

Horizontal Mixer - Icing/Fondant

Make: Gericke

Industry: Food and Beverage - Sugar

Challenge

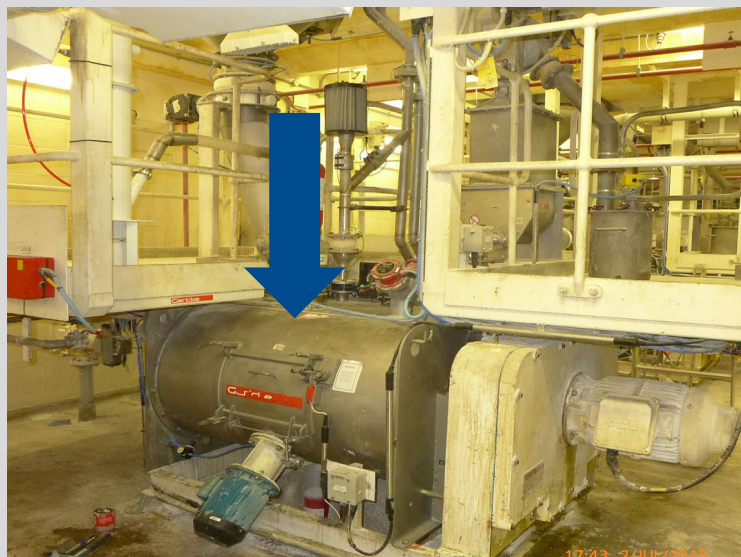
A horizontal mixer was leaking product out of the vessel due to insufficient sealing. The lost product caused a safety issue and would be thrown out. To change the drive end seals the gearbox had to be removed and reinstalled, leading to 2-3 days of lost production. The leaking seals increased maintenance costs and downtime.

Solution

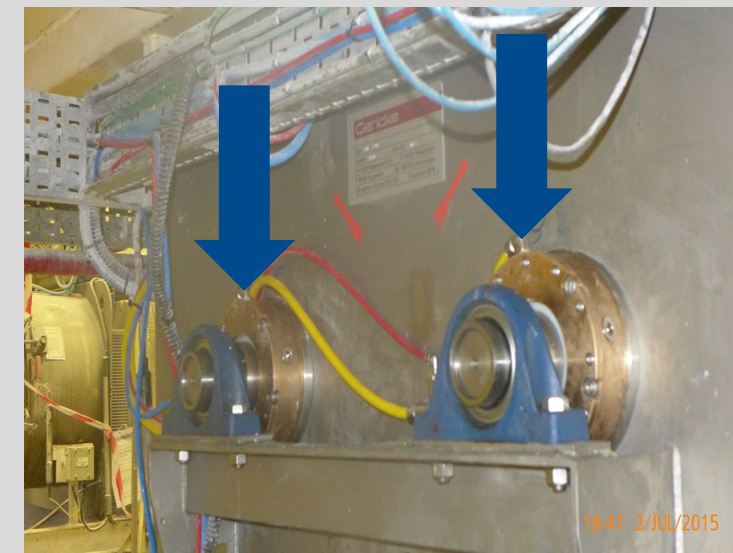
Inpro/Seal® Air Mizer® shaft seals were installed at both the drive end and non-drive end of the mixer. Two seals were needed per end for a total of four Air Mizer installs. The Air Mizer is a maintenance free, fully articulating, non-contacting shaft seal that utilizes a positive air purge to eliminate product loss and contamination. Its unique design fully articulates to allow for radial, angular and axial shaft movement. The Air Mizers were constructed of food grade materials to accommodate industry regulations and were ATEX certified due to the hazardous environment. A unique challenge for this application was the seals required a **consistent** sealing pressure as any abnormal pressure spikes would trigger the explosion arresting system.

Result

The Air Mizers were installed in 2012. Following a 100% maintenance/leak free period of 14 months, a second mixer was also upgraded. All Air Mizers are operating as designed, maintenance free with zero leakage.



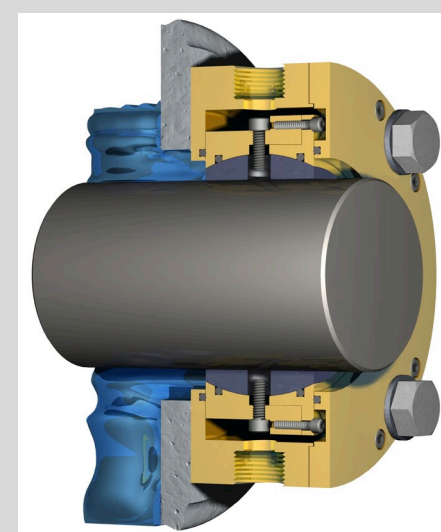
Application: Leaking icing/fondant mixer



Solution: Air Mizer shaft seals installed on the non-drive end of the mixer



ATEX Certified Inpro/Seal Air Mizer shaft seal constructed of food grade material



Air Mizer Cutaway