

Advanced Materials Improve Uptime & Outcomes in Cheese Manufacturing



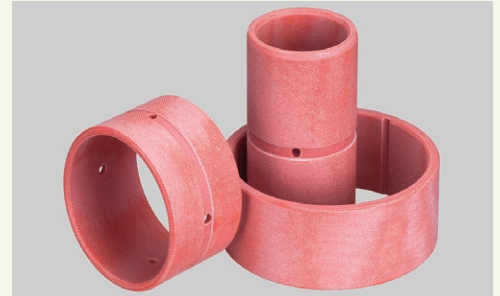
Fromage, queso, formaggio, ost. No matter how you say it, it all means cheese. It's a multi-billion-dollar global business and the process can be surprisingly hard on equipment.

Our customer's original request was for an area we don't often think about in cheese production and that's wastewater separation. In the bowels of the factory there is a very sophisticated separator system that requires bearings operating in submerged wastewater with fairly high abrasive content [more on that in a bit]. This component functions as the steady bearing for a large stirring system used to help settle the solids from the liquid for further separation.

It might surprise you to learn that milk is actually a pretty abrasive material. So, our solution had to be able to withstand abrasion, shaft vibration, impact loading, full submersion and temperatures approaching 150°F.

www.tstar.com

■ A partnership with TriStar gives you a competitive edge.



Ultracomp UC300AX

Ultracomp UC300AX Provides Better Abrasion Resistance and Significant Reduction in Downtime

TriStar's solution was our [Ultracomp UC300AX](#), which is made specifically for wet, abrasive and high-load environments and can run against stainless steel. The bearing we replaced was cast nylon which worked OK but the replacement expense due to the location of the bearing was substantial, requiring a minimum ½ day shutdown — a serious hit on production uptime. TriStar's solution tripled the interval between change-outs, saving the customer over \$45,000 over a three-year period.

FDA/3A Compliant Ultraflon Material Improves Packaging Function in the Same Facility

This same customer was having issues with some Delrin parts used on the packaging line in filling and packaging machines and press plates.

One of the big areas of concern in the [food industry](#) today is protecting the food product from bacteria and microbe contamination. Some plastics [like Delrin] are naturally more porous than others. For that reason, TriStar engineers recommended Ultraflon RTX which is non-porous, easy to machine to fine finishes, meets FDA and 3A requirements and is also highly abrasion resistant.

1-800-TriStar [874-7827]

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
- Asymmetric & Symmetric Filtration Membranes
- Specialized Primers & Coatings
- Material ID & Selection



TriStar



Engineered Plastic Solutions™

tstar.com



1.800.874.7827