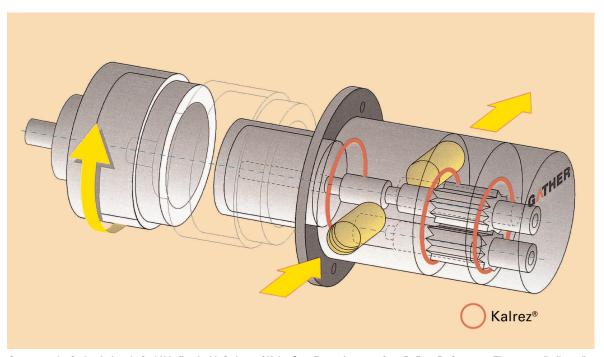


## Kalrez<sup>®</sup> Solves Gear Pump Seal Deformation Problem, Withstands Operating Extremes



Gear pump by Gather Industrie GmbH is fitted with O-rings of Kalrez® perfluoroelastomer from DuPont Performance Elastomers (indicated), to withstand temperature up to 327°C, pressure up to 100 bar and exposure to aggressive media in the chemical process industry, where other sealing materials fail.

By replacing metal/O-rings with Kalrez® O-rings from DuPont Performance Elastomers in gear pumps designed to operate in temperature up to 300°C and pressure of 100 bar, Gather Industrie GmbH, Mettmann, Germany, has solved the problem of seal deformation at high temperatures, which was causing leakage at the sealing surfaces and compromising chemical industry safety requirements.

Key markets for pumps, centrifuges and quick-couplings manufactured by Gather are the chemical process and aircraft industries in Austria, Germany and Switzerland. The company's gear pumps are also used in reactors and other difficult operating environments where only Kalrez® can meet stringent seal reliability and safety requirements long-term.

## Only Kalrez® withstands extremes

According to Dipl. Eng. Klaus Lübke, the company's Technical Manager, only Kalrez® O-rings were able to withstand long term exposure to aggressive chemicals at such extremes of heat and pressure. In numerous other cases, Kalrez® parts fitted up to ten years ago are still working without problem.

## Cost savings with Kalrez®

Unlike metal O-rings, the Kalrez® perfluoroelastomer parts also compensates for the uneven internal sealing forces within the asymmetric pump housing, maintaining a leak-free seal, explains Mr. Lübke. He also reports that by switching to Kalrez®, pump assembly and dismantling has been made easier, leading to cost savings through reduced maintenance and production down time. As a result, Kalrez® seals are now fitted as standard equipment in most of Gather's extensive range of gear pumps.

In the 25 years since first commercially introduced, Kalrez® perfluoroelastomer parts have provided superior performance in a wide variety of demanding sealing applications. Kalrez® resists more than 1800 chemicals and is thermally stable up to 327°C.

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