

Rulon[®] 1439 Bearings Keep Hummus on the Table

■ A partnership with
TriStar gives you a
competitive edge.



TriStar was contacted by a major hummus producer to discuss a problem with the operating life of the steady bearings in their grinders and mixers. Hummus paste is quite aggressive in terms of wearing out components – in this case a PTFE steady bearing supporting the mixing paddle shafts– so they asked if we could address this.

Our customer was using virgin PTFE for these bearings. This material looks great on paper; it is FDA compliant and a good fit for the temperature range of the process. It is also compatible with the soft stainless shafts, but virgin PTFE is a lousy bearing – especially in a wetted, abrasive environment. As a result, our customer was replacing the bearings routinely every 2-3 weeks. And while the cost of the bearings themselves was reasonable, the increased downtime from the excessively short maintenance intervals was becoming a real headache.

Enter Rulon 1439 – An FDA Compliant Material Engineered for Submerged Applications

After reviewing the parameters of temperature, speeds, loads, service times and hardware, [we recommended Rulon 1439](#).

Rulon 1439 is FDA compliant, works very well against stainless steel hardware, has an operating temperature range of -400 to +550°F, can handle CIP [Cleaning in Place] solutions without issues, and easily met the speed and load requirements of the application. All this and it is easily able to withstand the abrasiveness of the chickpea/hummus product.

From 3 weeks with PTFE to 6 months with Rulon... Success!

To prove that Rulon 1439 was worth the higher upfront cost, the customer decided to put some bearings into service and let them run for 3 months. They then removed those bearings and found very little wear. Next, they put these same bearings back into service for yet another 3 months and at the end of that test they were still at an acceptable tolerance to keep running. Problem solved!

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



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