



ITT Flygt mechanical shaft seals

Sealed for the job



Flygt



ITT Industries
Engineered for life

“Quality products deserve genuine spare parts”



Flygt pumps and mixers are the finest available because of our ceaseless demand for quality. When you use only high grade parts that are customized for the job, you know that they will perform and that you will have a high quality product. Introduce an inferior

grade spare part, or one which has not been made specifically for the job and you create a weak link in an otherwise strong operational chain.

The most critical component in any submersible product is the sealing system. To ensure that the seals meet the demands, ITT Flygt designs and manufactures its own seals in-house, developed solely for Flygt submersible pumps and mixers.

Made-to-measure

The shaft seal is an important component for a smooth-running operation. Unlike standard off-the-shelf seals, the seals used in Flygt products do not have to fit into narrow seal cavities initially intended for glands. Freed from this limitation, we have been able to utilise radial space to develop short, compact seal units.

In other words, the shaft can be kept to a minimum length, thereby reducing shaft deflections and subsequent vibrations. The result? Superior reliability that guarantees minimum leakage as well as quieter operation. Best of all, the service life is prolonged.

More value for money

The principle of the mechanical shaft seal is simple. Two rings of extreme flatness contact each other. As the

surfaces move against each other, the presence of a fluid film acts as a lubricant, thereby reducing surface wear yet simultaneously having some direct material contact between the seal faces. Hence, choosing the right material and its sliding properties are crucial. The stiffest material available, cemented carbide (WCCR), a corrosion-resistant tungsten carbide, has been developed exclusively for ITT Flygt.

In operation, it can withstand impacts from large particles in the liquid without any problem. It is also less likely to be damaged by vibrations or shocks. Simply put, its sliding properties and mechanical strength are superb, notwithstanding the fact that it is also far less brittle and sensitive to rough handling. As a result, WCCR is now the standard material of our seal range.

In applications where the pH value is below three, a reaction-bonded silicon carbide (RSiC) seal is available. The chemical and high wear resistance of silicon carbide makes it specially suitable for industrial processes where these two properties are necessary.

Double security

There are two sets of mechanical face seals within every ITT Flygt pump and mixer. With no joint spring between them, they are completely independent of each other. That means extra safety.

The leading edge

For nearly 50 years, patented seals have been designed, tested and manufactured in-house. Dedicated engineers in our research and development centre work at improving our seal assortment. Our specially designed testing facilities help ensure that the rigorous standards we set are met.



Why do we go the extra mile? The immediate advantages not only include shorter delivery time, but also the assurance of prompt and accurate response to any questions or problems that may arise.

From a macro point of view, it means responsibility for the overall performance of Flygt products as well as the rapid introduction of new developments in design and materials for new applications. After all, the aim of the Flygt seal system is to give it as long a lifetime as possible in combination with long service intervals. In the long run, this adds up to savings.

Option for flexibility

Flygt seals can be ordered either as individual items or within service kits. These service kits include parts normally needed for a pump or mixer overhaul. Besides the seals, the kits typically consist of bearings and a full set of O-rings. Delivery in a single package simplifies handling, administration and storage whilst giving you the confidence that there will be no delays for individual components.



Total quality, total reliability

As the world leader in submersible pump and mixer technology, we are constantly striving to improve, and develop our products through on-going research and development. Our continuous emphasis on quality and reliability has resulted in us being awarded ISO 9001.

Also as many Flygt products help in cleaning up the environment, we are constantly focusing on improving our environmental policies, which is why all our operations in Sweden are certified according to the environmental management system ISO 14001.

Our dedication

At ITT Flygt, one of our lifelong goals is our long-term commitment towards our customers. That is why all our spare parts come with a one-year warranty. Not only that, we guarantee their availability between 10 and 20 years after a pump or mixer has gone out of production.



