

Solving a Sticky Food Problem with Plasma Surface Treatment



Our partner supplies baking equipment such as nylon and mesh proofer cups to the country's top commercial kitchens. The cups are used to hold dough balls during the proofing (or dough rising) process.

But over time, our client noted that dry flour particles would stick to the mesh cups. As the flour particles accumulated, the fresh dough balls would have “flakes” of dry dough from previous use leading to inconsistent surface texture.

This posed an unacceptable quality control problem, and also caused delays on the production line as the dirty cups were replaced with clean ones.

■ A partnership with TriStar gives you a competitive edge.



Mesh proofer cup

Technique Imparts Quick-Release Properties to Bakery Equipment

Plasma surface treatment was our solution. While many designers may think of [plasma](#) as a way to **improve bond strength**, we used it to impart **hydrophobic qualities to reduce the bond between the mesh and dough**. After just a short time in a vacuum chamber, the proofer cups released the dough balls with little effort.

The plasma-treated mesh cups allowed our OEM partner to give their clients reliable quality control, higher production levels and lower equipment maintenance costs. And since plasma is a green process, our partner was able to remove all toxic cleaning from their [food-processing](#) facility.

Get your copy of our [Food Processing White Paper](#) to help you increase the safety and production of your facility with FDA-approved food bearings!

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



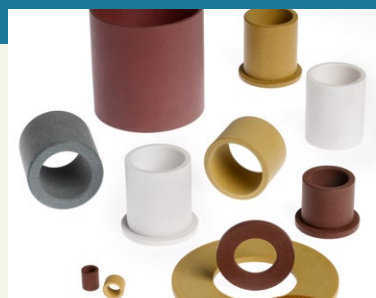
TriSteel[™]

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



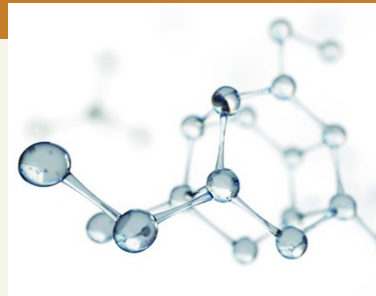
Rulon[®]

- 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



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