

Think big with the world's largest plastic energy chain from igus

With the E4.350, extra large cables and hoses are reliably protected in adverse ambient conditions

Energy chains made of high-performance plastics are conquering more and more areas in the industry and increasingly replacing metallic options. They score points with lower weight, zero maintenance and at the same time high strength, especially in areas where large cables and hoses are guided, such as in shipyards or on drilling platforms. These adverse conditions are the perfect home for E4.350, the largest plastic energy chain in the world, which igus showcases at this year's BAUMA.

Even in steel plants, the use of steel in operating equipment is not always the first choice, especially when it comes to a reliable and robust energy supply system. The E4.350 energy chain was designed by the motion plastics specialist igus for those industries where large cables and hoses must be protected, such as for heavy duty machinery or offshore applications such as ship cranes or drilling platforms. The high-performance plastic ensures that the e-chain is resistant to corrosion and insensitive to chemical and petrochemical influences as well as resistant to sunlight. The material is self-lubricating and requires no grease or oil on the joints throughout its service life, even in very dirty environments. This reduces the need for routine maintenance and enables a more accurate prediction of the service life of the energy chain.

Individually customisable to the application

Having a modular structure, the E4.350 can easily be lengthened and shortened, as required. For unsupported lengths up to 6.5 m and fill weights over 100 kg/m, the igus energy chain provides excellent rigidity and very high load capacity. The strong crossbars along with the enormous interior height of 350 mm provide for an easy filling of the e-chain with very large cables and hoses. A big advantage over energy chains made of steel is not only their lighter weight, but also its ability to be very easily custom filled, thanks to a separation system with interior fixtures and mounting brackets in every chain link, The E4.350 is also available as a rol e-chain for very long travels: rollers made of

special tribopolymers create a nearly maintenance-free operation, significantly reducing wear and tear of the chain, thereby increasing the service life of the application. Since the coefficient of rolling friction is by around 75 percent less than the coefficient of gliding friction, up to 57 percent less energy is needed to drive the chain. The E4.350 is available as a single component and as a fully-assembled system, and on request can also be installed directly on site anywhere in the world.

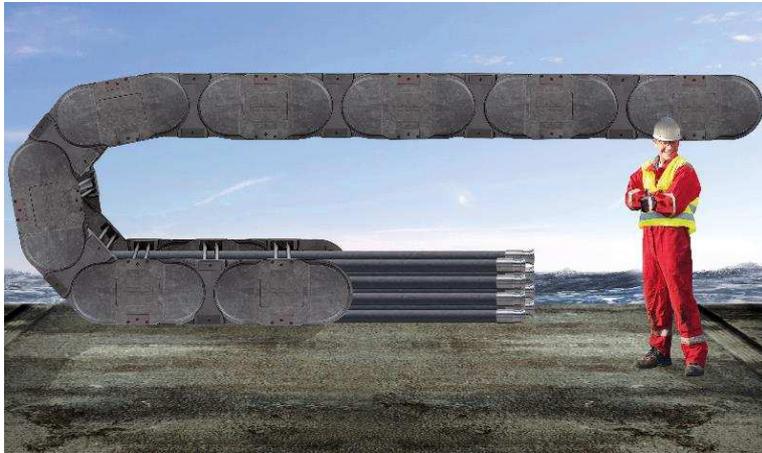
As strong as steel but significantly lighter

Extensive testing in the 2,750 m²-large test lab shows how strong the energy chain is. The result showed that the E4.350 withstood tensile and breaking loads of well over 175,000 N without problems. But the e-chain has proven itself even in actual use in many applications worldwide, in ships, offshore platforms as well as at the port of Antwerp. There, dredged water from the harbour is passed into a basin and the silt is drawn by pumps on the bridge. The pumps can be moved across the entire bridge length of 150 metres. The heavy hoses (around 100 kg/m) are guided safely with the E4.350 and protected against mechanical abrasion on the bridge. The entire system runs maintenance-free around the clock.

A video on the E4.350 in operation can be viewed here:

<http://www.igus.de/E4350vector>

Captions:



Picture PM1416-1

Corrosion-proof and maintenance-free features score points for the E4.350 in applications where large hoses and cables must be guided in extreme environments. Moreover, besides its custom interior separation, the low weight is particularly impressive. (Source: igus GmbH)

PRESS CONTACT:

Oliver Cyrus
Head of Media and Advertising

igus® GmbH
Spicher Strasse 1a
51147 Cologne
Tel. 0 22 03 / 96 49-459
Fax +49 22 03 / 96 49-631
ocyrus@igus.de
www.igus.de/de/presse

ABOUT IGUS:

igus GmbH is a globally leading manufacturer of energy chain systems and polymer plain bearings. The Cologne-based family business has offices in 35 countries and employs around 2,950 people around the world. In 2015, igus generated a turnover of 552 million euros with motion plastics, plastic components for moving applications. igus operates the largest test laboratories and factories in its sector to offer customers quick turnaround times on innovative products and solutions tailored to their needs.

The terms "igus", "chainflex", "CFRIP", "conprotect", "CTD", "drylin", "dry-tech", "dryspin", "easy chain", "e-chain", "e-chain systems", "e-ketten", "e-kettensysteme", "e-skin", "energy chain", "energy chain systems", "flizz", "iglide", "iglidur", "igubal", "invis", "manus", "motion plastics", "pikchain", "readychain", "readycable", "speedigus", "triflex", "twisterchain", "plastics for longer life", "roboLink", "xiros", "xirodur" und "vector" are protected by trademark laws in the Federal Republic of Germany and internationally, where applicable.