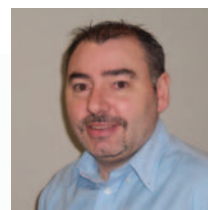


New ERIKS 'metal detectable' seals help food manufacturers detect contamination



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ERIKS SEALING TECHNOLOGY HAS DEVELOPED A NEW RANGE OF METAL DETECTABLE SEALS FOR USE IN SENSITIVE APPLICATIONS WHERE THE ABILITY TO DETECT AND CONTAIN CONTAMINATION IS VITAL. THE ELASTOMERS ARE DETECTABLE ON PRODUCTION LINES BY CONVENTIONAL METAL DETECTION EQUIPMENT, SO HELP TO DECREASE THE RISK OF POLYMERS FINDING THEIR WAY INTO THE FINISHED PRODUCT AND SUPPLY CHAIN, REDUCE PRODUCT WASTAGE, ELIMINATE COSTLY PRODUCT RECALLS, AND REDUCE EQUIPMENT MAINTENANCE COSTS.

The materials are FDA and 3A (class 1) compliant to meet the needs of the food, beverage, pharmaceutical and dairy industries. These industries are governed by some of the most stringent regulations for safety and traceability. The numbers of high profile product recalls and damaging litigation demonstrate the importance of implementing a systematic preventive approach to product safety that addresses physical, chemical and biological hazards as a means of prevention.

One potential, if unlikely, hazard is the breakdown of seals and the subsequent contamination of products. If the rubber from a standard seal

were to break down and find its way into the product, it would be extremely difficult, costly and time-consuming to detect. But the new compounds from ERIKS are easily detected by most of the conventional metal detection techniques that are already being employed on production lines. Should a piece of elastomer be detected, the production line can be stopped immediately, contaminated products can be easily removed long before they ever reach the supply chain, and the problem on the production line can be quickly rectified.

The seals are manufactured from NBR, EPDM, FKM and Silicone compounds to form metal detectable O-rings. Particle sizes as small as 2mm can be readily detected. As well as offering FDA compliance for the food and pharmaceutical industries, and 3A Class 1 (sanitary standard 18-03) compliance for the dairy, food and other hygiene sensitive industries, the O-rings can also be used as part of a HACCP (Hazard Analysis and Critical Control Points) programme. These procedures identify potential hazards so that key actions – Critical Control Points – can be taken to reduce or eliminate the risk of hazards being realised.

The seals are available in either blue or black for easy product identification, and offer extended lifetime performance, thanks to the lowest known industry compression set value. Tests against alternative products demonstrated up to 300% greater service life expectancy for the ERIKS O-rings. This means a lower life cost, reduced equipment maintenance costs, and a dramatic reduction of costly downtime in production lines. The O-rings operate over a wide temperature range from -60°C to $+220^{\circ}\text{C}$, and can be used in a wide variety of applications.

The product was developed in the UK by ERIKS at its Sealing Technology Centre, where the company has invested over £500,000 in simulation software and test and analysis equipment, with the brief to develop innovative solutions for demanding application requirements. The ERIKS Sealing Technology Centre is an ISO TS16949 accredited manufacturing site that offers both OEM and MRO customers access to the company's R&D capability – something no other distributor in Europe can offer.

