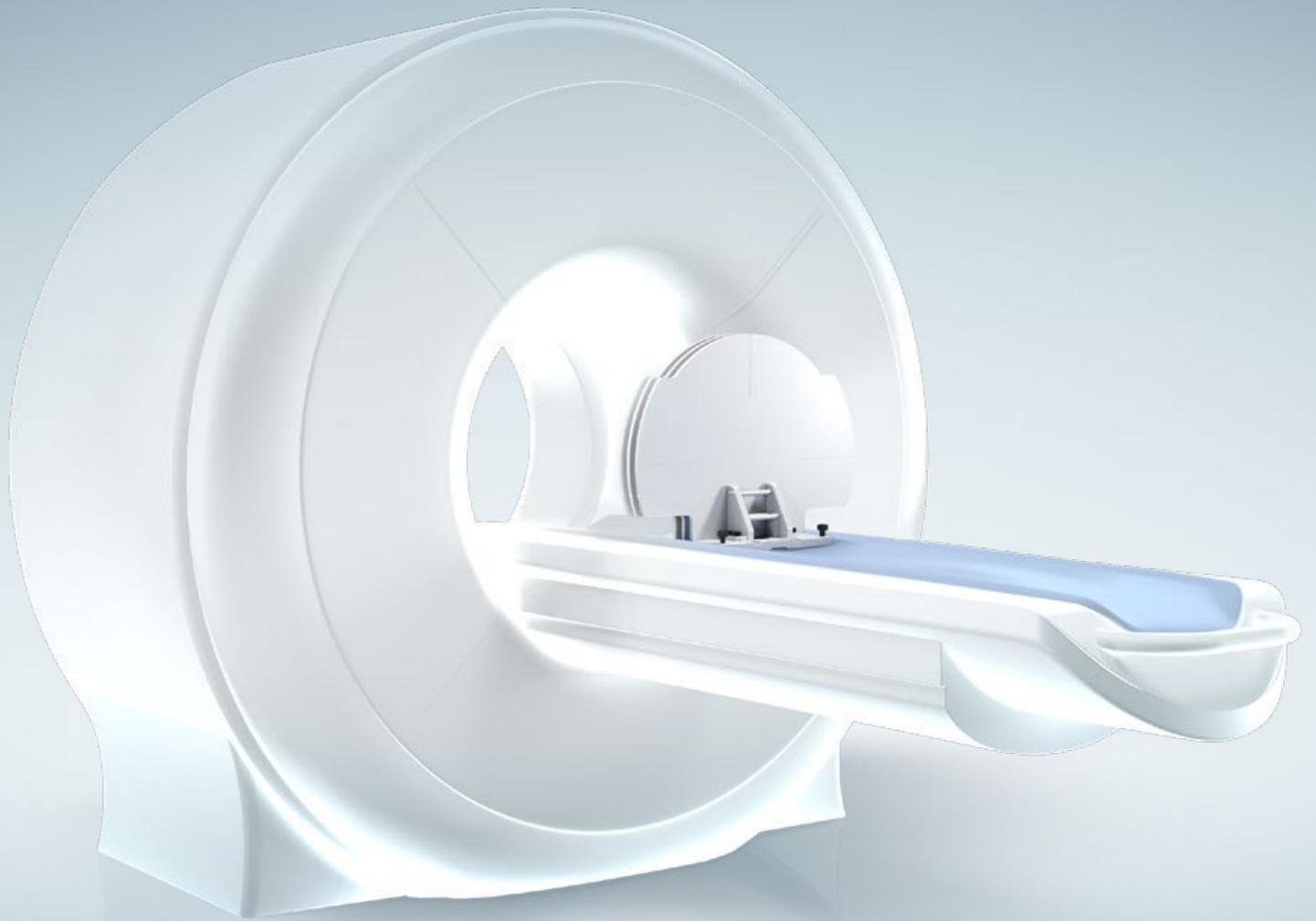




# THETIS MR Distortion Phantom

Detect distortions in MR imaging easily and reliably



# A good image is the basis for better treatment

Image distortion is a common phenomena in the MR imaging process due to inhomogeneities in the magnetic field, gradient non-linearities, or ferromagnetic materials in the vicinity of the MR. But there is a solution for

your quality assurance process in RT as well as diagnostics. THETIS MR Distortion Phantom enables you to easily detect image distortions. The phantom helps to register where the distortion affects the image and can

be utilized for both 2D and 3D. Precision is the key at any step in radiation therapy. The more precisely the initial tasks are handled, the better the treatment will be as the final result.



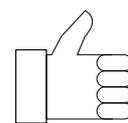
## Precise imaging

The main goal of imaging is to obtain an image with all important information and without any deviations. THETIS is designed to detect distortions reliably.



## Easy handling

THETIS is easy to handle and quick to set up.



## Affordable price

Choose from four different kits and additional extensions.

# Suitable for any MRI purposes

Whether you use the MRI device for RT or diagnostics, the image quality as a result of the process should be precise and reliable for the steps that follow.

When merging CT and MR images, no geometric differences should occur. For MR-only workflows, the treatment relies even more on the image quality and therefore needs to be exact.

## When to use THETIS MR Distortion Phantom?

- After commissioning of a new machine
- For QA after major updates to the machine
- For MR-only: monthly and daily before use

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## Distinctive design

The MR signal is delivered by small silicon markers arranged in a grid pattern. The dimensions of THETIS are suitable for the purpose of detecting distortions.

## Modularity

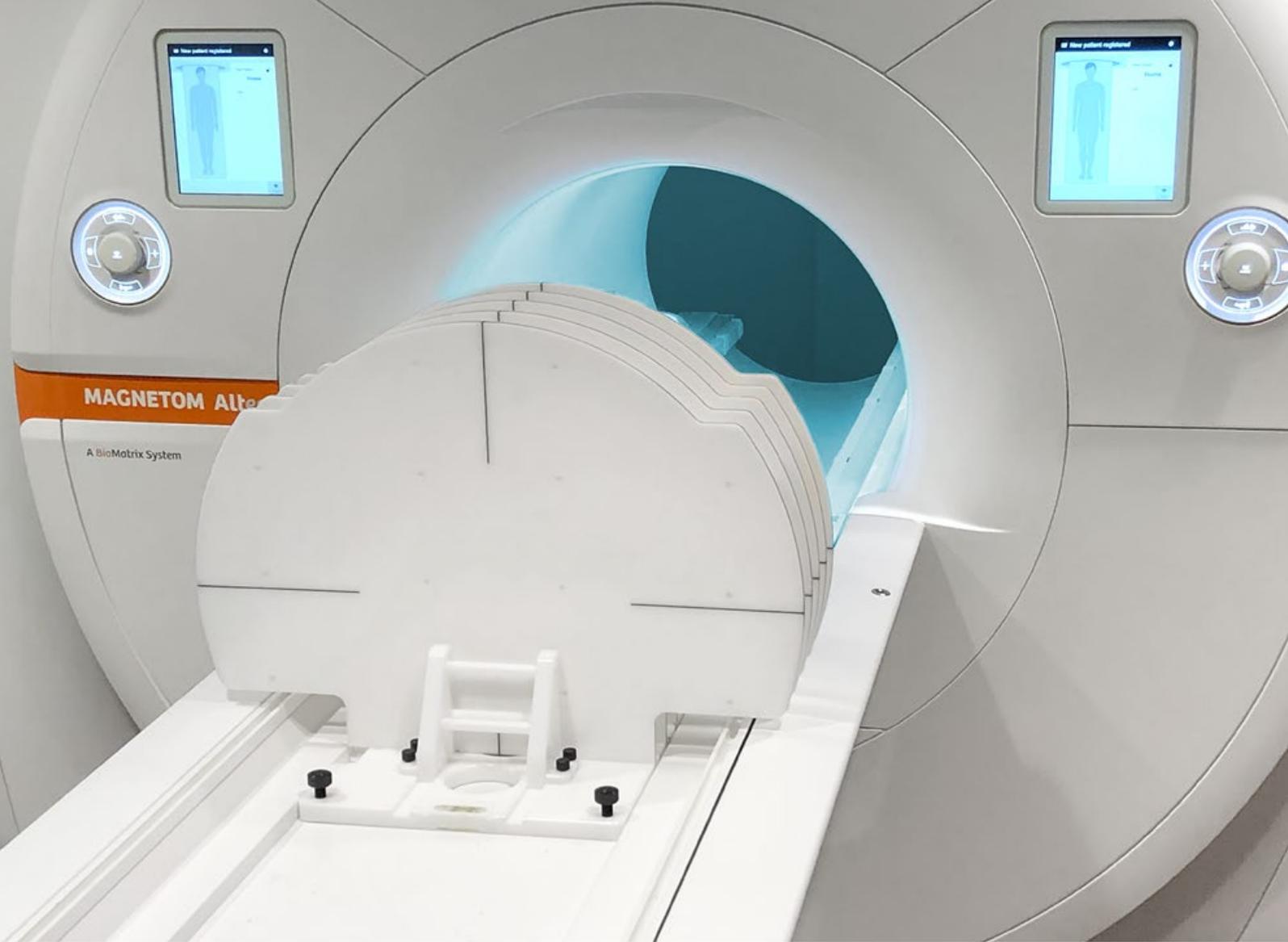
Whether for 2D or 3D (volume) checks, you can adapt THETIS to your specific needs. Choose a kit and add accessories if needed.

## Perfect fit

Magnetic field gradients do not behave linearly in the MR. The outer area of the field of view is mainly affected by MR-non-linearity. The dimensions of THETIS were chosen on this basis.

## Lightweight

Despite the size, THETIS is light and easy to carry, which makes a difference in daily clinical life.



“The use of MRI and MR-Linac in radiation therapy has grown massively. To cover the needs of generating MR images of the highest geometrical accuracy, we released THETIS. THETIS makes it easy to determine where distortions are affecting the image and whether the magnetic field or distortion correction has changed over a period of time.”

**Torsten Hartmann**

Director Product Management Healthcare  
LAP GmbH Laser Applikation



Visit our website to learn more about distortions and their sources and other resources.

# Flexible and scalable **Kits and accessories**



## **THETIS 3D MR Distortion Phantom**

The gold standard. Suitable for a broad variety of cases. Consists of three phantom plates and delivers MR FoV depth information.



## **THETIS 2D MR Distortion Phantom**

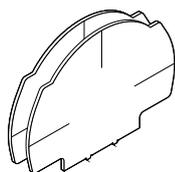
Consists of one phantom plate and is suitable for 2D measurements. Delivers no depth information.



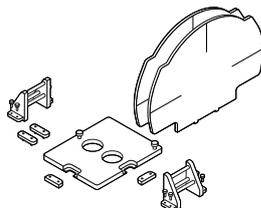
## **THETIS 3D Distortion Phantom max**

Provides the maximum of flexibility and covers the most MR FoV depth information. Consists of five phantom plates and two levelling plates.

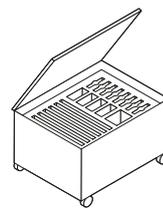
## **Make it yours**



**Extension Kit 1**  
Add phantom plates



**Extension Kit 2**  
Add levelling plate and phantom plates



**Storage Case**  
Conveniently store all your THETIS materials

# About us

LAP is one of the world's leading suppliers of systems that increase quality and efficiency through laser projection, laser measurement, and other processes. Every year, LAP supplies 15,000 units to customers in industries as diverse as radiation therapy, steel production, and composite processing. LAP employs 300 people at locations in Europe, America, and Asia.



**90+**  
Partners



**300**  
Employees



**7**  
Locations



## Quality

We work to uniform standards and with certified processes. For us, "Made in Germany" means the highest precision in manufacturing and quality inspection of each device. For our customers, this means planning and process certainty.

All our worldwide locations use a quality management system according to EN ISO 13485 or EN ISO 9001. Our products have all the necessary approvals and registrations almost everywhere in the world.



## Service

We ensure the maximum availability of your equipment so you can concentrate on your core process. Wherever you need us, our certified service technicians are quickly on site in any time zone. We support you from installation and commissioning, through user training, up to maintenance, repair, or unit replacement.

Our efficient logistics ensure the fast availability of spare parts worldwide. For technical questions and support, our helpdesk is at your disposal by telephone, via e-mail, or remote diagnosis.



More about our  
global QM system



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