
Case Study

Premier Is Freezing Tunnel



CERAMICSPEED

Long-lasting bearing solution for freezing tunnel applications

“Premier Is” is one of the oldest dairies in Denmark. In season they produce up to 270 pallets of ice cream each day. After the ice cream is produced, and just before packaging, it is transported into a freezing tunnel which is 37°C below zero.

Problem

The bearings are fitted in turning wheels, located at each end of the tunnel to guide the hundreds of meters of chain, slowly transporting the products through the tunnel in a bottom to a top spiral route. Due to moist being sucked into the bearing housings when cleaning the tunnel with hot water, the lubricant tends to be contaminated with water jeopardizing the actual working viscosity and hence increasing wear on bearings dramatically.

Result

Ever since it changed to CeramicSpeed Xtreme bearings, Premier Is has achieved 4 times (or even longer) bearing life, while also reducing on downtime and operational costs.

Solution

Due to the favorable material properties of a hybrid bearing, this problematic lubrication regime hurts a CeramicSpeed bearing far less compared to standard steel bearings.

Technical Highlights

- Suitable for dry and cold environment with moist from hot water rinsing.
- Speed: <10RPM
- Bearing temperature: 37°C below zero.
- Lubrication: Food grade grease

