

Official News

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Datamars releases a whitepaper on the use of RFID transponders in MRI scanners

Health providers in the MRI field now have further research to support understanding of the safe use of RFID (radio frequency identification) technology, used to track hospital gowns, when used in the MRI scanning environment, following the release of a whitepaper by Datamars Textile ID.

MRI relies on strong static magnetic fields and any item containing conductive elements (such as an RFID transponder) could lead to unwanted effects, including heating and image artefacts that could impact medical diagnosis, when placed in an MRI scan device.

To ensure that its UHF Laundrychips have the highest level of safety and quality for MRI compatibility, Datamars Textile ID carried out extensive testing on the use of transponders in MRIs, in conjunction with MR:Comp GmbH, an accredited ISO certified lab in Germany specialising in the MRI field. The results of this research have been published in a whitepaper that represents the most comprehensive documentation on the market about the use of RFID transponders in an MRI environment.

Unlike standard UHF (ultra-high frequency) RFID transponders, Datamars LaundryChips™ have been designed to be 'neutral', meaning they are almost invisible during imaging ensuring there is no potential influence or interference with a patient's diagnosis. Datamars has been able to obtain this result by making an in-depth analysis of each component used in its UHF LaundryChips™ and, when needed, replacing them with a-magnetic elements.

Julien Buros, Datamars Textile ID Product and Services Director explains that the reduction of the magnetic level of the tag antenna, by using a specially processed antenna wire realized with a patented technology, was the key to reduce the artefact size, ensuring at the same time the maximum quality and safety of the RFID transponder.

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“We are proud to be the only RFID manufacturer in the market to use a patented technology to manufacture our UHF LaundryChips™ antennas which makes them perfectly safe to use in an MRI environment with the minimal image artefact.”

For more information or to view the [whitepaper](#), visit [Textile ID](#) website.

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