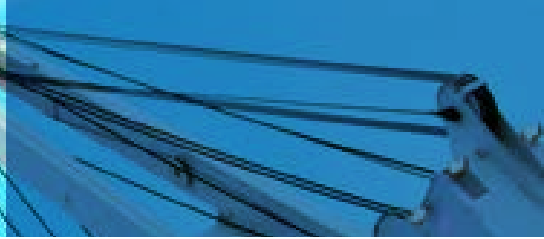




Customer : IHC Vremac Cylinders BV  
 Product group : Dynamic Seals  
 Market : Machinery and equipment construction



# ERIKS SUPPLIERS DYNAMIC SEALING CONCEPT FOR REVOLUTIONARY LIFTING DAMPER

Collaboration between ERIKS and IHC Vremac Cylinders



## CUSTOMER PROFILE

*IHC Vremac Cylinders BV is part of Royal IHC. The company has been designing and producing hydraulic cylinders, swivels and piston accumulators. Their products find their way to various industries, such as dredging, off and onshore markets and machine construction. The company's core activity is constructing cylinders of any conceivable size and coatings, both off the shelf and customer specified.*

## CHALLENGE

Product innovation is one of the pillars driving IHC Vremac Cylinders' business. Recently, the company released its latest innovation: the MaXine, a 'lifting damper', which can be hired for maritime lifting work, e.g. from shore onto water, or from a floating platform or oil platform onto a sup-

ply ship. It is compiled of proven products: one cylinder with two piston accumulators. The lifting damper is positioned between a static lifting crane and the load. When a wave hits during loading or unloading, the MaXine dampens the first peak load, keeping the lifting cable taut. This makes it possible to continue lifting operations more safely and in rougher seas.

A great deal of expertise has gone into the new MaXine. As ERIKS already supplies dynamic sealings to IHC Vremac, it was the logical choice to develop a sealing concept for the MaXine.

## SOLUTION

Together with manufacturer Merkel, ERIKS devised a fitting sealing concept, which has been tested thoroughly in collaboration with IHC Vremac.

ERIKS supported IHC Vremac in defining the testing parameters for a test rig for various coatings and sealing concepts. The smoothness of the rods was one of the parameters measured: did it conform to the seal manufacturer's specifications? Once a sealing concept has been defined for a particular coating, it is clear going forward. There are currently two 50-ton lifting dampers available for hire. Another two are under construction (100 and 200

ton). We aim to build up and expand to a range of from 25 to 700 tons, at least two of each.

## SAVINGS

- Time savings
- Engineering
- Downtime reduction

## OTHER BENEFITS

- ERIKS is an excellent sparring partner for the customer
- ERIKS' knowledge and quality helps customers to deliver quality down to the smallest details

## FURTHER COMMENTS

Another one of the IHC Vremac/ERIKS team's successes was the capacity expansion of the Panama Canal. The new locks here are being widened to accommodate the latest cargo ships. One of the requirements was that the locks have to open and close every hour, maintenance-free for 15 years. The water level in Gatun Lake may rise by half a meter, which may cause the existing cylinders in the locks to become submerged - for which they were never designed. We supplied 32 new cylinders for these two lock complexes. ERIKS realised the sealing concept.