
Grundfos sweetens everyday life for Danisco Sugar

Over the past ten years, Danisco Sugar has developed into one of Europe's largest and most efficient sugar businesses. Danisco Sugar now produces over 1.2 million tonnes sugar in Denmark, Sweden, Finland, Germany and Lithuania from sugar beet, which is supplied by around 15,000 beet farmers in the five countries. Added to this are imports of 60,000 tonnes cane sugar to Finland.

Danisco Sugar markets a wide range of sugar, liquid and lump sugar, syrup, brown sugar and a number of other speciality products for industry and consumers. More than 80% of the production is sold to the food industry, with the remainder going to retail markets. Danisco Sugar also supplies a number of animal feed products to agriculture.

The Situation

Danisco Sugar is a major manufacturer of sugar, a process which is more complicated than many may think. A crucial part of the process involves steam. This steam is condensed after having been used for treatment processes. At Danisco Sugar, the system is called upon to pump this condensate return – condensed at approximately 160°C/6.2 bar – back to the boiler room.

The old pump, made by another manufacturer, used external cooling water to protect the shaft seal against the high temperatures. This solution was not, however, adequate in the long run. When it was time to update the system, the chief engineer responsible for the project wanted a Grundfos solution instead.

The Grundfos Solution

TOPIC:

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LOCATION:

Finland

COMPANY:

Danisco Sugar

Grundfos was able to provide a system which did away with the need for external cooling water. Six Grundfos NKG pumps were installed, fitted with Burgmann Cartex double shaft seals. This solution uses glycol as cooling medium. The glycol is circulated over a tank by means of the differences in temperature. This system design ensures that even though the pump runs at 160°C, the glycol will never reach temperatures higher than 70°C.

The Outcome

The Grundfos pump solution eliminated the need for external cooling water. The new system has proven remarkably reliable, having provided the client with three years of trouble-free operation so far.

Related Products



NK, NKG, NKE, NKGE END-SUCTION LONG-COUPLED PUMPS

Grundfos offers a virtually limitless range of long-coupled (NK) end-suction pumps