

MAC & METAL: A recipe for DISASTER!



According to the [FDA](#) and other major news sources, Kraft Foods voluntarily recalled 6 million boxes of mac & cheese [with a financial hit estimated between 6-10.8 million dollars]. Lets use this real life example to explore how global and domestic food manufacturers are able to eliminate this problem using [FDA and EU compliant](#) engineering grade plastics.

Imagine scenarios where metal components are running against other metal components...creating metal particulate and flake that risk introduction to the food product. This is a very real concern for food manufacturers, especially considering modern day pressures for increased line speeds that produce more heat and friction. The problem is further compounded by any metal mating or wear parts that are under-lubricated.

■ A partnership with TriStar gives you a competitive edge.

Quadrant's FDA and EU compliant self-lubricating polymers are designed to replace metal wear components...

... in even the most aggressive applications including areas of high temperature and aggressive cleaning chemical environments. These advanced plastics offer high strength to weight ratios and are designed to run against mating components without lubrication often increasing component life significantly over metal parts.

[Advanced engineered plastics](#) continue to evolve enabling engineers to push them into environments once unheard of, and provide a safe and effective alternative to metals.

Metal and X-Ray Detectable Plastics

Quadrant also offers a complete line of [metal and x-ray detectable polymers](#) that ensure that any stray plastic debris will be caught by standard detection equipment before or even after packaging. Our Metal Detectable (MD) portfolio includes TIVAR MD UHMW-PE, NYLATRON MD PA66, ACETRON MD POM-C, and KETRON MD PEEK.

If you need help selecting the plastic alternative to match your application, reach out to [TriStar's experts](#) today. It could end up saving you or your customer a few million bucks and a lot of bad press!



QUADRANT

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We're ready to put our engineering expertise to work for you from prototype to production.

Engineering | Custom Fabrication | Manufacturing



CJ Composite

- Self-Lubricating
- Low weight | High Strength
- Chemical Resistance
- Direct replacement for Bronze



Ultracomp[®]

- Self-Lubricating
- High Load | Low Speed
- 54,400 PSI Compressive Strength
- Exceptional Resistance to Vibration and Impact



TriSteel[™]

- Self-Lubricating
- High Load | High Speed
- Metal Backed Bearing System
- 100% Lead Free



Rulon[®]

- Self-Lubricating
- Low weight | High Strength
- Low Coefficient of Friction
- Chemically Resistant



Enhanced Materials Division

- Plasma Surface Treatment
- Specialized Primers & Coatings
- Material ID & Selection
- Process Engineering | Analysis & Testing



TriStar



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