

# FOOD PROCESSING: METAL DETECTABLE PLASTIC COMPONENTS



**DIVERSIFIED  
PLASTICS, INC.**

www.diversifiedplastics.net | 800-321-0084

## REDUCE WEAR, MAINTENANCE AND CONTAMINATION RISK

Food processors and other industries use metal detectors to identify contamination from a variety of sources, including fragments from machinery and parts. Detecting such contamination before it leaves the plant greatly reduces liability and prevents massive recalls. In the past, that need forced processors to use metal components where plastic ones might actually wear and function better. Not any more. Diversified Plastics is pleased to introduce truly Metal Detectable Plastic Components.

Our innovative, tested process combines special additives with polymer resins to produce metal and X-Ray detectable injection molded components that are FDA approved. By incorporating these additives at precisely the right ratios, components can be easily identified by standard metal detectors and X-ray machines. Moreover, combined with proper material selection, our process actually improves wear and slide properties of components.

## FEATURES AND BENEFITS

- Small particles detected by standard equipment at sizes less than 1 mm in diameter.
- Reduces liability by reducing the likelihood of contamination.
- Reduces wear, weight and noise compared with metal components.
- Available in a wide range of polymers and elastomers to suit any application.
- FDA approved for food contact applications.
- Standard resin colors are black and gray. Pigments such as red, blue, green and orange can be added.



## TESTED AND APPROVED

We tested our metal detectable plastics at a client nutritional supplement facility on the equipment it uses daily to prevent fragment contamination. The result: a plastic fragment roughly .12" x .12" x .12" with a 7% additive loading was detected. This is the equivalent of a 1.00 mm mild steel sphere being detected.

***For more on our testing, see What's New at [www.diversifiedplastics.net](http://www.diversifiedplastics.net).***

## DETERMINING IF METAL DETECTABLE IS RIGHT FOR YOU:



- *What is the food product? Is it frozen when inspected by the metal detector?*
- *Does the product contain iron (like enriched flour or beef), which produces a long signal?*
- *What sensitivity are the metal detectors set for?*
- *What sphere size and material do they detect?*
- *How much product is in the metal detector aperture at one time?*

## RECOMMENDED APPLICATIONS

Scraper blades, wearstrips, guides, sprockets, chain guides, gears, bushings, bearings, mixer components — wherever you're using metal right now, metal detectable plastics can provide superior wear properties with less noise, weight and maintenance. All while meeting FDA requirements.

- Poultry and other Meat
- Candy
- Fruits and Vegetables
- Cereals
- Chips and Snack Foods
- Cheese
- Frozen and Prepared Foods
- Pet Food

## CONSOLIDATE BY GOING DIVERSIFIED

Our experience in all phases and types of fabrication as well as knowledge of material means we can easily meet most plastics engineering and fabrication needs.

- Engineering and drafting
- Consultation and prototype testing
- Tool and die design and fabrication
- Injection molding, machining and casting



Got questions? Ready to order? Call our knowledgeable sales team with your specifications, today — 800-321-0084.