Case Study

Centrifugal Separator



Costly overhauls reduced by a factor 3

The Separators are key equipment in the dairy industry industry, since they traditionally perform the first separation of raw milk into sub components.

Problem

The centrifugal separators are listed as critical equipment and have been maintained through years, according to a strict one-year schedule, at a relatively high cost. Standard bearings had a hard time with water intrusion and following mixed lubrication conditions.

Solution

To reduce cost without compromising reliability, a plan containing both CeramicSpeed bearings, and optimizing the condition monitoring equipment, was executed.

Result

The solution is now running past the targeted 3 years and with the online monitoring system securing early warning on beginning bearing failures. The equipment will be run until the true bearings life for the benefit of both the production capacity and MRO cost.

Technical Highlights

- Harsh environment with risk of water intrusion and following mixed lubrication conditions
- Bearing temperature: 40-60°C
- Lubrication: Oil

