Reduce failure risk, while saving time and money

with relubrication-free SKF Fryer Bearing Units

Increased competition makes unscheduled downtime a costlier problem than ever before. Traditional bearing solutions in the fryer's paddle position are being frequently replaced as the hot and oil vapour-filled environment inside the fryer is challenging.

The bearings are also exposed to frequent caustic boil out, sometimes as often as every seven days. This affects the service life of the bearings, as grease is washed out. In addition, the positioning of the bearings just above the frying oil causes the seal to lose its ability to perform, allowing frying oil and food products to enter the bearing and eventually leading to failure.

Unplanned fryer stoppages due to bearing failure can cost you a full day's production

Since the fryer is a critical asset, downtime has a major impact on costs and productivity. An additional concern is that bearing breakage could cause contamination of the food, resulting in product waste.

Based on application experience, you replace the paddle support bearings every 6 000 hours – an expensive and time consuming process in itself. But even this conservative approach cannot fully guarantee that you won't lose time, productivity, and revenue to unforeseen bearing failures.

What if you could...

- Double the life of your bearings in the fryer's paddle position while reducing unplanned downtime?
- Reduce the possibility of lubricant contaminating your fryer oil?
- Reduce the financial and environmental costs of bearing maintenance and replacement?

Prevent potential points of failure

By eliminating the seals and allowing the process cooking oil to lubricate the bearing, you can greatly reduce the risk and consequences of potential failures and the associated costs, time and production output.

Unplanned production downtime has been estimated to cost companies approximately $33 000 per hour*

* How much does downtime cost your organization? Stratus blog post, Feburary 8, 2017 www.stratus.com/stratus-blog/how-much-does-downtime-cost-your-organization/

With relubrication-free SKF Fryer Bearing Units, you'll get longer, more reliable life from each bearing, reducing maintenance costs.

Reduce the chance of bearing failures

A special high temperature PEEK cage, highly abrasive resistant, plus stainless steel bearing materials in a corrosion-resistant housing prevent the development of corrosion – one of the most common cause for failure.

This innovative solution allows cooking oil to enter the bearing and act as an effective lubricant. At the same time, the design prevents foreign bodies from entering the bearing. Bearing service life can be extended up to 16 000 hours. In addition, maintenance costs and unplanned stops due to bearing failure can be eliminated.

Prevent food contamination from bearing grease

A design that allows the process cooking oil to enter and lubricate the bearing removes the need for traditional relubrication at set intervals. This eliminates the risk of grease being washed out during production, thus improving food safety.

Save time and money on bearing maintenance

By eliminating the use of lubricant and reducing the frequency of bearing replacement by half, relubrication-free SKF Fryer Bearing Units save you time and money, while imposing a far smaller burden on the environment by reducing the disposal of grease and spent bearings.

What you gain

With relubrication-free SKF Fryer Bearing Units, you can:

- Significantly extend the mean time between replacement (MTBR), to at least twice that of traditional bearings.
- Eliminate the need for relubrication in fryer bearings, ending the possibility of contamination should that grease leak.
- Increase cost savings in materials and labour due to reduction of unplanned downtime.

A major snack food producer increased reliability of its fryer and reduced costs

By replacing all of their traditional bearings in the fryer's paddle position with the new SKF relubrication-free technology, the customer was able to reduce maintenance costs by 15–20%. The customer kept the SKF Fryer Bearing Units in place until inspections revealed the start of structural changes after 24 months of continuous use. The payback period for the SKF technology was only eight months considering the reduction of planned and unplanned downtime.*

Read the full story about how the customer pushed the limit of the bearing life to 24 000 hours on skf.com/foodandbeverage

* Based on operation 24/7 during a period of 24 months. All numbers are rounded off and based on customer estimates. Your particular cost savings may vary.

Available with cast stainless steel housing, in shaft sizes of 20 to 40 mm and 3/4 to 1 1/2 in.

Find out more about the available range, go to: skf.com/foodandbeverage

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