

Chesterton Wear Rings Reduce Product Loss on Extrusion Machine

Food and Beverage **P22KN Rod and Piston Seal and 19K Split Wear Ring** Polymer Seals Case Study

Challenge

Background

A European cookie manufacturer needed to upgrade a cream extrusion machine used to make biscuits.

The current wear rings caused scoring of the internal cylinders roller, resulting in expensive repairs or replacement of the rollers. Each roller has 70 pistons.

The plant was losing product throughout as the failed seals introduced quality issues with the end product.

Solution

Product

The plant switched to the following Chesterton sealing solutions:

- P22KN Rod and Piston Seal using the AWC800 material. The seal design offers a positive-rake lip profile for optimal radial sealing load with minimal frictional resistance.
- 19K Split Wear Rings using AWC600 material. These bearings reduce radial movement to help extend seal life.

Results

Increase Reliability

The customer has been using this solution since 2010. The Mean Time Between Repair (MTBR) is 3X the previous solution.

There are far fewer related product loss issues, downtime issues, or repairs.



Cream extrusion roller equipment.



Pistons with P22KN Rod and Piston Seal with 19K Split Wear Rings.



Chesterton P22KN with 19K extends the life of each piston.

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