

Success Story: Retrofitting a Centrifugal Pump for a Petrochemical Company in Africa

The Challenge

Olefins, such as ethylene and propylene, are essential to the modern chemical industry. Derived from advanced industrial processes, these molecules serve as the building blocks for the production of plastics, solvents, and numerous everyday products. Ethylene, the simplest olefin, is primarily obtained from hydrocarbon processing and forms the foundation for polymers like polyethylene and other essential chemical derivatives.

A renowned petrochemical company in Africa, specializing in olefin processing, sought Fluiten's support to enhance the operational service of an OH centrifugal pump.

The primary objective was to provide a plug-and-play interchangeable solution promptly while maintaining high-quality standards.

Project Objective

Enhance operational service with a timely and reliable solution.

The intervention focused on:

- Delivering a mechanical seal with the same technical specifications as the existing system.
- Ensuring fast delivery times to minimize machine downtime.

Outcome: Fluiten was selected as the supplier for new machinery and future interventions at the plant.

Technical Analysis

Problem Diagnosis

The client identified delivery timelines as the primary challenge. Although the existing system was reliable, the secondary seal material was deemed marginal for the operating conditions and its chemical compatibility with the process.



Alternative Evaluation:

After careful analysis, a Fluiten seal was selected with:

- Identical technical specifications comparable to the existing system.
- Higher-performing materials better suited to the operating conditions.

Adopted Technical Solution:

- Model: **BM6S** 2 1/4" mechanical seal

Operating Conditions:

- Temperature: 120°C
- Pressure: 8 bar
- Shaft speed: 2900 rpm

Compliance: Designed and coded according to **API 682 standards**



Intervention Execution

- Timeline: **3 weeks**
- Involved Departments: Sales, Application Engineering, Technical Office, Procurement, Production, Assembly, and Logistics

Results

Technical Improvements

- TFE seals replaced the originally supplied seals, providing superior resistance and higher operational margins.

Economic Benefits

- Competitive Pricing: Fluiten's solution offered a lower cost compared to competitors.
- Spare Part Advantages: The client benefited from a more economical and sustainable approach to future maintenance, reducing overall costs.

Why Choose Fluiten?

Fluiten's ability to respond quickly to client requests, combined with superior technical quality, allowed the company to fully meet the client's needs, strengthening a trusted relationship for future interventions.



Useful tip for your plant:

Don't wait for a failure—schedule a technical check-up today with the Fluiten Service Hub.

A preventive evaluation of your mechanical seals can uncover hidden issues and improve operational efficiency.

For more information about our products and available solutions, **contact** us or visit our website.
www.fluiten.com