



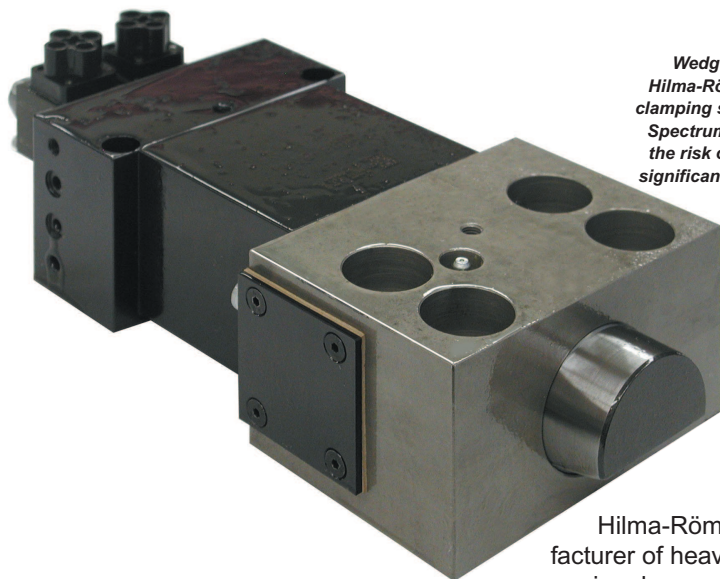
Kalrez[®] perfluoroelastomer
parts

From DuPont Performance Elastomers

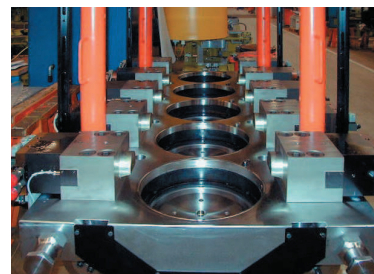
Kalrez[®] Spectrum[™] 7075 resists aggressive fluids at high temperatures and saves costs in Hilma-Römheld clamping systems



Clamping bar on Hilma-Römheld heavy duty clamping system, equipped with Kalrez[®] Spectrum[™] 7075 perfluoroelastomer O-rings resists pressures up to 400 bar, temperatures as high as 250°C, and handles clamp forces of 25-1250 kN without leakage of hydraulic fluid.



Wedge clamp and cylinder, part of Hilma-Römheld heavy duty hydraulic clamping system, is fitted with Kalrez[®] Spectrum[™] 7075 O-rings to minimize the risk of premature seal failure and significantly reduce costly down-time.



Hilma-Römheld GmbH, of Hilchenbach, Germany, a leading manufacturer of heavy duty clamping systems for metals, plastics and rubber processing, has switched to DuPont Performance Elastomers Kalrez[®] Spectrum[™] 7075 perfluoroelastomer parts to seal its hydraulic clamp range, with the goals of ensuring long-term resistance to highly aggressive Oemeta HF/DU hydraulic fluids at 250°C, saving costs, and increasing the reliability of the system.

Other sealing solutions used in the same environment had to be replaced due to failure after only a few months, while Kalrez[®] Spectrum[™] 7075 seals from DuPont Performance Elastomers have been in place for well over a year and a half to-date without problems, Hilma-Römheld confirms. Since refitting with Kalrez[®], the company has been able to significantly extend the service intervals of the pressure cylinders, resulting in cost savings and increased reliability of the clamping system. It also allows the company to offer its customers new application areas.

Heavy duty hydraulic clamping system

Heavy duty hydraulic clamping systems developed and manufactured by Hilma-Römheld are used to hold large hot dies in exact position on forging machines, and also to secure hot molds in injection molding equipment. The units are designed to handle pressures of up to 400 bar, and temperatures as high as 250°C. Any leakage of the hydraulic fluid from up to six pistons applying clamp forces of 25-1250 kN is unacceptable. The seals used in those systems have to offer resistance to highly aggressive Oemeta HF/DU hydraulic fluids at 250°C.

Kalrez® Spectrum™ 7075: Optimal fluid and heat resistance

According to Hilma-Römheld, Oemeta HF/DU, an ester-based hydraulic fluid, contributes to the outstanding temperature performance and ensures low flammability of the pressure unit, while the superior heat and fluids resistance of Kalrez® Spectrum™ 7075 minimizes the risk of premature seal failure, and significantly reduces costly down-time.

Longer seal life

Kalrez® Spectrum™ 7075 from DuPont Performance is intended to set a new industry standard for severe chemical process industry (CPI) sealing applications. It offers even longer seal life than Kalrez® 4079, resulting from enhanced sealing force retention and higher thermal resistance up to 327°C. Kalrez® Spectrum™ 7075 also offers broader chemical resistance and better cool down set recovery than Kalrez® 4079. In combination, these improvements translate into reduced downtime, lower maintenance costs, increased MTBR and higher yields for our customers.

About Hilma-Römheld GmbH

Hilma-Römheld GmbH specializes in the development and manufacture of clamping systems for cutting and non-cutting machining, encompassing traditional hydraulic workholding, mechanical and electromechanical systems, plus die changing and magnetic clamping systems for plastics and rubber processing. The company, which was established over 50 years ago, has been a member of the Römheld Group since 1991.

About Kalrez®

DuPont Performance Elastomers makes Kalrez® perfluoroelastomer parts for the chemical, pharmaceutical, oil and gas, aerospace and semiconductor industries. Kalrez® O-rings, custom parts and other seal designs, such as sanitary seals and valve stem packings, are available from DuPont Performance Elastomers and its local distributors, supported by a globally operating technical service network.

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