CASE STUDY

1589

APPLICATION GOAL

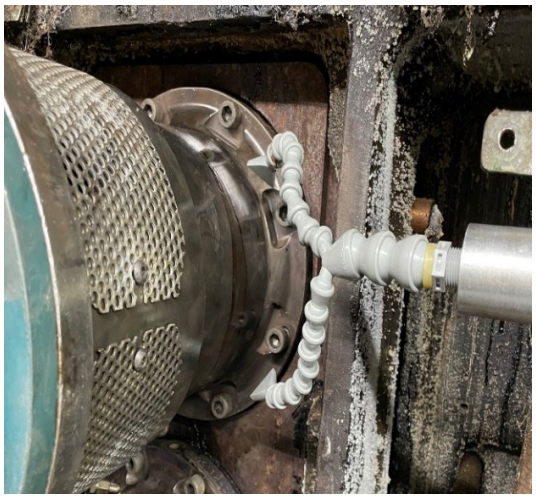
To provide cooling to a bearing housing on a Circular Sock Knitting Machine (CSM), which generates excessive heat from process as well as electric current, in the hopes of prolonging the life of the bearings.

BEFORE EXAIR

A major producer of high-performance plastic knitted products operates (128) Spindle motors that require couplings. These couplings use hi-speed, hi-temperature bearings that fail regularly sometimes prior to the predicted run life. This results in loss of production while the CSM is down and the bearings are replaced, and repair costs associated with refurbishing the failed CSM bearing to include labor, new bearings, lost production, etc.

AFTER EXAIR

Using the **Model 3925 Dual Point Adjustable Spot Cooler**, we were able to prolong the average lifetime of each CSM bearing by more than 260%.



SUMMARY:

The enhanced run life of the CSMs was noticed immediately as the non-cooled CSM bearings continued to fail at a much higher rate when compared to the positions with the EXAIR Spot Coolers installed.

Based on the average cost of a failed CSM bearing including lost production ($1,925.00) and an average of 180 premature failures each year, their estimated annual savings using the Spot Cooler is $346,500.00 on just the 12 high fail rate machines they have put these on to date. They are expecting to place a 3295 on every CSM within 5 years focusing on the high fail rate machines first.

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