

Mechanical face seals

Genuine spare parts from ITT Flygt – No worries



Flygt

What makes a pump a Flygt pump?

Reliability is no accident. It's a question of step-by-step improvements, component by component. By eliminating all the weak links in the chain, you get a pump you can really trust.

We've been making seals ever since we launched the world's first submersible pump in 1948. Because the sealing system is the heart of a submersible, we make no compromises. Not only do we develop all seals ourselves, but we've even kept manufacturing strictly in-house.

Genuine spare parts from Flygt – No worries

The result is a sealing system that gives you fewer problems and lower overall costs. In other words – no worries.

What makes a pump a Flygt pump? Read on and discover how we've eliminated every conceivable weak link to give you products that set the standard for reliability.

The fastest parts delivery in the business?

When you need a spare part, you want it fast. At Flygt, we keep an exceptionally high number of spares in stock – and that means rapid delivery. We also have the expertise to help you match the right part with the special demands of your application.



The heart of a pump

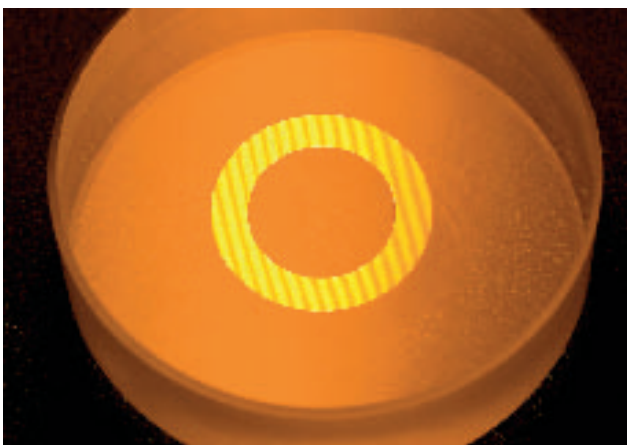
The right stuff

Most materials used for the face of the seal offer either good corrosion resistance or high durability. Working together with metallurgists, we have developed a unique tungsten carbide alloy that offers both. The result is a surface material that will give you long-term reliability under the toughest conditions, including corrosive environments, high pressure and poor lubrication.



Facing aggressive media

As a complement to tungsten carbide, we offer silicon carbide seal faces for seawater and media with a low pH. While they are almost as durable as tungsten carbide, they provide excellent resistance to acidic and chloride liquids.



The art of making unflat seals

The flatter the seal face, the better it works. Most seals provide good flatness – but only when they are cold. However, during operation they heat up, resulting in convexing and less effective sealing. At Flygt, we build a slight concavity into our seals – just a few fractions of a micrometer. Consequently, as the seals get warm, they straighten out. In other words, you get a high degree of flatness when you really want it, i.e. when your pumps are running.





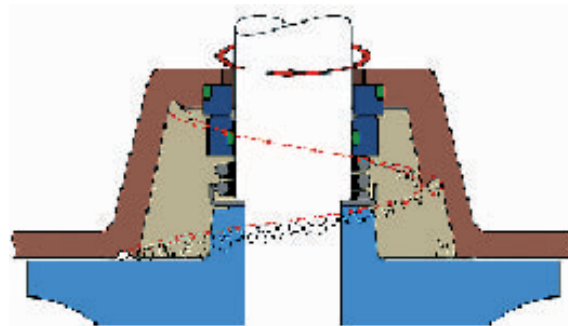
Keeping their cool

In many applications, the water level can get so low that air is sucked in together with the pumped liquid. So, instead of being cooled by water, the seal is enclosed in a pocket of air, increasing the risk of overheating and leakage.

However, Flygt seals are designed so that heat is quickly and efficiently transferred to their surrounding material. In this way, the seals keep cool even when they are running dry.

The spin doctor

Sand and grit can get trapped in the seal cavity of your pump and damage the seals. Spin-Out™ is a patented design that harnesses the centrifugal force of the shaft to spin abrasive particles out of the cavity. The result is less wear on the seal and reduced risk of clogging.



Plug & play & play & play

One of the main reasons seals fail is because they are carelessly handled or incorrectly installed. Plug-In™ is a cartridge seal that offers fool-proof mounting, eliminating the risk of human error. Because the inner and outer seals are factory-assembled as a unit, the seal faces are protected from any dirt and solids that could cause leakage. An integrated design also means that fibres cannot clog up the springs that keep the seal faces pressed together.



Putting more Flygt in your pump



Building better pumps is a matter of constantly adapting to change and continuously improving our range.

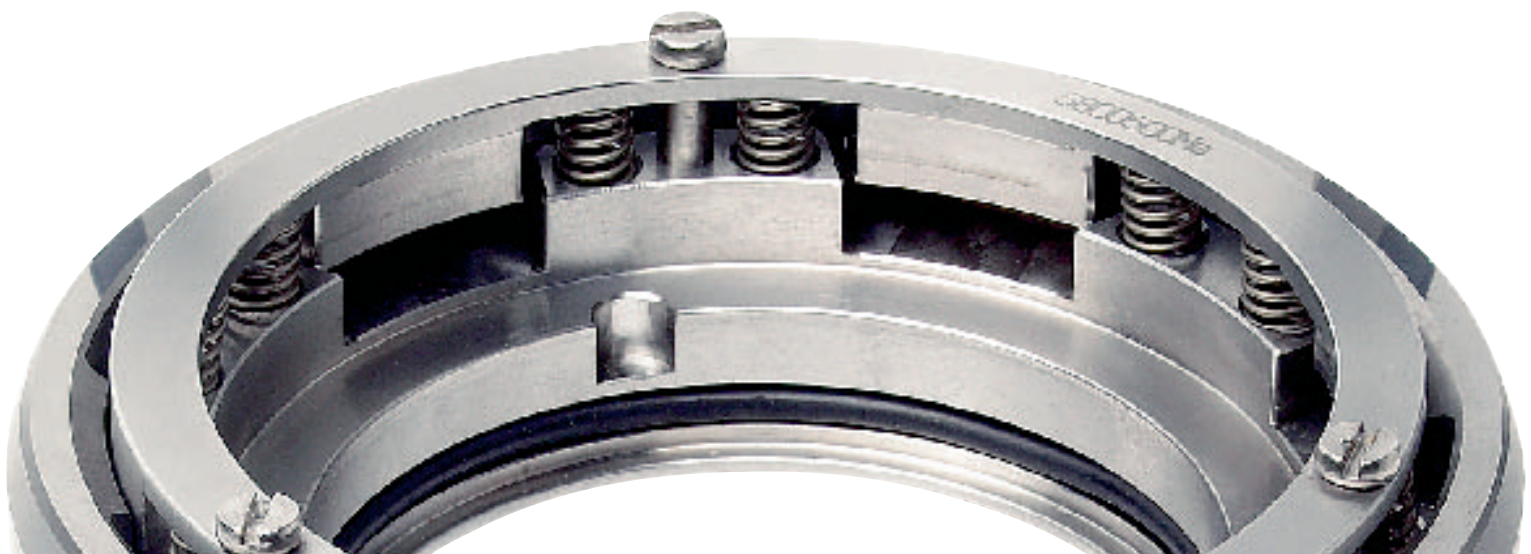
While Flygt has a reputation as an innovator of new products, the work we do to improve existing models is less well known. Every day we meet customers, receive phone calls and e-mails, answering your questions and listening to your needs.


Improvements big and small

Some of the improvements we make are small, some more comprehensive. Our mid-range pumps are a good example of a more extensive change. By developing an entirely new platform – including new motors, seals, hydraulics and bearing arrangements – users get a more robust pump that offers greater value for money than ever before.

A smaller improvement, of which many are unaware, is Spin-Out™. We found that sand and other abrasive solids have a tendency to find their way into the area behind the impeller, known as the seal chamber. There the particles rotate, wearing down the outer seal and the oil-house bottom. Spin-Out™ consists of a spiral groove in the oil-house bottom that spins all solids out of the seal chamber. The results have exceeded expectations: in some cases, seal lifetime has been increased by up to 50 percent.

You won't be able to read about all the improvements we make in our literature – product evolution is second nature to us, so we don't make a big fuss about it. But next time you order a spare part or product, you will automatically receive the new improved version, benefiting from our constant striving to put more Flygt in your pump.





As the world's leading supplier of fluid handling technology, Flygt can provide you with complete pumping solutions. From planning and delivery, to installation and after sales service, Flygt's competence is at your service.

Through our products and services, engineers, planners and consultants have access to more than 100 years of experience, assuring the most reliable and cost-effective operation.

Flygt service and sales facilities are found in more than 130 countries worldwide.



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