Case Study

Rinsing Station

ceramicspeed

Running submerged in acetone without any problems

This Production line runs 24/7 producing filter membrane by the meter. The final step in the process is a cleaning section in which the membrane fabric is rinsed thoroughly to meet food grade cleanliness.

Problem

Half of the bearings installed in this section are running submerged in a water-acetone solution, which can only be described as a directly hostile environment for any bearing installation. The service life of the standard steel bearings in this application was therefore very short - mostly down to under two hours. This had a huge effect on the maintenance costs along with loss of production.

Result

By replacing standard steel bearings with CeramicSpeed SLT bearings our customer achieved a much longer service life and a remarkable reducement of the maintenance costs.

The CeramicSpeed SLT bearings have now been running submerged in acetone for 8 months without any problems.

Solution

CeramicSpeed SLT is a polymer matrix saturated with lubrication oil. The matrix retains oil right on the functional surfaces of the bearing under even very harsh conditions while at the same time preventing moist and foreign particles in entering the bearing.

Technical Highlights

- Extremely harsh environment
- Slow speed - moderate load
- Bearing temperature: 20°C-80°C
- Running 24/7