

Case Study: Food Manufacturing Plant Detectomer[®] Family of Products



INDUSTRY Food Manufacturing Plant

CUSTOMER

One of the top 5 Foods Processors in the World

BACKGROUND

This producer experienced excellent results utilizing various Rubber Fab products including Tuf-Steel[®] and Detectomer[®] gaskets. Because of this success, the plant's Sanitation Manager asked Rubber Fab to survey their facility to determine applications in which they could employ additional Rubber Fab products.

CHALLENGE FACED

Because of the size of the plant and the many products made, applications include hot filling, batch mixing, and flash freezing, among other processes. In mixer applications, the plant utilized UHMW scrapers due to its increased wear resistance. Because UHMW pieces occasionally broke off the scrapers, the plant specified a blue-colored UHMW material to aid in visually identifying particles in order to mitigate the risk of plastic contamination in their food products. While the blue coloring aided in finding contaminants, very small pieces were still not possible to find via their visual inspection program.

In another area of the production, magnetic detectors and traps were used to capture any magnetic particles that may contaminate the food. On these magnetic traps, the clean-out lid used a rubber seal that could not be picked up by the detection equipment. So as the lid was opened and closed to clean out any trapped magnetic particles, pieces of the rubber gasket could enter the process and contaminate final products.

SOLUTION AND BENEFITS

As a company focusing on utilizing advanced materials to solve customer challenges, Rubber Fab applied our Detectomer[®] technology for the mixer scrapers and created blue Detectomer[®] UHMW scrapers. These scrapers provide the plant with the same reliability and strength of their original UHMW scrapers and the familiar blue color to aid in simple visual identification, but they also add in the ability to detect any small particles that may break off via their already-existing magnetic detectors and metal detection equipment.

In the magnetic traps, Rubber Fab Detectomer[®] elastomer gaskets were applied as a direct replacement for the rubber gasket currently used on the clean-out lid. This ensured that even if the gasket degraded due to the constant opening and closing of the lid, the rubber would not contaminate the end-product and cause costly loss of product or recalls. Since the addition of Detectomer[®] gaskets in this producer's mag traps, the mag trap manufacturer has since added Detectomer[®] gaskets as their standard OEM offering for the clean-out lids so other plants can also benefit from the Detectomer[®] technology.

For more information, please visit: www.rubberfab.com