Inpro/Seal Application Success

Vertical FDA Agitator

Make: DCI

Industry: Food & Beverage

Challenge

A US beer manufacturing facility produces 11,000,000 barrels of beer a year. They have five top-mounted yeast brink agitators that each have an 80 barrel capacity. These agitators have been causing issues for multiple years due to leaking packing. When the packing failed, contaminants entered the vessel, contaminating the product, and foam leaked out of the top of the agitator, creating a safety concern.

Solution

The customer turned to Inpro/Seal® and agreed to run a six month trial that started in April 2017. They installed an Inpro/Seal Food Grade Air Mizer® shaft seal on a single agitator. The Inpro/Seal Air Mizer is a non-contacting shaft seal that articulates to accommodate shaft angularity and can handle 0.250" of radial movement and infinite axial movement.

The seal was tested by thoroughly cleaning the vessel after each batch and taking ATP swabs inside and outside the vessel to verify no contaminants entered through the seal. The Air Mizer passed each inspection, which was a major breakthrough as packing never passed this test. Eliminating product contamination reduced the amount of times they cleaned the yeast brinks, significantly saving on maintenance costs.

Result

After installation of the first seal in April 2017, the remaining four agitators were upgraded with Air Mizer shaft seals in January 2018. All five agitators have run issue free since installation.



DCI Top Mounted Agitators



Inpro/Seal Food Grade Air Mizer shaft seal



Seal Location



Air Mizer Cutaway



