

Service agreement

between EagleBurgmann and TOTAL
for the Mitteldeutschland refinery

Information **E06031**



The plant

The TOTAL refinery Mitteldeutschland GmbH, located in Spergau near Leuna, is one of Europe's most modern refineries, with a processing capacity of approximately 11 million t/year. It belongs to the TOTAL Group and crude oil from Russia is processed there.

The service agreement

Initial talks with the planning companies were held as far back as 1993 in cooperation with EagleBurgmann France, and a service agreement was ultimately concluded with the refinery in 1997. This agreement is on an annual fixed-cost basis and provides for the exclusive performance of repairs of all mechanical seals in operation at the plant. It was extended in 2005 for a further five years.

Service Center Halle-Leipzig

For the purposes of ensuring optimal plant availability in terms of the contractual arrangement, EagleBurgmann opened up a fully equipped Service Center in April 1997 with a workshop area of 140 m² not far from the refinery. This Service Center was subsequently relocated in 1997 to a new building with a floor area of 750 m² at which a staff of 6 is currently active. The modern machinery enables the following types of work – among others – to be performed to the highest standard of quality:

- grinding, lapping, polishing
- shrinkage
- flatness testing
- peak-to-valley measurement
- measurement of wear and tolerances
- measurement of spring power and leakage
- pressure tests

This enables fast response to the requirements of the refinery but also to those of other companies in the region as well.

One of Europe's most modern refineries: TOTAL's Mitteldeutschland refinery. Crude oil from Russia is processed into high-quality mineral oil products there. EagleBurgmann mechanical seals type H75 and MFL85 according to API 682 were installed.

At the TOTAL refinery the SC Halle-Leipzig is responsible for handling the following activities, in particular:

- Repair of all mechanical seals employed by TOTAL at the refinery, irrespective of manufacturer
- Stocking of the necessary quantities of spare parts
- Analysis and documentation of failure
- Documentation of service lives
- Solving technical problems
- Consultancy on and control of the installation and operation of mechanical seals
- Provision of assembly personnel
- Training of refinery personnel
- Standardization of mechanical seals

EagleBurgmanns' seals in use

Right from the start of the project, EagleBurgmann put the focus on standardization, based on a case of the company's "SPIR" (Spare Parts Interchangeability Record) software – which has already proven itself in the offshore industry – being used to advantage. The philosophy of the API 682 standard in its first edition provided the basis for the selection and design of the seals to be used, and type H75 O-ring and MFL metal bellows seals in cartridge design were the main types installed.

Competitors' seals in use

Besides those from EagleBurgmann, the refinery also uses seals from Flowserve and Crane. The service agreement provides for the maintenance and repair at the EagleBurgmann Service Center Halle-Leipzig of all the seals in use at the refinery that were provided by these companies.

The advantages for TOTAL and EagleBurgmann

The refinery's operator has just one contact person for all mechanical seals in use there.

This concept makes for enhanced availability of the plant, and its advantages are obvious: shortest response and repair times, less seals and spare parts to be kept on stock, as well as the complete documentation of all activities with regular meetings including the analysis and evaluation of "bad actors" and the MTBR factor.

From initial equipment supply and installation right through to repairs, EagleBurgmann is able to offer its customers the entire spectrum of service capability and has repeatedly shown itself to be a competent and reliable partner.

Results of the cooperation

The intensive cooperation between TOTAL and EagleBurgmann led to a reduction of 41 % in the number of repairs and of around 54 % in the costs arising from "Bad Actors" in the period from commencement of the service agreement 1997. Meanwhile, the contract was prolonged twice and now runs until 2016.



EagleBurgmann MFLWT80
Mechanical Seal