

Reducing Friction Saves Energy

Trelleborg Sealing Solutions can contribute to cost savings by helping lower friction. Trelleborg Sealing Solutions puts a lot of emphasis on developing solutions that minimize friction in sealing systems. In particular, Turcon® PTFE based (Poly-Tetra-Fluoro-Ethylene) and Zurcon® polyurethane sealing materials improve efficiency in dynamic hydraulic applications. Innovative seals, such as Turcon® Stepseal® 2K and Zurcon® U-Cup RU9, use patented technologies with tribological benefits.

Lars Pleth Nielsen, Manager of the Tribology Center at the Danish Technological Institute, believes that the world can save trillions of dollars by reducing the costs associated with the unwanted effects of friction.

Friction depends on the characteristics of surfaces – how flat, round or rough they are, says Pleth Nielsen. Friction is also dependent on what kind of medium the surfaces are in, if it is wet or dry, or what particles there are in the medium. According to Pleth Nielsen, estimates show that between two and four percent of an industrialized country's gross domestic product (GDP) is lost through friction and the wearing out of mechanical parts.

You can see wear, tear and friction issues in major business arenas, such as in the food and automotive industries, he says. Friction is one of the main reasons why things work only for a limited time. Of course, it is an extra cost for companies to put low-friction coatings on surfaces, so that is a barrier to overcome. But these additional expenses will certainly lead to long-term benefits. At first customers are not really aware of the huge costs involved due just to friction. But when they see that they can produce higher quality for an extended period, then they realize that the cost of coatings and tailored surfaces is more than counterbalanced by the gains.

Trelleborg Sealing Solutions also recognizes that surface finishes can significantly enhance the performance of elastomer seals and have devoted considerable resources to identifying effective coatings and treatments for different applications. This led to the development of the Flexcoat® range, which gives optimum friction characteristics, enhancing the performance of elastomer seals, especially in automated assembly operations.

For more information or high resolution images, please contact: Donna Guinivan, Editor PR and Media Telephone: +44 (0)121 746 3621 Email: donna.guinivan@trelleborg.com www.tss.trelleborg.com For press releases from the whole of Trelleborg Group, visit the Trelleborg Media Center. The Products and Solutions section allows you to select news by industry. Go to www.trelleborg.com/news where you can also subscribe to our newsletter.