



A pump is only as good as its shaft seal

The Risks of Buying and Using Non-Original, Non-Approved Parts

Case Story



The lesson learned: non-genuine shaft seals may be less costly in the short term, but in the long run, the low-quality non-approved seals present risk and lead to pump failure.

Background

At a major European dairy an Alfa Laval LKH pump successfully sent liquid through a regulating valve for two years without any problems. But when it was time to replace the shaft seal, a “pirate” seal was substituted for the genuine Alfa Laval part. The pirate seal lasted only 16 days.

The LKH pump’s shaft seal, the “heart of the pump,” is a device that prevents the passage of fluids along a rotating shaft inside the pump. An inferior seal can cause the pump to stop running.

When companies invest in Alfa Laval products, it is with good reason that the purchase comes with a message to buyers about the critical importance of using only Alfa Laval’s Genuine Spare Parts when replacements are required.

Evaluation

Non-genuine seals were tested in laboratory conditions, with dimensions compared to the manufacturing drawings for the genuine parts, along with an analysis of the materials used. In addition, the pirate parts were evaluated for hygienic specifications required by the dairy industry.

The following are findings regarding the non-genuine seals:

- The non-genuine parts were inferior in quality, with less corrosion resistance
- Tested seals did not meet proper dimensions, thus fitting of parts was a problem
- The sealing face was liable to chemical attack during CIP conditions
- The quality of machining and finish were well below standard
- Flatness was inferior, which caused leakage
- Rotating parts were impeded by improper sized elastomers
- Materials did not comply with hygienic demands

Conclusion

The high quality of Alfa Laval Genuine Spare Parts provides assurance of safety, efficiency, continuous operation and avoidance of risk. In the case of this particular dairy, using the “pirate” seals, which came with no markings of the supplier or manufacturer and no contact information, resulted in lost productivity and a hit to the bottom line.

If cost-cutting is a goal, purchasing non-genuine parts provides no savings in the long term; genuine parts are manufactured to work with Alfa Laval products – no other manufacturer can match the specifications. In the case of this Alfa Laval LKH pump, the investment would have been protected by using the parts created for it.



Poor quality of non-genuine shaft seal.
A cheap purchase, but expensive to replace.



Packaging doesn't guarantee a quality product.



Alfa Laval products offer quality, high standards, and a longer and more efficient lifespan.

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How to contact Alfa Laval

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