

# The Dedicated MRI Factbook



*Esaote MRI: A world of difference*



# Esaote Dedicated MRI Measures of Excellence

“Creativity in Healthcare” is Esaote’s motto which represents the philosophy that has been adopted by the Dedicated MRI product line since its inception in 1993, a year that marked the launch of the world’s first dedicated MRI for extremities, Artoscan. From the outset the company has positioned itself as an innovator and has broadened its product offering, gaining recognition both industry and the medical community as a pioneer in Dedicated MRI.

Over two decades, Esaote has continued to maintain its leadership position in the Dedicated MRI segment because its products are focused on satisfying specific requirements that have not been met by the other imaging companies. Research and development activities are strongly driven by customer needs and by working very closely with users and clients, Esaote is able to respond to new market demands and expectations.

The growing family of innovative dedicated MRI systems boasts common features such as ease of use, open ergonomic design that guarantees optimal patient comfort and cost effectiveness. The positive cost-benefit ratio that can be attributed to Esaote’s MRI systems is particularly attractive given the current economic climate of cost control faced by the healthcare providers.

## Major Milestones >

1993  
Artoscan



1999  
E-scan



2001  
C-scan

2003

First 1.000  
systems sold

2005  
G-scan





**2008**  
S-scan

**2012**  
Over 2.400 systems sold.  
Esaote Family of innovative  
dedicated MRI system  
continues to grow

**2007**  
Opera

O-scan

S-scan

G-scan Brio

**Today**  
eXP Technology  
available on all Esaote  
dedicated MRI systems



# O-scan, Take Pride in Performance

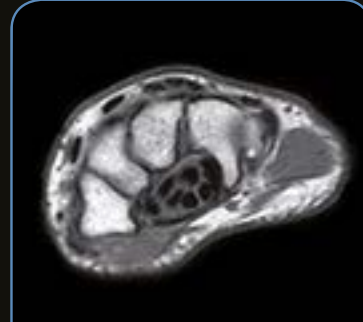
O-scan, the Star Performer in MRI for extremities, satisfies the need for higher through-put in Radiological settings and Orthopaedic practices. It can easily work alongside whole body scanners in Radiology departments, freeing-up the time for major clinical cases on the whole-body imager therefore allowing you to improve your workflow and provide an optimal patient experience.

- ✓ Very high quality MRI joint examinations at a much more competitive cost than standard whole body MRI systems
- ✓ Open, ergonomic design, no claustrophobia
- ✓ High patient comfort
- ✓ Real-Time Positioning
- ✓ Fits in only 9 m<sup>2</sup> (100 ft<sup>2</sup>)
- ✓ Low power consumption runs from a standard wall-plug
- ✓ Complete set of dedicated DPA coils





Knee FSE T2 Sagittal



Wrist SpinEcho T1 Axial



Ankle STIR Sagittal



Elbow 3D SHARC Coronal



Knee 3D SHARC Axial



Wrist 3D SHARC Coronal



Knee XBONE Sagittal



Wrist XBONE Coronal



# G-scan Brio, Changing the MRI Perspective

The G-scan Brio is a revolutionary MRI approach for all musculoskeletal applications, which allows you to increase your diagnostic accuracy and confidence. The open and tilting design is the new and innovative way of doing MRI in which the position of the patient becomes an integral part of the outcome of the examination. G-scan Brio also features an optional Head coil for standard brain imaging.



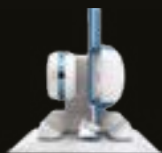
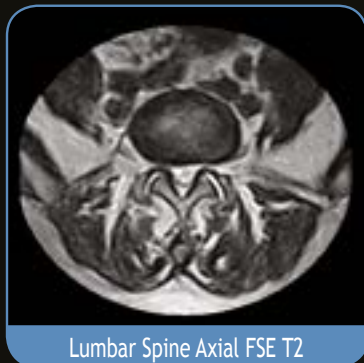
- ✓ G-scan Brio is a dedicated musculoskeletal MRI system covering all applications from foot to shoulders and the most important spine segments such as L & C-spine
- ✓ Weight-bearing: a new frontier in spine and knee MRI giving your clinic the possibility to distinguish itself from competitors
- ✓ Real-time positioning feature: display on the gantry showing in real-time the MR image of the joint assuring fast and accurate positioning
  - ✓ Open MRI, no claustrophobia
  - ✓ Fits in only 23 m<sup>2</sup> (245 ft<sup>2</sup>)
- ✓ Complete set of dedicated coils including the Head options

**Images courtesy:**

Department of Radiology, University of L'Aquila, Italy  
Villa Donatello clinic, Florence, Italy



**G-scan Brio  
supine**



**G-scan Brio  
weight-bearing**



**C-spine.** in weight-bearing flexion, evident ligament instability at level of C4-C5

**Lumbar Spine.** Articular facet instability highlighted in weight-bearing, while supine exam only shows arthrosis

**Knee.** In weight-bearing the actual damage to the cartilage of the medial compartment is clear and the origin of the bone edema is well identified. The lesion to the medial collateral ligament is visible only in weight-bearing

**Lumbar Spine.** Spondylolisthesis at L4-L5 level, highlighted in the weight-bearing position



# S-scan, The Next Step in Office MRI

The S-scan dedicated MRI scanner represents the latest development of Esaote's technology in MRI. It is perfectly in line with today's need for efficient and economic health care and a sensible choice for any practice with a substantial musculoskeletal work-load. The range of application can be extended with the optional Head coil for standard brain imaging.

- ✔ The S-scan covers all musculoskeletal MRI, from foot to shoulders and the most important spine segments such as L& C-spine
- ✔ The unique design and wide, rotating patient table guarantees easy patient positioning, patient comfort, maximum stability and easy examination management
- ✔ Open gantry: easy patient access, no claustrophobia
- ✔ Real-time positioning: fast error free positioning with the real-time feature that includes fast sequences and a display on the gantry
- ✔ Fits in 20 m<sup>2</sup> (238 ft<sup>2</sup>). Same space as the Esaote Opera and E-scan systems, therefore an ideal upgrade path
- ✔ Complete set of dedicated coils including the Head option







Ankle GE T2 Sagittal



Knee STIR Coronal



Shoulder SE T1 Coronal



Lumbar spine FSE T2 Sagittal



Hip XBONE T2 Coronal



Wrist GE Coronal



C-spine FSE T2 Sagittal



Lumbar Spine 3D Hyce Axial



FAST FLAIR Sagittal

# Q&As on Dedicated MRI

## What are the benefits of dedicated MRI with respect to conventional whole body MRI systems?

Esaote Dedicated MRI systems boast unique technical features that target specific applications, are equipped with dedicated coils and customized software, have an open design and optimal ergonomics which maximize patient comfort and eliminate unpleasant claustrophobic reactions. They require limited installation space, and feature much lower installation and maintenance costs.

## Why is image quality so good?

Most imaging experts are surprised by the high quality images produced by dedicated technology. Thanks to a combination of dedicated MSK sequences, advanced RF coils, advanced computing technology and algorithms and optimized magnet homogeneity, Esaote MRI systems deliver high resolution MSK images with good acquisition times.

## Who are the main users of dedicated MRI?

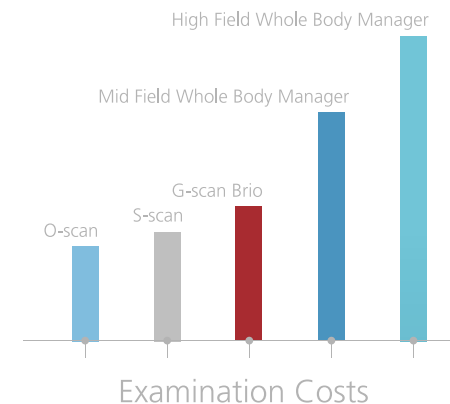
Dedicated systems are suitable for any clinical environment from Radiology departments in large hospitals, orthopaedic and sport medicine centres aiming to provide direct MRI services, to specialized rheumatology centres.

## Why should a healthcare center invest in a dedicated MRI for extremities?

One of the main reasons why an extremity MRI is an appealing investment is because it can work as a standalone system or alongside whole body scanners freeing up the time for major clinical cases allowing you to optimize resources and reduce waiting lists which can be a problem for many healthcare facilities. Given that over 20% of exam requests are for joints excluding spine, if you use a simpler system for handling the extremity cases you can increase efficiency and avoid the extra costs connected with the purchase of another whole-body system.

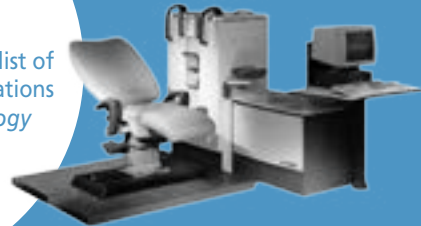
## Esaote MRI: The most cost effective systems

The low break even of Esaote systems is fully in line with the economic constraints of today's healthcare environment which make them optimal investments also for private clinics.



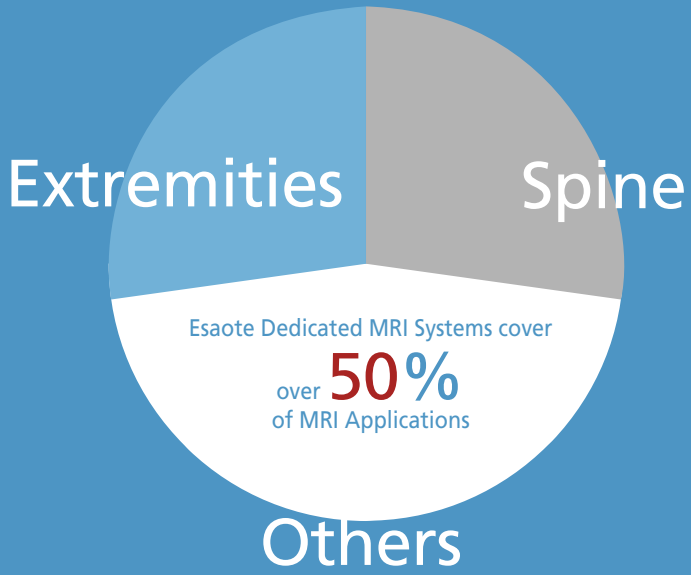
# Facts & Figures

In **1994**  
Artoscan was included on the list of the ten most important innovations in the imaging field (*Radiology Today USA 1994*)



Over **1.300** systems dedicated to extremity imaging (Artoscan, C-scan, O-scan) have been sold worldwide

More than **100** scientific papers have been published on Dedicated MRI



Esaote Dedicated MRI Systems cover over **50%** of MRI Applications

In **2001**  
E-scan was awarded the "Compasso d'Oro" from ADI (Association for the Industrial Design). This is the most prestigious design award in Europe with a history of almost 50 years. Including Esaote, the 2001 "Compasso d'oro" has been awarded to such companies like Ferrari (sports cars) and Alessi (the home supplies company)



Premio Compasso D'oro ADI





## Thank you for considering Esaote

We listen to your needs and work every day to provide the most advanced technologies and the most innovative design for you to excel in the patient care.



**Esaote S.p.A.**  
Via E. Melen, 77 16152 Genova, Italy, Tel. +39 010 6547 1, Fax +39 010 6547 275, [esaote@pec.esaote.com](mailto:esaote@pec.esaote.com)

**FRANCE**  
Esaote Medical SAS  
ZA du Bel Air  
10, rue de Témara, 78105 Saint-Germain-en-Laye  
Tel. +33 1 8204 8900, Fax +33 1 3061 7210  
[info@esaote.fr](mailto:info@esaote.fr)

**GERMANY**  
Esaote Biomedica Deutschland GmbH  
Max-Planck-Straße 27a  
50858 Köln  
Tel. +49 2234 688 5600, Fax +49 2234 967 9628  
[info@esaote.de](mailto:info@esaote.de)

**SPAIN**  
Esaote España S.A.  
C/ Pont Reixat, 5  
08960 Sant Just Desvern, Barcelona  
Tel. +34 93 473 2090, Fax +34 93 473 2042  
[info@esaote.es](mailto:info@esaote.es)

**THE NETHERLANDS AND BELGIUM**  
Esaote Benelux B.V.  
Philipsweg 1  
6227 AJ Maastricht  
Tel. +31 43 3824650, Fax +31 43 3824651  
[benelux@esaote.nl](mailto:benelux@esaote.nl)

**UK**  
Esaote UK  
14, Cambridge Science Park  
Milton Road, Cambridge, CB4 0FQ  
Tel. +44 1223 424499, Fax +44 709 288 0231  
[infoUK@esaote.com](mailto:infoUK@esaote.com)

**NORTH AMERICA**  
Esaote North America  
8000 Castleway Drive,  
Indianapolis, IN 46250  
Tel. +1 317 813 6000, Fax +1 317 813 6600  
[inquire@esaoteusa.com](mailto:inquire@esaoteusa.com)

**BRASIL**  
Esaote Healthcare do Brasil  
Rua Geraldo Flausino Gomes, 78  
CEP: 04575-060 São Paulo - SP  
Tel. +55 11 2789-0400 Fax +55 11 2789-0432  
[comercial@esaote.com.br](mailto:comercial@esaote.com.br)

**ARGENTINA**  
Esaote Latinoamérica S.A.  
San Martín 551, Cuerpo 'C', Piso 8, (C1004AAK) Buenos Aires  
Tel. +54 11 4326 1832, Fax: +54 11 4328 1245  
[info@esaote.com.ar](mailto:info@esaote.com.ar)

**INDIA**  
Esaote Asia Pacific Diagnostic Private Limited  
Sector-DLF IT Park, A - 44 & 45, Tower- C, Ground Floor,  
Sector- 62, Noida, Uttar Pradesh, India  
Pin Code: 201 301  
Tel. +91 120 4732444, Fax +91 120 4750148  
[info@esaote.in](mailto:info@esaote.in)

**HONG KONG AND FAR EAST**  
Esaote China Ltd  
18/F, 135 Bonham Strand Trade Centre,  
135 Bonham Strand, Sheung Wan, Hong Kong  
Tel. +852 2545 8386, Fax +852 2543 3068  
[esaote@esaotechina.com](mailto:esaote@esaotechina.com)

**CHINA**  
Esaote Shenzhen Medical Equipment  
Room 2608, Tower B  
Beijing Global Trade Center  
36 North Third Ring Road East,  
Dongcheng District, 100013, Beijing  
Tel. +86 010 58257766, Fax +86 010 52257760

**RUSSIAN FEDERATION AND CIS**  
Esaote S.p.A.  
18 Leningradsky prospekt  
Off. 5 and 6, Moscow 125040  
Tel. +7 495 232 0205, Fax +7 495 232 1833  
[esaotemoscow@yandex.ru](mailto:esaotemoscow@yandex.ru)

Technology and features are system/configuration dependent.  
Specifications subject to change without notice. Information might refer to products or modalities not yet approved in all countries.  
Product images are for illustrative purposes only.  
For further details, please contact your Esaote sales representative.