

## Roller bearings: polymer solutions not exhausted yet

### Polymer plain bearing expert igus now also manufactures ball bearings

Already the leading manufacturer of special polymer Energy Chains and plain bearings, igus now also offers lubrication-free plastic ball bearings for the first time. According to the company, this is due to more and more customers asking for maintenance-free solutions using roller bearings. With more than 20 years of experience with tribologically optimised polymers and, by utilising the possibilities of its in-house test laboratory, igus now wants to fill the gap "where standard materials are not effective." There are a number of areas in which, because of parameters such as temperature, chemical or moisture exposure, the performance of conventional ball bearings is limited and special solutions are difficult or at excessively high costs. The "iglidur" ball bearings first presented at the Hanover show last week represent "the first, small step towards technically optimised polymer ball bearings available ex-stock with a predictable service life."

#### **New: lubrication-free deep-groove ball bearings for high temperatures**

The inner and outer races and the cage of the new polymer ball bearings is made of a high-performance "iglidur" material. The corrosion-free rolling elements are made of stainless steel. Glass balls are available for maximum corrosion resistance.



**Picture PM1507-02: igus GmbH, Cologne**  
"iglidur A500" polymer deep-groove ball bearings – lubrication-free, corrosion- and temperature-resistant up to 150 °C.



**Picture PM1507-01: igus GmbH, Cologne**  
Many potential applications: special polymer dry-running ball bearings from igus have a predictable service life.

Ceramic is another potential option for the future. For now, the ball bearings launched at the Hanover exhibition had races made from the high-temperature material "iglidur A500". The deep-groove ball bearings are available for shaft diameters of 3, 6, 8 and 10 mm and are temperature-resistant up to 150 °C. Application sectors for these easily cleanable bearings include the medical engineering, chemical, food, pharmaceutical and biotechnology and plant engineering industries. However, according to igus, the dry-running polymer ball bearings do not compare with permanently lubricated metal roller bearings with regards to service life, speed, and permissible loads. Nonetheless, in many applications this is not an important factor; instead, low friction values and minimum driving forces are the basic requirement. Moreover, the igus polymer ball bearings

## igus - press release

are available ex-stock and can be used in combination with potentially corrosive elements, such as chemicals. They do not require any lubrication, making them compliant with food industry standards. This range will ultimately be expanded in keeping with the company's ongoing pursuit of customer-specific solutions using its high performance polymer expertise.

### PRESS CONTACT:

André Kluth  
Corporate Communication Manager

igus GmbH  
Spicher Str. 1a  
D-51147 Köln  
Tel. +49 (0) 22 03 / 96 49 - 611  
Fax +49 (0) 22 03 / 96 49 - 631  
akluth@igus.de  
www.igus.de



DIN ISO 9001:2000

The terms "igus, Chainflex, Easy Chain, E-Chain, E-Chain System, Energy Chain, Energy Chain System, Flizz, ReadyChain, Triflex, TwisterChain, DryLin, iglidur, igubal, Polysorb, plastics for longer life and manus" are legally protected trademarks in the Federal Republic of Germany and, where applicable, in some foreign countries.