

**SIEMENS**



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# MAGNETOM ESSENZA

The established performer at 1.5T

Answers for life.

# The established performer at 1.5T

With more than 900\* installations worldwide MAGNETOM® ESSENZA proves its outstanding performance at 1.5T every day. Ultra-short, light-weight, and equipped with state-of-the-art technology it is highly efficient, delivers excellent MR images, and helps you to provide high-quality radiology services on a daily basis.

## Advanced Tim technology

Benefit from the gold standard in MRI: Tim® integrated coil technology. In combination with the unique IsoCenter Matrix coil and MAGNETOM ESSENZA's compact system design, Tim provides more flexibility, accuracy, and speed in MR imaging.

## Head to toe applications

Experience excellent imaging performance and acquire outstanding image quality for any application, in any body region. From diffusion tensor imaging in the brain to high-resolution 2D and 3D imaging of the knee, and much, much more.

## Sound investment

MAGNETOM ESSENZA was specifically developed for hospitals and private practices that aim to provide comprehensive, high-quality diagnostics with limited budgets. Due to the unique system design, investment and operating costs can be reduced significantly, and make MAGNETOM ESSENZA a highly economical and resource-conserving MR System.



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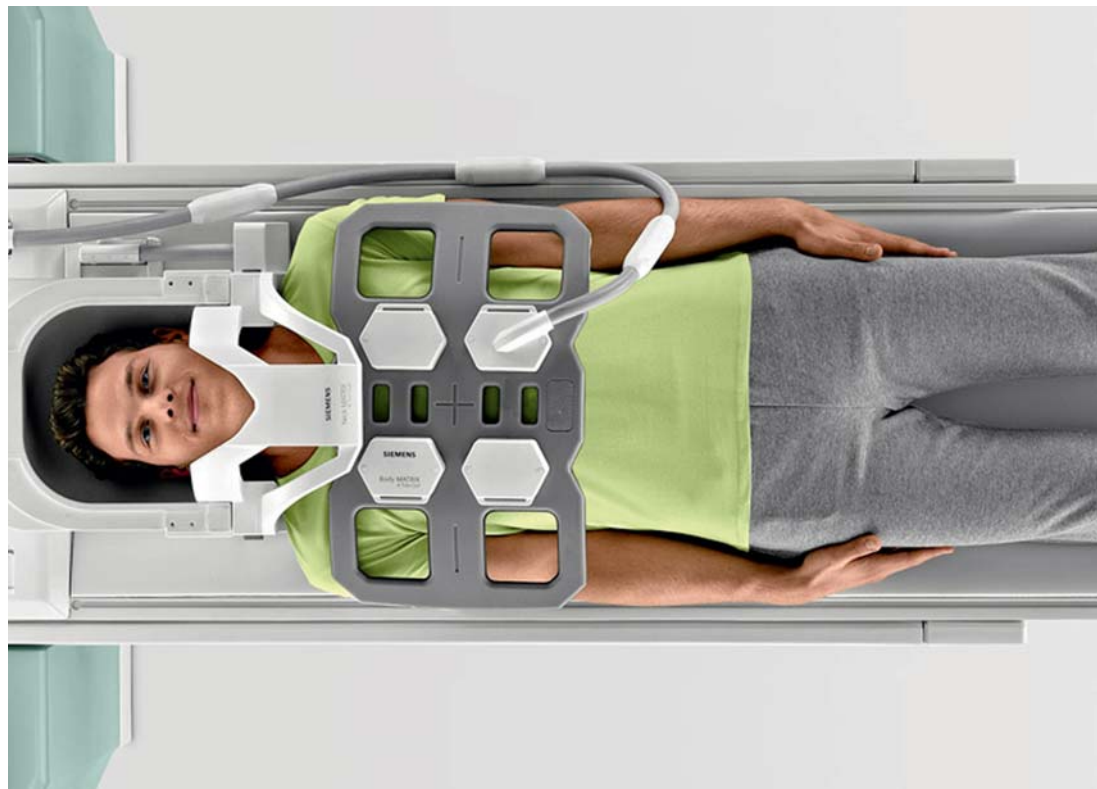
MAGNETOM  
ESSENZA  
A Tim System

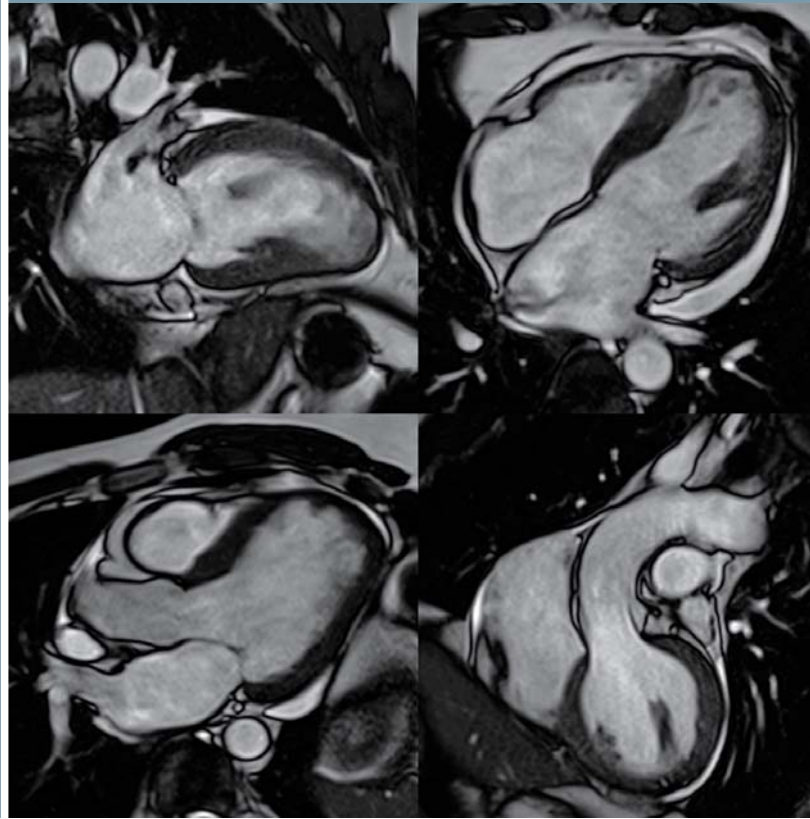
# Advanced Tim technology

MAGNETOM ESSENZA offers Tim (Total imaging matrix) integrated coil technology for superb imaging performance. With thousands of installations all around the world, Tim has become a standard in MRI (Magnetic Resonance Imaging). Tim is proving it every day, with unprecedented flexibility, accuracy, and speed.

## Flexibility. Select exams, not coils.

- For a scan setup tailored to the desired anatomy, and the individual patient, Tim allows you the flexible combination of up to four coils simultaneously.
- Up to 25 seamlessly integrated coil elements are automatically matched to 8 or 16 independent RF channels.
- Push-button, automated multi-step acquisitions with a maximum scan range of 140 cm enabled by the integrated IsoCenter Matrix. It makes patient and coil repositioning virtually unnecessary, and can be flexibly combined with additional Body Matrix coils.
- Streamline your clinical workflow. Automatic, optimized coil selection with AutoCoil Detect and AutoCoil Select.





**Accuracy.**  
**Local and total.**

- Experience highest SNR with Tim and our advanced high-density Matrix coil portfolio.
- Benefit from the excellent coverage and image quality, both for small and large Field of Views.
- Even perform exams like wholeCNS, wholeABDOMEN, or peripheral MRA studies without any repositioning of patients or coils.

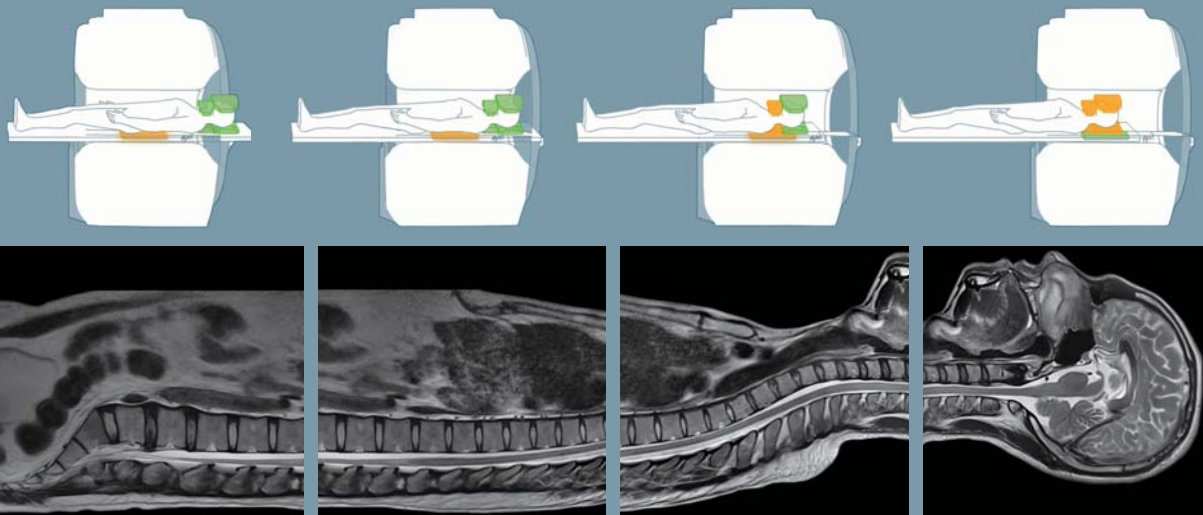
**Speed.**  
**Parallel in all directions.**

- Experience unlimited parallel imaging with the high-density Matrix coils, from head to toe, front to back, and side to side.
- Reduce acquisition times with iPAT (Parallel Acquisition Techniques).
- Accomplish challenging applications such as cardiac, with the powerful V-gradients (30mT/m), and benefit from an excellent imaging performance.

Enhance your MR workflow even further.  
Offer more clarity, comfort, and convenience  
to your technologists and patients.

**The IsoCenter Matrix is always in  
position and ready to scan:**

- Delivering highest image quality through optimal coil position in the isocenter of the magnet.
- Supporting faster and easier patient setup. Never carry a spine coil again.
- Providing flexibility by combining the IsoCenter Matrix with additional coils such as the Body Matrix for abdomen or thorax imaging.
- Enabling multi-step-examinations without repositioning by operating the IsoCenter Matrix as 140 cm coil.



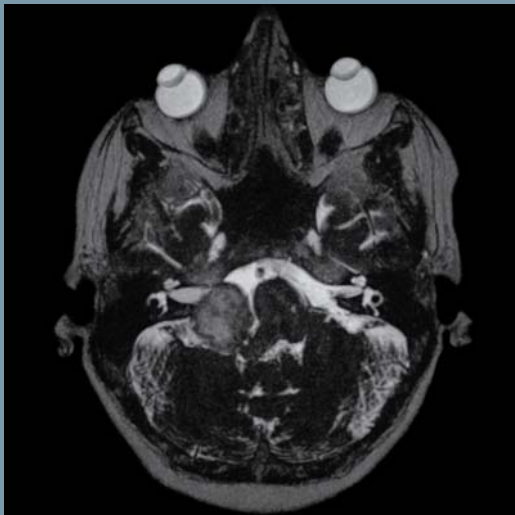


**Highest flexibility and excellent image quality with the 10-element Head/Neck Matrix**

- Large aperture opening and detachable double mirror.
- For claustrophobic patients, use lower part only.
- High SNR and iPAT performance due to 10-element design.

**Focus Shoulder Array brings off-center images into focus**

- Capture pristine off-center images with our innovative shoulder array.
- Focus the FoV and magnet homogeneity with the unique shim shell.
- Improve speed and accuracy with our 6-element, iPAT-compatible coil.



# Shortest system design in its class for enhanced patient comfort

- 145 cm system length, cover to cover
- Head-out examinations for most applications
- Up to 140 cm scan range using advanced Set-n-Go protocols

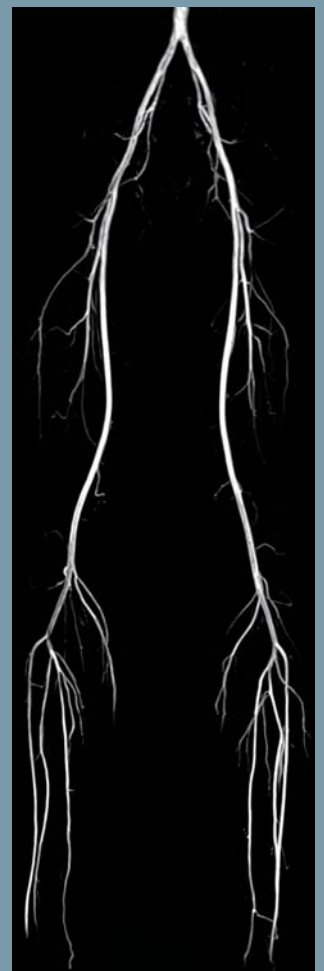




# Head to toe applications

MAGNETOM ESSENZA's 1.5T field strength delivers outstanding image quality that supports a complete range of clinical applications, all powered by Tim.

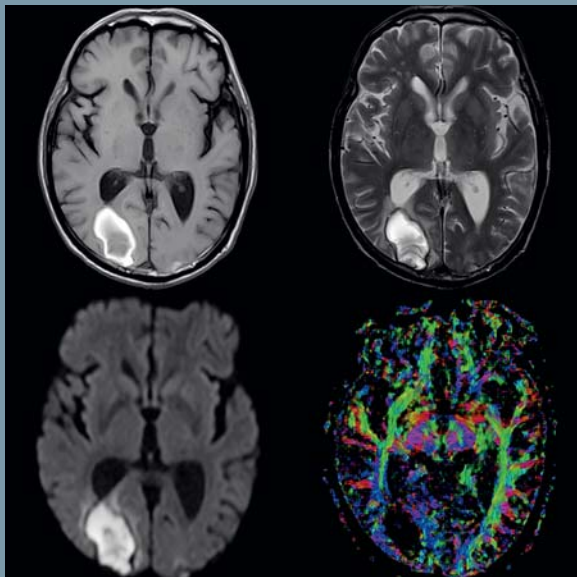
What does all this innovation add up to? Accuracy and efficiency you can count on for the lifetime of your system.





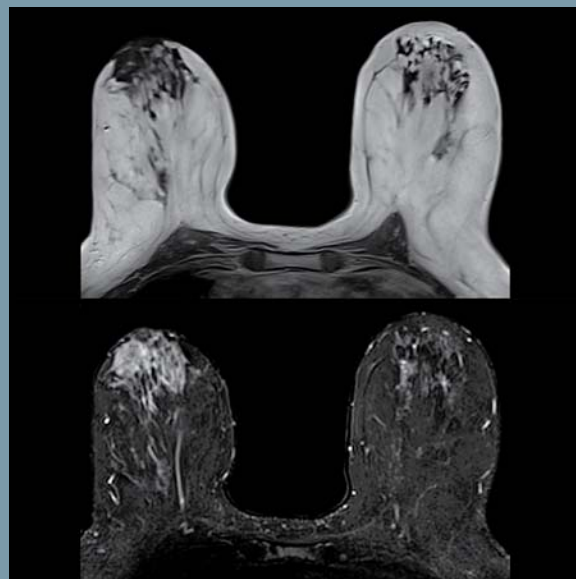
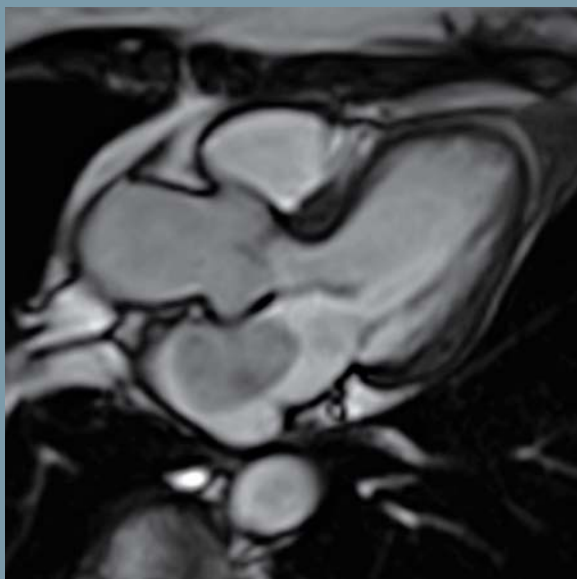
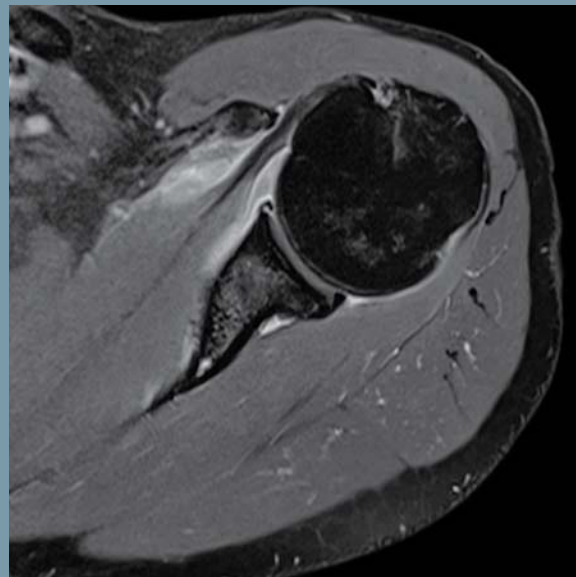
# Neuro

Evaluate disc herniation to advanced stroke with high quality morphological and functional techniques.



# Ortho

Examine ligament tears to cartilage degeneration with high-resolution imaging and a wide range of dedicated coils.



# Cardiac

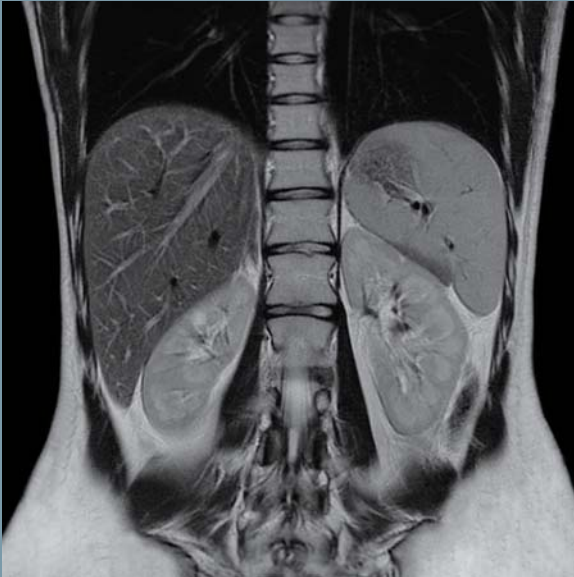
Helping to answer clinical questions more easily. From cardio-myopathies to ischemic heart disease, and valvular to congenital heart diseases.

# Breast

Streamline your workflow in clinical cases, including lobular carcinoma, breast implant assessment, and therapy monitoring.

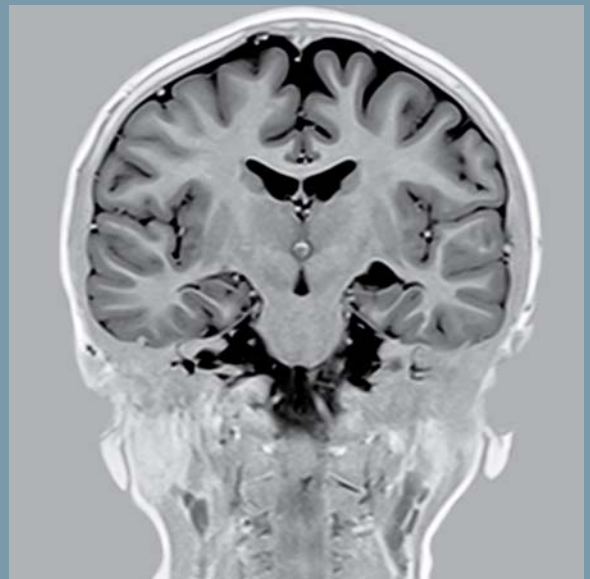
## Body

Perform free-breathing high-resolution abdominal studies with ease, from liver, kidneys to pancreatic and pelvis studies.



## Angio

Depict vessel diseases with a wide range of contrast and non-contrast enhanced techniques.



## Oncology

Provide state-of-the-art oncology services for tumor detection and staging of prostate, liver cancers, and more.

## Pediatric\*

Achieve excellent contrast and resolution with age-dependent protocols, using ultra-fast and motion correction techniques.

\* MR scanning has not been established as safe for imaging fetuses and infants under two years of age. The responsible physician has to decide about the benefit of the MRI examination in comparison to other imaging procedures.

# Sound investment

## Excellent efficiency along the complete lifecycle

### Maximum output ...

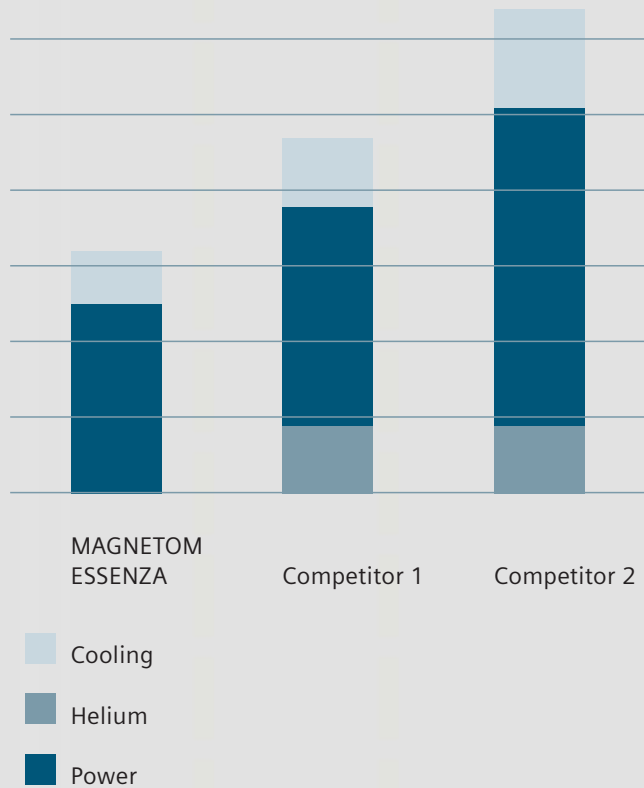
- Outstanding 1.5T image quality, local and total, for high diagnostic confidence
- Excellent ease of use and workflow performance, enabled by Integrated IsoCenter Matrix and Tim
- Extended application range, powered by Tim: answering all your needs – and much more
- Enhanced patient comfort with the ultra-short system design
- Maximized uptime with highest system reliability



### ... with minimum input\*

- Low installation requirements; save up to 25% on siting costs
  - Lightweight, ultra-short magnet, enables low floor space requirements
  - No need for a separate equipment room due to optimized power electronics
  - Low power requirements
- Low running costs
  - Energy-efficient system design for significantly reduced power consumption – up to 50% energy savings when replacing an existing MRI system
  - No hidden helium cost due to the state-of-the-art zero helium boil-off magnet

### Best-in-class operating cost compared to current competitive systems\*



# Experience workflow efficiency

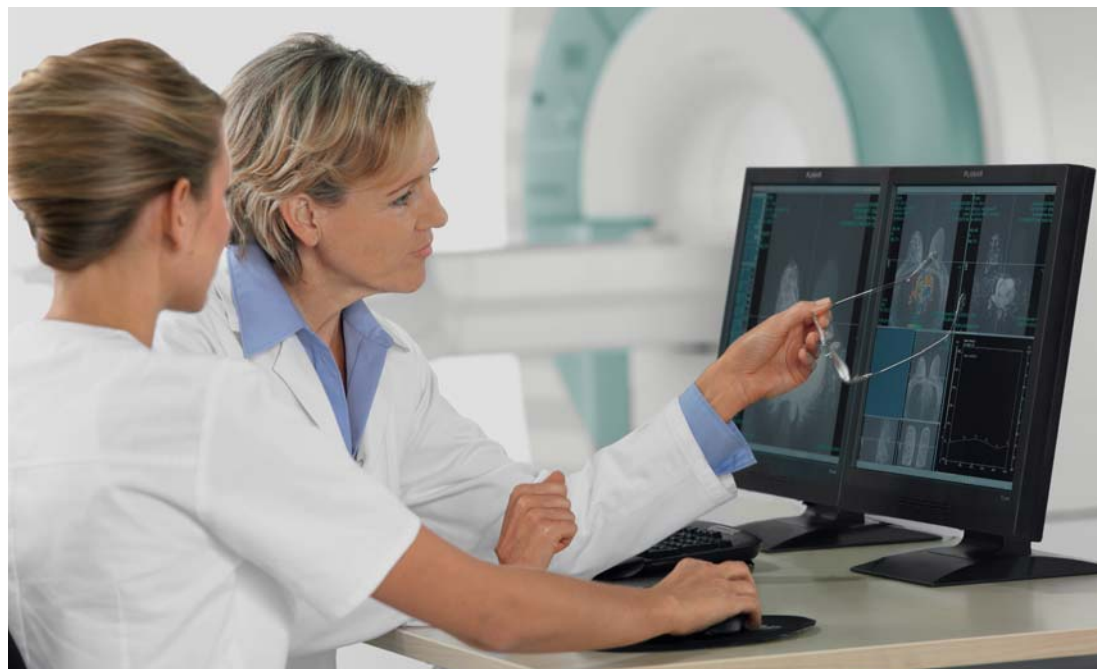
MAGNETOM ESSENZA is simple to learn and easy to use. Experience excellent usability that lets you focus more on what really matters – your patients.

## Simple to learn

- *syngo*, the highly intuitive Siemens cross-modality user interface is easy to learn and operate, and enables you to expand your capabilities in every clinical field.
- Bring your skills to perfection with a broad range of education and training programs.

## Easy to use

- Never carry a spine coil again with the integrated IsoCenter Matrix.
- Discover how easy patient set-up can be with ultra-lightweight Tim coils, short coil cables, and the unique, integrated IsoCenter Matrix.
- Access the MRI suite remotely from virtually anywhere within the network with *syngo* Expert-I.



# Customer care and services

Dedicated to helping you get the most out of your investment throughout the product life cycle and beyond.

## MAGNETOM World

Relevant for the clinical routine: our international user community with the latest clinical information, publications, talks, application tips, videos, education and training programs, and more.

[www.siemens.com/magnetom-world](http://www.siemens.com/magnetom-world)

## Financial Solutions

Siemens Financial Services creates value with best-in-class financing solutions.

[www.siemens.com/finance](http://www.siemens.com/finance)

## Options and Upgrades

Get the most out of your Siemens system during the whole product life cycle. Discover new possibilities with our applications, coils, and *syngo*.via.

[www.siemens.com/discoverMR](http://www.siemens.com/discoverMR)

## Customer Services

We offer you a wide range of proactive services – thus enabling increased system availability, optimized performance, and workflow efficiency.

We focus on real-time remote monitoring and preventive maintenance of medical hardware and software. That's how we solve problems before they occur, thus enabling increased system availability, optimized performance, and workflow efficiency. To keep you on track to success – now and in the future.

[www.siemens.com/uptime-services](http://www.siemens.com/uptime-services)

## *syngo* Evolve MR

Up-to-date, powerful hardware and software are key factors for enhancing the performance and diagnostic quality of your systems. *syngo* Evolve helps you to keep pace with rapidly developing technological advances.

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MAGNETOM World,  
where MRI meets  
clinical expertise.

# MAGNETOM ESSENZA – The established performer at 1.5T

## Clinical benefits

- Great diagnostic confidence with 1.5T and Tim
- Optimized image quality and easy setup with the IsoCenter Matrix
- Applications from head to toe, powered by Tim – answering even your advanced application needs

## Patient comfort

- More “head out” exams, thanks to the ultra-short magnet design
- Comfortable exams, with ultra-lightweight coils
- Faster exams powered by Tim

## Economical efficiency

- Attractive initial investment
- Minimum installation requirements
- Low operating costs
- Maximum reliability and world-class service

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TOM  
ESSENZA  
Tim System

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