Industry solutions

motion plastics® solutions for any industry...
"Did you know ... 
... that we have polymer solutions for nearly 60 industries?"
From a garage ... 
... to global market with tribo-polymers

Innovative solutions for a lubrication-free future for more than 50 years

Nearly 200,000 customers worldwide trust “plastics for longer life®”. Manufacturing products at low cost, while also ensuring quality, this is our commitment with “plastics for longer life®”. Plastics are becoming increasingly affordable and technical benefits continue to grow. For years, we have been developing, producing and selling our products based on the principle of “plastics for longer life®”. Products made from high-performance plastics ... last longer ... and cost less.

Reduce cost ... 
... improve technology!

For any task – in any batch size

Different industries need different solutions. From mechanical engineering, automotive assembly or medical technology, to the robotics industry – igus® offers customised solutions for specific applications. igus® possesses many years of experience in most branches of industry and has competent specialists that can be contacted when necessary. If your industry is not listed, please let us know. We’re here to help.

Fit and forget – matching solutions from stock

- Innovative and cost-effective products that can be assembled quickly
- Fast delivery from stock – lower storage costs
- Large product selection – find the right solution at once
- Time-saving tools on the internet
- Customised assembly modules delivered ready to install
- Maintenance- and lubrication-free dry-tech® bearings
- Cables with 36 month guarantee (according to igus® guarantee provisions)
- No minimum order charges, no cutting costs for cables

Our online tools also enable you to reduce process costs. Also visit our industry website.

www.igus.eu/industry

I look forward to talking to you – whether during a visit to your premises or at a trade fair.

Artur Peplinski
Head of Industry Management

Phone: +49 2203 9649-266
e-mail: apeplinski@igus.net
Ready to install and cost-effective ...

Products in focus

Light and strong:
System E4.1L
www.igus.eu/E41light

For flexible use, cost-effective:
chainflex® M
www.igus.eu/chainflexM

Dirt-resistant dry operation:
drylin® hybrid bearing
www.igus.eu/WJRM

Tested!

Swarf tests at the igus® test lab prove the excellent sealing of igus® RX e-tube, even with hot swarf.

Online

Industry web pages with detailed information, application examples and more...
www.igus-machinetools.com

... Machine tool industry

"Toolmakers and their suppliers are facing major global challenges. The competition is becoming more intense, the price pressure is becoming greater, as also the demand for local production. igus® has the right solutions: top quality but are affordable."

Your contact:

Lukas Czaja
Head of Industry Management
Machine Tools
Phone: +49-2203 9649-7722
e-mail: lczaja@igus.net

Ready-to-install readychain® systems with transport rack for all axes of a machine tool. Steel parts, hydraulic and control unit customised for your application.
Specially customised for robots with small to medium loads, the igus® triflex® RSE retraction system offers a way to prevent loop formation in the workspace of the robot, even in highly dynamic applications.

Move reliably in all axes ... "For all 3D applications: triflex® R provides modular protection of cables and hoses in the robotic modular kit."

Products in focus

- For sophisticated 6-axis applications: triflex® TRCF
  › www.igus.eu/TRCF
- Easy, quick to fill, for large hoses: triflex® TRLF
  › www.igus.eu/TRLF
- Twistable robot cables up to ± 180°/m: chainflex® CFROBOT
  › www.igus.eu/CFROBOT

Tested!

Robotic CFROBOT5.501 fibre optic cable withstands more than 28 million cycles with ± 180°/m torsion.

Your contact:

Matthias Meyer
Head of Industry Management Robotics
Phone: +49-2203 9649-161
e-mail: mmeyer@igus.net

Online

Industry web pages with detailed information, application examples and more ...
› www.igus.eu/robotics
Reduce weight dramatically ...

For example, iglidur® plain bearings in brake caliper bearings replace metallic bearings under extreme conditions.

"igus® bearings are 7 times lighter than metallic rolled, PTFE coated bearings and do not rust."

Your contact:

Markus Feth
Head of Industry Management Automotive
dry-tech® bearing technology:
Phone: +49-2203 9649-251
e-mail: mfeh@igus.net

Products in focus

Cost-effective for the engine compartment: iglidur® H4
► www.igus.eu/H4

Save 90% weight: igubal® coupling joints
► u www.igus.eu/double-joint

Customised special parts upon request, no minimum order quantity
► www.igus.eu/specialparts

Tested!

Quality assurance: 100% visual inspection for the highest quality, target: 0 errors

Online

Industry web pages with detailed information, application examples and more ...
► www.igus-automotive.com
Guide reliably in confined spaces ...

... Automotive industry on board

"Failsafe energy supply systems specifically for your installation space, adapted to your weight and load limits."

Your contact:

Johannes Zournatzis
Industry Manager
e-chain systems®
On Board Systems
Phone: +49-2203 9649-7355
e-mail: jzournatzis@igus.net

Products in focus

Modular and in one piece for easy application: E1 e-chain®
www.igus.eu/E1
Strong, quiet, light and easy to assemble: E2.10 e-chain®
www.igus.eu/E2micro
The reinforcement for existing corrugated tube systems: e-rib
www.igus.eu/e-rib

Tested!

Test 3621: Control cable CF98.05.04 withstands more than 138 million strokes at a radius of 18mm (3.2 x d).

Online

Industry web pages with detailed information, application examples and more ...
www.igus.eu/automotive-onboard

Specifically customised for your installation space, weight and load limits. Whether in cars, commercial or special vehicles – the requirements for energy supply solutions are becoming increasingly complex. The multitude of moving, electrically controlled functions require reliable, long-lasting and lightweight solutions for the constant supply of energy and signals.
Fulfil FDA compliance ...

"Tuned to the specific needs of the packaging industry, such as food hygiene or FDA compliance, we offer you solutions made of high-performance plastics that optimise your packaging machines."

Products in focus

- **Corrosion-resistant steel components:** drylin® SLW
  - www.igus.eu/drylinSLW
- **Temperatures up to +250°C & FDA-compliant:** iglidur® A500
  - www.igus.eu/a500
- **Harnessed and ready-to-install:** readychain® systems
  - www.readychain.eu

Wear iglidur® G with various shaft materials (rotating 0.3m/s; 1.0MPa). Low load applications can often be worked with inexpensive shaft materials.

Your contact:

Lars Braun
Head of Industry Management
Packaging Industry
Phone: +49-2203 9649-218
e-mail: lbraun@igus.net

Online

Industry web pages with detailed information, application examples and more ...
- www.igus-packaging.eu
On long travels up to 800m ...

Several advantages were achieved by the replacement of the old rol e-chain system® with the igus® P4 e-chain®: the service life of the crane was enhanced, the e-chain® runs with lower noise in the trough and the wear of the rollers was significantly reduced. [Container loading crane, Qing Dao/China]

"igus® e-chain systems® and flexible chainflex® cables have been successfully used worldwide on more than 800 STS, 5,000 RTG / RMG and over 10,000 harbour installations, like bulk handling cranes, Goliath cranes, reach stackers, empty container trucks, spreaders, lifts and forklifts."

Tested! igus® e-rover enables automatic coupling and decoupling on e-chain system®.
Supply energy, data and fibre optic signals at Gbit speed.

Your contact:
Theo Diehl
Head of Industry Management
Cranes & Material Handling
Phone: +49-6162 6808
e-mail: tdiehl@igus.net

Products in focus

For very high fill weights and speed:
P4 rol e-chain®
www.igus.eu/P4

Intelligent products forecast
maintenance date:
smart plastics
www.igus.eu/industry4-0

For outdoor applications, TPE qualities:
chainflex® CF330, CFLG
www.igus.eu/chainflex

Online
Industry web pages with detailed information, application examples and more ...
www.igus.eu/cranes
Save space and enhance reliability ...

... Indoor crane industry

"igus® e-chain systems® with flexible chainflex® cables for single or double girder cranes, rolling and box girder profile cranes, as well as travelling, overhead or jib cranes. Easily and safely mounted directly on or above the crane girder."

Your contact:

Jens Göbel
Industry Manager
Cranes & Material Handling
Phone:  +49-2203 9649-114
e-mail:  jgoebel@igus.net

Products in focus

High stability and quiet operation: E2/000 e-chain system®
☆ www.igus.eu/E2000
For side mounting on crane girders: guidefast trough
☆ www.igus.eu/guidefast
All required cross sections from stock: chainflex® cables
☆ www.igus.eu/chainflex

Tested!

Flexing cycle test: Just one of the many series of tests for the reliable service life prediction of igus® e-chains®.

Online

Industry web pages with detailed information, application examples and more ...
☆ www.igus.eu/indoorcranes

Cost-effective energy supply for crane girders and indoor cranes - quickly installed as a modular solution:
The guidefast guide trough is side-mounted on the crane girder. This makes it possible, for example, to avoid welding of brackets on crane girders during assembly.
Defy loads & most adverse environment ... for example, enclosed E4 system rol e-chain®. Long travels of 600m and more. The special enclosure keeps away dirt, coal, snow and ice from the energy supply system.

... Bulk handling

"Moisture, dirt, swarf, heat, cold – we have the solution for every requirement. igus® is the specialist in plastics research and can bank on its experience of more than 50 years."

Your contact:

Frank Schlögel
Head of Engineering Projects
Sales & Marketing
Phone: +49-2203 9649-166
e-mail: fschloegel@igus.net

Products in focus

- Reduce energy consumption by up to 57%: rol e-chain®
  - www.igus.eu/rol-chain

- Rotary movement from 1,250° and more: rotary module
  - www.igus.eu/MRM

- TPE control cables for extreme flexing performance
  - www.igus.eu/chainflex

Tested!

Service life test on long travels at high speeds in the igus® lab

Online

Industry web pages with detailed information, application examples and more...
- www.igus.eu/bulkhandling
Speed and precision are asked for when using storage and retrieval units in the warehouse. For the energy supply within the device, a leading manufacturer therefore relies on ready-to-connect, harnessed igus® e-chain systems® for the extreme dynamics of 6m/s and 4m/s² to 7m/s and 10m/s².

"No other manufacturer offers this diversity in energy chains and cables from stock and no other manufacturer provides as much service as igus®."

Products in focus

- For storage and retrieval units: GLSL-P guide troughs
  >>> www.igus.eu/GLSL-P
- Efficient and quiet operation: dryspin® high helix thread
  >>> www.igus.eu/dryspin
- For increased tensile strain, hanging up to 50m: CFSPECIAL.182
  >>> www.igus.eu/cfspecial182

 Tested!

- chainflex® CFSPECIAL proves itself in the tensile force test as the ideal solution for applications with extremely high tensile forces, such as in forklifts.

Your contact:

Christian Strauch
Industry Manager
Material Handling
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e-mail: cstrauch@igus.net

Online

Industry web pages with detailed information, application examples and more ...
>>> www.igus.eu/materialhandling
The optimum solution designed for the customer ...

"They are already in use in many offshore applications and have proved very effective: energy chain systems and plain bearings from igus® withstand the toughest environmental conditions."

Your contact:

Tim Schneebeck
Industry Manager
Offshore, Oil and Gas
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e-mail: tschneebeck@igus.net

Products in focus

- The largest e-chain® with 350mm inner height: e-chain® E4.350
  - www.igus.eu/E4-350
- Rotary movement from 1,250° and more: rotary module
  - www.igus.eu/MRM
- DNV-GL approval for offshore applications: chainflex® CFL.GLB.PUR
  - www.igus.eu/CFLG

Tested!

RBR test set-up: customer-specific construction of a circular movement in the igus® lab. Each product is tested thoroughly before it is delivered to the customer.

Online

Industry web pages with detailed information, application examples and more ...
  - www.igus.eu/maritime

igus® rotary module with 560° rotation angle in the heavy-duty crane.

Complete systems, custom designed – modular and space-saving, easy to integrate.
By the use of lubrication-free plastic plain bearings in the overload element of the Karat 9 (intensive cultivator) a subsequent lubrication can be completely dispensed with. [Lemken GmbH & Co. KG]

"Especially in agriculture you need solutions that will withstand the harshest conditions such as dirt, shocks and high edge loads. Freedom from lubrication and long service life are also important."

Your contact:

Uwe Sund
Industry Manager Agricultural Engineering
Phone: +49-2203 9649-487
e-mail: usund@igus.net

Products in focus

- Long lasting at high loads: iglidur® Q290
  - www.igus.eu/Q290

- Curved rails to your specifications
  - www.igus.eu/curved

- Reliable cable guidance for smallest installation spaces: E2 micro
  - www.igus.eu/E2micro

Tested!

- Pivot test on galvanised shafts: iglidur® Q290 plain bearing (left) against metallic model.
  - www.igus.eu/agriculture
Moisture, dirt, swarf, heat, cold – we have the solution for every requirement and we entirely dispense with steel and other metals in our e-chains® materials. With strong vibrations it has been shown that igus® e-chains® last longer and no bolts or screws can get loose as in steel energy chains.

"Machine components are subjected to high loads especially in the construction equipment and machinery industry. igus® products have been tested for outdoor applications with vibration, cold, heat and UV radiation."

Your contact:

Harry Suckau
Industry Manager
Construction Machinery
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e-mail: hsuckau@igus.net

Products in focus

Reliable under vibrations:
e-chain® E4 "Heavy-Duty"
► www.igus.eu/E4-HD

Extremely wear-resistant & dimensionally stable:
iglidur® Q2
► www.igus.eu/Q2

High UV resistance and use in up to -35°C:
chainflex® CF9
► www.igus.eu/CF9

Tested!

Vibration test: A standing installation of igus® E4 e-chain® was exposed to direct vibration (comparable to a rock drilling).

Online

Industry web pages with detailed information, application examples and more ...
► www.igus.eu/constructionmachinery
"Functional safety and the prevention of contamination are top priorities in medical and laboratory equipment, as well as in the production of pharmaceuticals. Due to the elimination of lubricants, igus® products are often the first choice."

Your contact:

Ulf Hottung
Industry Manager
Medical Technology
Phone: +49-2203 9649-7706
e-mail: uhottung@igus.net

Products in focus

- Reduces the germ load: antibacterial iglidur® AB
  - www.igus.eu/AB
- Minimum bend radii up to 4 x d: chainflex® CF9 and CF98
  - www.igus.eu/chainflex
- Parallel guiding of two capillary hoses possible: e-cord
  - www.igus.eu/e-cord
- Special test bench for comparative wear rate determination of materials of igus® and competitors.

Tested!

Online

Industry web pages with detailed information, application examples and more...
www.igus.eu/medical
igus® has products in its wide range that covers all requirements in the wood industry. Whether for multi-axis, hanging, standing or rotating movements or even e-chains® with extender crossbars for large suction hoses.

"Swarf-resistant igus® plastics solutions help you decrease installation times and the demands on your logistics, reduce throughput times and dispense with virtually all maintenance."

Your contact:

Guido Lopes
Sales Manager Germany
e-chainsystems®
Phone: +49-2203 9649-7209
e-mail: glopes@igus.net

Products in focus

- With integrated seal against dust: e-chain® E4.64L
  www.igus.eu/E4-64L
- Drive cables according to 24 manufacturers: readycable®
  www.readycable.eu
- Dry operation and resistant to dirt: drylin® hybrid bearing
  www.igus.eu/WJRM

Tested!

Customer-specific tests: We test each product also specifically for the application. Here a test with wood swarf for a side mounted E4.64L e-chain®.

Online

Industry web pages with detailed information, application examples and more ...
www.igus.eu/woodworking
In the support of the thread guide unit for the thread winder, concentricity errors and shocks are compensated for by means of spherical rod ends. With the flexibility of the rod end bearings, the micro-vibration that occurs is more attenuated than in the comparable metallic products. [SAHM GmbH & Co. KG]

"The textile industry places top priority on components being lubrication-free and resistant to dust. Maintenance-free and tribologically optimised plastics from igus® ideally fulfil these and many other requirements."

Your contact:

Patrick Carl
Head of International Sales
iglidur® bearings
Phone: +49-2203 9649-265
e-mail: pcarl@igus.net

Products in focus

ESD-suitable universal bearings: iglidur® F2
► www.igus.eu/F2

Usable as a belt tensioner or guide roller: xiros®
► www.igus.eu/xiros

Suitable for multiple lining of surfaces: tribotape
► www.igus.eu/tribotape

Tested!

Wear test: igus® materials are significantly more wear-resistant than PTFE films in the test.

Online

Industry web pages with detailed information, application examples and more ...
► www.igus.eu/textile
In heat and cold ...

In pit furnaces, 4-metre slabs are heated. Temperatures up to 1,200°C or blasting flames from the furnace place high demands on the system. The used e-chain® of the 4040CR series meets the requirements without failure. [voestalpine Grobblech GmbH, Austria]

"In steel mills and foundries there is constantly high external strain on man and machine. For these tough environments we offer you low-maintenance, low priced and long-lasting systems."

Your contact:

Michael Berteit

Phone: +49-2203 9649-7439
e-mail: mberteit@igus.net

Products in focus

- Reduce energy consumption by up to 57%: rol-e-chain®
  www.igus.eu/rol-chain

- Highly abrasion-resistant at temperatures up to +250°C: iglidur® X
  www.igus.eu/X

- TPE control cables for extreme flexing performance: chainflex® CF9
  www.igus.eu/CF9

Tested!

Wear-resistant: Every e-chain® has a running performance of more than 10,000km.

Online

Industry web pages with detailed information, application examples and more ...
www.igus.eu/steelmills
"Smooth running, corrosion-resistant and high load capacity instead of rust, lubrication and squeaking. The convenience of igus® high-performance plastics are great for your furniture and interior ... long-lasting and cost-effective."

Cost-effective, lubrication and maintenance-free iglidur® polymer plain bearings from igus® provide for the various settings for the absolutely essential smooth running. [Nowy Styl GmbH]

Cost-effective and flexible guide systems: drylin® N
[www.igus.eu/drylinN]

Ideal for chairs, lights, handles: clearance-free pre-loaded bearing
[www.igus.eu/JVSM]

Aesthetic for height-adjustable applications: ZF e-chain®
[www.igus.eu/ZF14]

Since 1987, 35 igus® products have been awarded by the “iF Forum Design GmbH” in the category "Industry Design".

Your contact:
Michael Hornung
International Product Manager
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e-mail: mhornung@igus.net

Products in focus

Award-winning designs

Online

Industry web pages with detailed information, application examples and more ...
[www.igus.eu/furniture]
Print out 1 unit quickly yourself ...

This 3D Delta printer consists of a variety of lubrication-free igus® products: drylin® W high profile for the Y/Z adjustments, ready-to-install linear axes with motor, igubal® spherical bearings and aluminium shafts, triflex® R e-chains® with chainflex® motor cables. [igus® GmbH]

"The use of maintenance-free drylin® linear bearings eliminates the regular greasing, and they move quietly and dampen the vibrations occurring during high accelerations while printing."

Your contact:
Tom Krause
Head of Business Unit
Additive Manufacturing
Phone: +49-2203 9649-975
e-mail: tkrause@igus.net

Products in focus

Up to 50 times more wear-resistant: iglidur® tribo-filaments
www.igus.eu/tribofilament

3 times more abrasion-resistant for laser sintering: iglidur® I3/I6
www.igus.eu/lasersintering

Interchangeable 1:1 with recirculating ball bearings: drylin® R
www.igus.eu/drylinR

Tested!
Wear-resistant, linear: up to 50 times more abrasion-resistant than common 3D print filament materials

Online
Industry web pages with detailed information, application examples and more ...
www.igus.eu/tribo-printing
Always there in the most difficult terrain and under extreme stressing: iglidur® G polymer plain bearings from igus® in the guide roller of the SRAM derailleur – no maintenance.

"In all types of cycling, there is one factor that is always crucial – the weight of the bike! To achieve top sporting performances or simply enjoy a relaxed bike ride without too much effort, it is essential for the bike to have a low weight."

Your contact:

Patrick Carl
Head of International Sales
iglidur® bearings
Phone:  +49-2203 9649-265
e-mail:  pcarl@igus.net

Products in focus

Very wear-resistant on (almost) all shafts: iglidur® J
  ▶ www.igus.eu/J

The classic endurance runner up to 30MPa: iglidur® W300
  ▶ www.igus.eu/W300

Excellent price-performance ratio: iglidur® G
  ▶ www.igus.eu/G

Tested!

Simulation of continuous load in seat posts.
Impact simulation.

Online

Industry web pages with detailed information, application examples and more...
  ▶ www.igus.eu/bicycle

Reduce weight, dispense with maintenance ...
Smallest installation spaces ...

"Lasting, tough and reliable mechanical components form the backbone of the transport industry. A maintenance-free continuous operation is critical in applications with high cycle rates under changing weather conditions."

Your contact:

Thorsten Mersch
Industry Manager
Rail Industry
Phone: +49-2203 9649-7038
e-mail: tmersch@igus.net

Products in focus

High reliability and efficiency: dryspin® technology
www.igus.eu/dryspin

Low-cost all-rounder for fire safety: iglidur® G V0
www.igus.eu/GV0

Especially for use in rail vehicles: CFSPECIAL414
www.igus.eu/cfspecial414

igus® has certified the material igumid V0.GF for the fire safety standard EN45545. With these test results igus® covers the requirement for areas R22, R23 and R24.

Tested!

Online

Industry web pages with detailed information, application examples and more ...
www.igus.eu/railwaytechnology

A chainflex® cable used in a moving energy supply system ensures smooth opening and closing of the doors. Improved conductors and jacket materials make it possible that no more failures occur despite high continuous stresses. [low-floor trams]
Failsafe and maintenance-free ...  

"Lightweight, quiet, failsafe and as small as possible. igus® combines these product requirements for aviation – specifically for the interior design – with freedom from lubrication and maintenance."

Your contact:

Alexander Mühlens  
Project Leader drylin®

Phone: +49-2203 9649-7742  
e-mail: amuehlens@igus.net

Products in focus

For flexible adjustments (backrest, tables, etc.): drylin®  
www.igus.eu/drylin

For the smallest spaces with UL 94-V2 approval  
www.igus.eu/easychain

Extremely lightweight, rugged and stable: drylin® carbon  
www.igus.eu/drylin-carbon

Tested!

igus® has certified the material igumid V0.GF for the fire safety standard EN45545. With these test results igus® covers the requirement for areas R22, R23 and R24.

Online

Industry web pages with detailed information, application examples and more ...  
www.igus.eu/aircraft

Lubrication- and maintenance-free iglidur® polymer plain bearings and drylin® linear guide systems for smooth adjustment of arm rests, neck rests and tables in airplanes.
Quiet operation and smooth sliding ...

"The lubrication-free components can be moved with millimetre accuracy and have an absolutely smooth movement. The best conditions for perfect photos."

Your contact:

**Martin Kochmann**
Sales Manager Germany
drylin® linear technology
Phone: +49-2203 9649-538
e-mail: mkochmann@igus.net

Products in focus

**Harnessesd camera slider with double roller:** drylin® WW
► [www.igus.eu/drylinW](http://www.igus.eu/drylinW)

**For rotary & pivoting movements:**
PRT slewing ring bearings
► [www.igus.eu/PRT](http://www.igus.eu/PRT)

**For small installation spaces, 12mm max. height:** drylin® N
► [www.igus.eu/drylinN](http://www.igus.eu/drylinN)

Tested!

Noise test: comparison of noise development of ball bearings against drylin®linear bearings

Online

Industry web pages with detailed information, application examples and more ...
► [www.igus.eu/camera](http://www.igus.eu/camera)
Dirt, sand, heat and rain ...

"The requirements of systems for the recovery of energy from sunlight could not be more different. Extreme temperatures and weathering by wind, water, dirt and dust expose products to their very limits."

Your contact:
Thomas Preißner
Head of Business Unit
igubal® spherical bearings
Phone:  +49-2203 9649-115
e-mail:  tpreissner@igus.net

Products in focus

Self-adjusting and high durability: igubal®
www.igus.eu/pillowblocks

Dirt-resistant lead screw nuts: dryspin®
www.igus.eu/dryspin

Twistable up to 10°/chain link: 3D e-chain® triflex® R
www.igus.eu/triflexR

Tested!
Endurance test: igubal® rod end bearing (right) against metallic rod end. 97 million cycles, steel has failed by about 50 million cycles.

Online
Industry web pages with detailed information, application examples and more ...
www.igus.eu/solar

The iglidur® bearings are installed in the main axles of the tracking system: they provide low-friction rotary movement even under unfavourable conditions. For the kinematics of the adjustment system, Conergy decided on the drylin® linear bearings from igus®. [Conergy]
Weather-resistant ...

This wind turbine runs constantly. Because, with the use of three drylin® linear round guides and a drylin® flange bearing in the rotor head, the operator eliminates the need to grease the bearings at a height of 30 metres. [Fiscante, Casalnuovo Monterotaro, Italy]

... Wind energy

"Wind power is your strength, motion plastics® ours. igus® offers a wide selection of solutions for wind turbines as well as in production equipment, transport and installation."

Your contact:

Christian Ziegler
Regional Sales Manager North
e-chainsystems®
Phone: +49-2203 9649-418
e-mail: cziegler@igus.net

Products in focus

Azimuth and rotor blade adjustment: RBR system
[www.igus.eu/RBR]

Rotor blade adjustment and brake: iglidur® plain bearings
[www.igus.eu/iglidur]

Reliable torsion up to ± 10° per link in the rotor hub: triflex® R
[www.igus.eu/triflexR]

Test 3105: chainflex® robotic fibre optic cable can withstand more than 27.5 million cycles in the torsion test.

Online

Tested!

Industry web pages with detailed information, application examples and more ...
[www.igus.eu/windpower]
Guide all media while saving space ...

... Theatre / Stage construction

"Fit and forget ... this summarises the requirements of a stage and theatre builder. This is possible with igus® products."

Your contact:

Thomas Piepenbring
Industry Manager
Theatre/Stage Construction
Phone: +49-2203 9649-7040
e-mail: tpiepenbring@igus.net

Products in focus

Space-saving and vertically hanging: zig-zag solutions
► www.igus.eu/zigzag

The "igus® cable reel" without slip ring: e-spool
► www.igus.eu/e-spool

PVC and halogen-free cables for flexible applications
► www.igus.eu/chainflex

Tested!

Noise test: the e-spool is moved in a sound-insulated space at a speed of approx. 0.3m/s. The noise development is measured.

Industry web pages with detailed information, application examples and more ...
► www.igus.eu/theatre

Whether in stage installations, lighting systems or audio technology, igus® products can help you to technically optimise your application. igus® products are ideal for limited installation space and with low noise and low vibration.
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Moving energy made easy ...

The igus® e-chain® construction kit.

- For all environments and climates (from -40°C to +120°C)
- Easy to clean
- Space-saving installation
- Enclosed or open types
- Also as detectable material or as ESD/ATEX version
- Available as harnessed readychain® system (chain + cable)
- Easy installation of the systems, and quick retrofitting
- Numerous standards, approvals and certificates

- For high dynamic loads and demanding service life requirements
- Many possibilities in terms of movement type and travel length

Strong stop-dogs for high strength

Cross bars openable from both sides for quick filling

Dirt-resistant outer contour

Very quiet operation due to structural stop brake

Sliding surfaces for long service life

Custom colours and special solutions

More than 1,354 highly flexible igus® chainflex® cables from stock

Flexible cables in energy chains need a special design to last through many cycles, high speeds and accelerations, as well as demanding environmental conditions. Likewise, EMC safety and the fulfillment of standards and guidelines such as NFPA 79, UL, CSA, VDE, Inter- and Profibus are today essential requirements to be met. The igus® chainflex® range extends over control, servo, motor and robot cables up to bus, data, encoder and fibre optic cables, all ideal for the energy chain.

- Temperatures -40°C to +90°C
- For highly dynamic applications in energy supply systems
- Special design prevents cable failure and "corkscrewing"
- Highly abrasion-resistant jacket materials (PVC, PUR, TPE)
- 3 years igus® guarantee for every chainflex® cable*
- readycable®: harnessed cables with connectors according to 22 manufacturer standards

* 36 months or up to 10 million double strokes (5 million for cables of the chainflex® M family); whichever is first

www.igus.eu/e-chain

Guarantee

36 month guarantee

www.igus.eu/chainflex
Lubrication-free ... maintenance-free

Maintenance-free iglidur® plain bearing made of plastic
No lubrication and thus low maintenance, while cutting costs and increasing service life, everything from stock and delivered promptly – that is the central idea of all igus® products. iglidur® plastics have been extensively tested with respect to wear and friction values including other relevant material properties. iglidur® polymer plain bearings from igus® signifies the step from the plastic bushing to the tested and therefore predictable machine element.

- Absolutely lubrication-free
- Lightweight
- High static loads
- No corrosion
- Vibration dampening
- Metric and imperial dimensions
- Special dimension and designs
- Numerous standards, approvals and certificates

www.igus.eu/iglidur

Maintenance-free drylin® linear plain bearings and guide systems
drylin® is a product range of lubrication-free linear plain bearings based on the principle of sliding instead of rolling. Tribologically optimised iglidur® high-performance polymers are used as sliding surfaces. The drylin® linear systems use dry operation and are maintenance-free. Linear guides on rails or round shafts are available. The drylin® drive technology can supply ready-to-connect systems with lead screw drives or toothed belt drives, with or without motor. The focus is on the ruggedness and resistance to influences such as dirt, water, chemicals, heat or impacts, as well as the freedom from maintenance and lubrication.

- Resistant to dirt due to dry operation
- Resistant to impacts and vibrations
- High static load capacity
- Suited for short-stroke applications
- Lightweight
- Vibration dampening
- Quieter than metallic linear bearings
- Special designs according to customer needs

www.igus.eu/drylin

Dry operation ... sliding ... low noise

The base polymers are crucial for the wear resistance.

Fibres and filling materials reinforce the bearing to absorb high forces or edge loads.

Finally, the solid lubricants automatically lubricate the bearings and reduce the friction in the system.

Quiet operation
Clean as no lubricants required
Smooth operation through sliding elements of iglidur® J/J200
Profiles available in various geometries, installation sizes and clearances
In the largest lab of the industry...

... 2,750 m² lab ... 107 test stations ... more than 2 billion cycles/year

Applications with high cycle rates, speeds and accelerations in demanding environmental conditions require tested and reliable systems – especially for energy chains and cables, as well as polymer plain bearings and linear systems. igus® constantly conducts tests in its in-house laboratory under real-world conditions.

- 3,000 tests for e-chain systems® every year on over 180 facilities: climatic chamber, field tests, noise chamber and more
- Two billion test cycles a year for highly flexible cables
- One million electrical measurements recorded annually
- 15,000 tribological tests (friction and wear) in 300 test set-ups
- 140 trillion test movements in the bearings business unit

www.igus.eu/test

igus® laboratory: 2,750 m² inside & outside areas

Torsion tests

Bending cycles tests

Long-term wear and service life test

Cold tests at -40 °C

Swarf test

igus® motion plastics® from Cologne

Nearly 200,000 customers worldwide trust "plastics for longer life".

Manufacture affordable products and yet ensure high quality, this is a promise that we keep with "motion plastics®": moving parts made of plastic that cost less and last longer.

Our core technology consists of tribo-polymers – high-performance plastics, which we have optimised for friction and wear. The technology has made us into a world-wide leader for developing and manufacturing energy supply systems and plain bearings. The family-run company based in Cologne is represented in 35 countries and employs approximately 3,800 people worldwide.

For years, we have been developing, producing and selling our products based on the principle of "plastics for longer life".

www.igus.eu/motionplastics

igus® factory, Cologne (Germany)

Assembly factory

Material preparation

Open offices

Toolmaking

Injection moulding
Fitted with experience ...

Fast, professional installation by specialised installation staff: saves installation time and cost, increases the service life, prevents failures.

Predictable fixed prices for the installation and maintenance: saves you administrative work in planning and purchasing.

Predictable installation time for your system in your plant: helps you in schedule and contributes to high plant availability.

Short access routes through certified partner in your area: keeps travel and response times short and saves installation costs.

Short-term, flexible installation dates even on weekends or at night: if you need immediate support or if the scheduled date has to be shifted. Simply give us a call and we will find a solution.

Everything from a single source from the manufacturer – including customised system guarantee: We will guide you! Ranging from the initial review to the system configuration, the delivery, and including the on-site installation of the system on your plant.

... numerous time-saving services

Engineering
Customer-specific developments with many solutions from the "modular kit".
► www.igus.eu/projects

Harnessing
Harnessled energy supply systems, connectors & cables from igus®. Everything from a single source.
► www.igus.eu/readychain

Sampling
We provide support in the construction phase of your (exhibition) machine.
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Open-Space
Save valuable time for engineering whilst reducing process costs.
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Different industries need different solutions. From mechanical engineering, automotive assembly or medical technology, to the robotics industry – igus® offers customised solutions for specific applications. igus® already has many years of experience and specialised resources for many industries.

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igus® newsletter
igus® is certified in accordance with ISO 9001:2015 and IATF 16949:2016 in the field of energy supply systems, cables and harnessing, as well as plastic bearings.