



MRI Safety – See the unseen Ferroguard® Screener

Ferroguard Screener
works with you to detect
risk items that others miss.

Despite careful, guideline compliant screening procedures, small ferrous objects inadvertently concealed on a patient, visitor or staff member may present a significant risk within your MRI facility. Trust the world's most sensitive ferromagnetic detection system (FMDS) to prevent incidents and artifacts from small, hidden, risk items:



Detects the risk items that other systems miss

Industry-leading sensitivity from top of head to tip of toe. High performance Fluxgate sensors provide minimum detectable magnetic signal of, 80 pTesla, 0.8 μ Gauss.



Effective Implant Detection

The only FMDS with substantial published evidence of effective implant detection,¹⁻⁵ including 99% detection sensitivity for cardiac pacemakers.¹



Preserves image quality, improves efficiency

Demonstrated ability to detect items missed by conventional patient screening.⁶⁻⁷ Reduces artifacts and timewasting restarts, improving throughput efficiency.



A true FMDS

As recommended by the American College of Radiology (ACR) for use in MRI facilities. The ACR specifically recommends against the use of conventional metal detectors for MRI screening.



Better accepted by your patients

Eliminates invasive pat-down procedures, and provides much faster and more reliable detection than a hand wand.



Entirely passive

Completely safe to use on all patients, including those with implants.



Screen all your patients

Ferroguard Screener is ideal for your non-ambulatory patients too, using Ferroguard-approved Zero-Magnetic™ patient transfer equipment.



Simple adoption into your screening process

As the final check in your screening processes, Ferroguard Screener replaces assumptions with objectivity, taking pressure off you and your staff.





Fast, consistent and objective Zone II screening... in the time it takes to turn around!

Ferrogaurd Screener's ultra-sensitive whole-body detection gives you the confidence of smaller risk-item screening – in seconds

2 simple steps

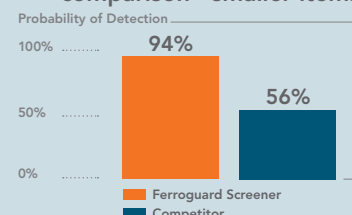
- Position patient on mat
- Rotate 360°



Detects risk items that other FMDS systems miss

Independent testing-laboratory study,⁸ comparing the performance of Ferrogaurd Screener in detecting smaller, commonly encountered risk items, against the performance of the other most frequently seen whole-body FMDS.

Detection performance comparison - smaller items

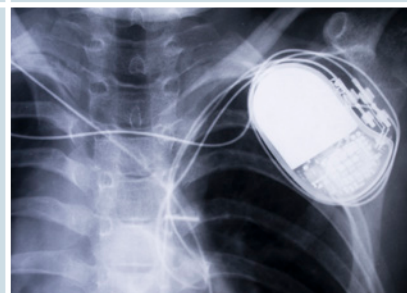


Demonstrated implant detection efficacy

Detection of implanted cardiac pacemakers in 75 patients:¹

- 99.6% Sensitivity
- 100% Specificity

Similar detection efficacy demonstrated for wide range of implanted items.²⁻⁵



Can increase throughput and efficiency

Published studies show 5% of patients still have remaining, unknown, ferromagnetic risk items following conventional screening & gowning.^{6,7} Adopting Ferrogaurd Screener can reduce artifact and time-wasting restarts.



1. Watson, R. E., Walsh, S. M., Felmlee, J. P., Friedman, P. A., & Keene, M. N. (Accepted/In press). Augmenting MRI Safety Screening Processes: Reliable Identification of Cardiac Implantable Electronic Devices by a Ferromagnetic Detector System. *Journal of Magnetic Resonance Imaging*. <https://doi.org/10.1002/jmri.26277>.
2. Shellock, F.G., Karacozoff, A.M. Detection of ferromagnetic implants using a ferromagnetic detection system: implications for patient screening prior to MRI. *American Journal of Roentgenology* (2013) 201: 720-725.
3. Linnemeyer, H., Shellock, F.G., Ahn, C.Y. In vitro assessment of MRI issues at 3-Tesla for a breast tissue expander with a remote port. *Magnetic Resonance Imaging* (2014) 32: 297-302.
4. James, C.A., Karacozoff, A.M., Shellock, F.G. Undisclosed and undetected foreign bodies during MRI screening resulting in a potentially serious outcome. *Magnetic Resonance Imaging* (2013) 31: 630-633.
5. Karacozoff, A.M., Pekmezci, M., Shellock, F.G. Armor-Piercing bullet 3-T MRI findings and identification by a ferromagnetic detection system. *Military Medicine* (2013) 178: 380-384.
6. Orchard, L.J., Implementation of a ferromagnetic detection system in a clinical MRI setting. *Radiography* (2015) 21:248.
7. Heinrich, A., et.al., Can ferromagnetic metal detectors improve MRI safety? *Biomed. Tech.* (2012) 57(Suppl.1):709.
8. Intertek Testing & Certification Performance Laboratory. (2019) Full report available.

Ferrogaurd Screener is not an approved product for implant-detection and detections may be used for indication only. Metrasens accepts no responsibility for any adverse consequences arising from positive or negative indications of implants.



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