

#### **RELY ON EXCELLENCE**

### For a good night's sleep

Service contracts from EagleBurgmann increase reliability in pharmaceutical manufacturing

Pharmaceutical manufacturers like the Bayer AG rely on mechanical seals in their manufacturing plants. These components, however, are subject to wear and will fail at some point – resulting in significant costs. With a service contract, EagleBurgmann ensures that operation at Bayer's biggest pharmaceutical production facility runs smoothly. For the duration of the contract, EagleBurgmann assumes full responsibility for the seals' availability. The customer can focus on core competencies – and sleep easy at night.



#### From aspirin to crop protection agents

Bayer AG, headquartered in the German town of Leverkusen, is one of the world's leading manufacturers of pharmaceuticals and chemicals. Their best-known products include the pain reliever Aspirin, the antihypertensive drug Adalat and Betaferon, which is used in the treatment of multiple sclerosis. In addition to their Pharmaceuticals division, Bayer's operational business includes the segments Consumer Health and Crop Science. In Bergkamen, Germany, the company operates four chemical production plants, a microbiological production facility including processing and a microbiology technical center. Almost half of the 1,600 employees work directly in production.

### Downtime in pharma production leads to tremendous costs

For pharmaceutical producers, machine standstills go along with high financial losses. When an interrupted production chain leads to entire batches being rejected, daily costs can run into the millions. Among the most common reasons for machine downtimes are defective mechanical seals. Bayer, like many pharmaceutical producers, uses these seals in machinery such as agitators.

For their supply center in Bergkamen, Bayer entered into a service contract with EagleBurgmann. Its goal is to proactively prevent seal failures and be best prepared in case of a malfunction. The agreement covers topics such as short delivery times for spare parts and training employees on how to properly handle the seals. Furthermore, statistics are maintained in order that Bayer can continuously improve plant availability and productivity.

### High spare parts availability and full cost control

When repairing mechanical seals, delivery times of up to 20 weeks for certain spare parts are not uncommon. The service contract with EagleBurgmann cuts down these

waiting times for Bayer. "We know which seal types Bayer uses and can stock our local service centers specifically to fit these product types", explains Benjamin Wessling, Sales Director Service Engineering EMEA at EagleBurgmann. "This way, when a seal fails, all spare parts are available immediately." When a seals fails, it is dismounted from the assembly and sent to an EagleBurgmann service center or to their headquarters. A worldwide network of locations ensures that gualified experts from EagleBurgmann are never far away. The seal - be it a product from EagleBurgmann or from a third-party manufacturer - is then repaired and tested. Subsequently, the product is reinstalled in the plant and the customer is provided with a repair report, which documents the cause of malfunction and the repair measures taken. Since the repair fees are specified in the service contract, the customer knows beforehand what costs await him.

### Service partner for an industry with highest standards

Pharmaceutical manufacturers need to comply with stringent quality and safety standards. For example, their production processes need to be in accordance with good manufacturing practices (GMP).

# The TotalSealCare service modules from EagleBurgmann at a glance

#### Consulting & Engineering

After establishing and analyzing all of the installed seals in a system, standardization concepts are developed based on the as-is status. The aim is to reduce the number of seal types, sizes and materials used, and to improve the plant performance of the system. This module includes consultation on codes of practice and statutory regulations, and indicates what actions need to be taken.

#### Maintenance

In the plant or in the service center, qualified fitters and technicians look after all the aspects of seal maintenance – installation, start-up, servicing, conversion, overhaul and repair. Functionally relevant data (e.g., failure reasons and related costs) are recorded and documented. This means it is possible to evaluate seal operating times and maintenance costs on a continuous basis, thereby defining measures for extending service intervals.

#### **On-site Service**

On-site service includes an overhaul service, conversions and service container. EagleBurgmann deploys a service unit directly to the customer's premises: equipped with the basic range of seals or a stock of seals discussed with the customer in advance, and staffed by qualified personnel. Tasks on-site include production of the necessary gaskets, ensuring that the documentation is complete and advising the customer on the selection and installation of seals. EagleBurgmann's range of services also includes complete conversions.

#### Seminars & Training

An extensive range of continuing education programs in sealing technology. Developed for service and maintenance personnel and skilled staff and engineers. The program includes group seminars, individual training and custom-tailored seminars. At EagleBurgmann's premises or at a location of the customer's choice.

#### **Technical Analysis, Digital Services & Support**

A team of seal specialists is responsible for rectifying process malfunctions or "bad actors". The latest methods such as thermography or data logging are used for diagnosing critical items for the operation of the plant and for defining measures to resolve them. In research and development centers, experts from EagleBurgmann perform realistic tests on test rigs or in original pumps. The objective is to extend the MTBF and to increase system reliability by individual and constructive solutions.

#### **Inventory Management**

Based on the client's individual requirements and the applicable quality regulations, EagleBurgmann develops a concept for inventory management of complete seals and spare parts. Furthermore, stocking on site or in the EagleBurgmann service center is optimized. In this way, administration overhead is significantly reduced for the customer.

#### Individual Service Agreements

EagleBurgmann offers specific agreements that are combined from the six service modules. Whether for individual seal systems, critical process elements, specific plant units or an extensive seal service for complete plants, the modular structure of EagleBurgmann's service makes it possible to satisfy individual requirements. With the well-established monitoring instrument SealCare PRO, all seal-related data can be recorded for documentation and evaluation purposes.

This in turn places high demands on suppliers and service partners. EagleBurgmann has longstanding experience in engineering, manufacturing and servicing products for pharmaceutical companies. They work according to a thorough quality concept and offer products that are developed in line with the rules of qualified hygienic design. Depending on the customer's requirements, products are also available with ATEX certification and with FDA-approved materials.

#### Employee trainings extend service life

For EagleBurgmann, sharing know-how with the customer's employees is paramount to reduce seal failures. Possible training formats range from informal conversations to extensive training courses. "We tailor our trainings specifically to the customer's needs. I actually think the term 'education program' does it more justice", says Benjamin Wessling. "We can train staff on the running machine in the customer's plant. Alternatively, we can invite them to our service center, where they can really get to know our seals." The thematic focus is also customized depending on the client: From installing and commissioning the mechanical seals to ensuring optimal operation and failure analysis.

#### Types of service contracts

Every customer has different needs regarding service agreements. That's why EagleBurgmann offers different kinds of service programs and modules, each of which revolves around the customer's requirements. "In practice, no two service contracts are exactly alike", says Benjamin Wessling. "Every agreement is specifically tailored to the customer's wishes and needs."

### Powerful software enables continuous improvement

With SealCare Pro, EagleBurgman has developed a software tool that maps the customer's entire pump and machine population. It produces statistics at the push of a button, so that the effects of the service measures become transparent to the customer. At Bayer, for example, purchasing can understand whether trainings and other measures implemented by EagleBurgmann actually lead to less seal failures. Based on these key figures, goals for the further collaboration can be established. These can include, for example, to what extent seal failures are to be reduced in the next year. This allows Bayer and EagleBurgmann to minimize repair expenditures in a continuous improvement process. The component Instant Service is currently being integrated into SealCare Pro and will enhance the software with cloudconnectivity.

#### Close cooperation is a service partnership's beating heart

Thanks to proven advantages, such as cost reductions from less seal failures and reduced losses of production, the service partnership with many customers persists for decades. The collaboration with Bayer in Bergkamen already lasts for a good 20 years. For Benjamin Wessling, a close cooperation between EagleBurgmann and the customer is the key to a successful service partnership: "We have a very trusting relationship with Bayer. Their technicians share a lot of information with us and are very open minded when it comes to optimizations. The closer the cooperation, the more rewarding the service contract will be for the customer."

### Customers sleep easier with service contracts

Instead of supporting the customer only in isolated events, EagleBurgmann takes full responsibility for the seal during the service contract's duration. In case of malfunction or when questions arise, the customer's technicians have a direct line to EagleBurgmann's seal experts and service centers.

## EagleBurgmann – at the leading edge of industrial sealing technology

Our products are used wherever safety and reliability count: in the industries of oil & gas, refineries, petrochemicals, chemicals, pharmaceuticals, food, power, water and many more. About 6,000 employees contribute their ideas, solutions and dedication every day to ensure that customers around the globe can rely on our seals. With our modular TotalSealCare Service, we emphasize our strong customer orientation and offer custom-tailored services for every need. **Rely on excellence.** 

