

250 motion plastics® news

igus

Autumn 2025



Let's stay curious

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Innovative solutions for the industry of tomorrow

Innovation meets sustainability

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PTFE-free and PFAS-tested products

From CAD to motion plastics®

Page 12

With the igus® tribo parts service, you can find your customised solution even faster

Our new products - thanks to you!



You are our inspiration

We honour innovative commitment with our awards
igus.eu/competitions



We listen to you
On site, virtually, at the IMPS
igus.eu/contact



We ask questions

Every year in our Christmas wish list
igus.eu/wishlist



We try things out

Use our manufacturing services for the fast production of special parts: 3D printing, CNC
igus.eu/ffh

igusgo

You help us

Typical applications feed our igusGO® app - and show optimisation potential via photo
igus.eu/igusgo



We set up systems

With our assembly and conversion service
igus.eu/assembly



We come to your premises

With sample boxes, displays and the roadshow
igus.eu/roadshow



We will stay tuned.

Will we also prove ourselves in your application?

Let's stay curious

Discover our innovative solutions for the industry of tomorrow.

Being innovative means staying curious. It means pushing boundaries and recognising challenges as opportunities. At igus®, innovation has been our driving force - for over 60 years.

Driven by our passion for movement and technology, we have made it our mission to break new ground. It is not uncommon for new solutions and products to be developed based on your specific application ideas.

We are presenting 250 new products that will help you reduce emissions, dispense with PTFE and lubrication, support recycling, make better use of machines and reduce routine work.

Innovative wishes from Cologne



Michael Blass,
CEO e-chain systems®



Tobias Vogel,
CEO dry-tech® &
New Businesses



Dr. Thilo Schultes,
CEO Operations



Artur Peplinski,
CEO igus® International

"Made in Cologne":
PTFE-free materials, a humanoid robot as part of cost-effective automation solutions and many other motion plastics® innovations

motion plastics®



igidur®
rollers
Page 18



xiros®
ball bearings
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drygear® gear and
gearbox technology
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drylin®
linear technology
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igidur® slewing ring
bearings
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dryspin® lead screw
technology
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igidur®
bar stock
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drylin®
drive technology
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igidur®
3D printing
Page 40



**Low Cost
Automation**
Page 86



igubal®
spherical bearings
Page 44



RBTX®
marketplace
Page 100

Print2Digital made easy ...



GRS-A-0007



Two ways to reach the same goal: a **QR code** takes you directly to the relevant page on the igus® homepage.

No mobile device ? No problem!

You can also use the **text code** to go directly to the product page via the search function on our website.

news 2025 Highlights



42 **igidur®**
igidur® i2000 resin for
DLP 3D printing, PTFE-free



64 **drylin®**
Telescopic guide
drylin® NT-60-DS for
extension from both
sides



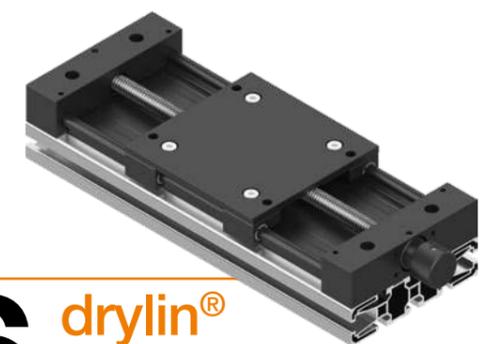
90 **Low Cost
Automation**
Humanoid robot: iggyRob for
cost-efficient automation



24 **drygear®**
Aluminium profile with plastic
gear rack components for
long travel lengths



56 **xiros®**
Cleanroom ball bearing with
high abrasion resistance



76 **drylin®**
drylin® linear module
SLW-06-70-FLS for maximum
strength in restricted space
conditions

Improve what moves

igus® answers ...

Solve the problems of tomorrow today with motion plastics®.



Maintenance-free igus® products

igus® motion plastics® have been specifically developed to operate completely without lubrication - thanks to high-performance plastics that function without maintenance over millions of cycles. Our solutions also offer a guaranteed service life of up to four years, based on extensive testing and decades of experience. With our smart plastics, we allow for predictive maintenance, maintenance intervals that can be scheduled and transparent service life forecasts.



PTFE-free or PFAS-tested solutions from igus®

igus® already provides a wide range of motion plastics® made from PTFE-free or PFAS-tested materials. This means that our products not only fulfil all current legal requirements, but are also future-proof - ideal for companies that want to switch to environmentally friendly production at an early stage.



Easier and faster with igus® online tools

There are intuitive online configuration tools for 95% of the igus® products and systems, which considerably simplify and speed up the design process. Our digital solutions demonstrably shorten the time required for design and development and enable less experienced engineers to work efficiently. Experience a proven increase in efficiency by using igus® online tools.



Cost reductions and efficiency with igus®

igus® provides customised solutions that have been proven to save 20 to 80% otherwise spent on parts and systems. With over 300,000 catalogue products and individually configured systems, we offer maximum choice. Thanks to our fast delivery times (one to five days) and seamless ERP integration, procurement is easier than ever, including simplified administration and ordering. Experience optimised processes - proven in numerous projects around the world.



Sustainability with igus® products

With igus®, our customers make an active contribution to CO₂ reduction. Our live online tool makes it possible to verify the carbon footprint of our products. We also promote the circular economy with our change® recycling programme and the wide range of products containing a high percentage of recycled materials. Together, we are shaping a sustainable future.



High maintenance costs and a lot of effort due to lubrication

Industrial customers are often presented with the challenge of keeping their machines and systems in good condition through regular lubrication and maintenance. This leads to considerable costs due to personnel, downtime, spare parts and the time spent on maintenance measures such as lubrication.



Legal requirements or regulatory factors: PFAS bans

The increasingly stringent legal requirements, such as the ban on PFAS, are a matter of concern for many industrial customers as common materials and lubricants often contain PFAS or PTFE additives.



High personnel costs and considerable time spent during the development process

Product design and development require specialised engineers with years of experience. Long familiarisation periods and complex design processes are a burden on many companies in terms of personnel and finances.



Cost pressure on purchasing and delivery times

Industrial customers are under massive pressure to reduce their material costs, optimise delivery times and reduce the complexity of their supplier base.



Proof of CO₂ reduction and promotion of the circular economy

Environmental regulations and the growing pressure to reduce CO₂ emissions are forcing companies to demonstrably implement their sustainability strategies and use raw materials efficiently.

... to current challenges

Innovation meets sustainability



Saving costs with motion plastics® for the industry and automation of tomorrow

igus® sets a positive example for innovation and sustainability and shows the latest product developments, which prove the innovative strength "made in Germany".

In times of economic uncertainty and growing pressure in terms of sustainability, igus® presents solutions that increase competitiveness and are eco-friendly at the same time. These products offer advantages such as being lubrication-free, which protects the environment and saves costs.

One example is the PTFE-free product range that igus® has created to offer alternative materials without harmful compounds. In addition, an energy chain series made from recycled material was presented that reduces the CO₂ footprint by 80% without increasing costs or compromising quality.

In addition to these developments, igus® continues its research into pioneering solutions for specific applications. An example is the dry cleanroom for battery production, where the new igus® products are particularly durable and achieve the highest cleanroom classes.



Sustainability at igus®



Sustainability well thought-out

1 Production and energy supply

On the road to climate neutrality

A lot has happened in recent years: in 2023, we caused 85%* fewer CO₂ emissions than in 2020, largely due to the switch to green electricity in mid-2021 and to green gas in October 2021. Our goal of being CO₂-neutral with our buildings and production by 2025, in accordance with the requirements of Scopes 1 and 2, remains in place. The current status shows that we have already achieved **92%** of the target. Another step in this direction is the new multi-storey car park, which has been equipped with façade greening.

Solar energy

igus® currently generates 500,000kWh per year through photovoltaic systems, and more are planned. In total, more than 2,000,000 kWh per year are possible.

Would you have known?

igusbal® pillow block bearings are often used in the bearings of large solar panels.

Sustainability at igus®

"Everything we do for our environment is capital well invested. We save raw materials, especially in the recycling sector."

Helmut Rath
Head of Control Engineering
IBG Automation

2 Lubrication-free motion plastics®

High-performance polymers can do a lot

Long service life, no additional lubrication required and up to 70% lighter than metal products, also resistant to dirt, chemicals, corrosion, heat and cold.

Lubrication-free

How much can be saved with motion plastics®? A joint study by RWTH Aachen University and igus® is the first to investigate how many kilogrammes of lubricant and associated costs can be saved in applications if conventional metal bearings are replaced with lubrication-free polymer solutions from igus®.

Improve what moves

In material and product development, we work on the continuous improvement of friction and wear properties in order to improve the durability of the products and thus conserve resources.

CO₂ equivalent calculator

Calculation of the CO₂ equivalents for our iglidur® and igumid® G materials in order to incorporate possible CO₂ reductions into the material development. Please do not hesitate to contact us.



3 Recycling: change®

Recycling platform

With change®, we have launched an online platform that accepts recycled material and offers recycle. Recycling companies, those willing to recycle, regranulate users and suppliers come together here. Become our partner for a successful circular economy.

Recycling plastics: You can send old energy chains and other industrial plastics (PA, PBT, POM, and many more) to our recycling system in just a few steps. We will take care of a quick pick-up.

Buy recycle: Do you want to produce more sustainably and use recycled plastic? On the change® marketplace, you can find different materials with just a few clicks. Can't find what you're looking for? Contact us.

Sell recycle: Recycling companies, recyclable material suppliers, recycle distributors and enthusiasts: we want you to keep technical plastics in circulation. Become a partner in our network.

Join now:
changeigus.eu

... and through partnerships

80% of plastic in the oceans comes from rivers



4 Plastic Fischer

8 to 12 million tons of plastic end up in the oceans every year, mostly via rivers. Plastic Fischer starts right here and collects the rubbish in the rivers, which is more cost-effective than fishing in the sea.

How does the project work? Local people use special devices to fish the rubbish out of rivers and receive a regular income in return. The collected plastic waste, which is mostly classified as non-recyclable, is forwarded to thermal treatment plants: it is incinerated with energy recovery.

igus® finances the collection of a total of 10,000kg of plastic waste. For the duration of the collection, at least 34 people in Kanpur and Mangalore (India) could be given a regular income, and on some days more people are employed.

"We prevent plastic from entering the oceans by stopping it in rivers."

Plastic Fischer

More about the project:
plasticfischer.com

Digital heroes

With enjoyneering® and our digital services and solutions, you can achieve top engineering performance with ease. Use our digital services to make your work easier, increase creativity or secure further benefits.

Revolutionary AI product search

Discover the optimisation potential of thousands of applications in just a few seconds.

Discover optimisation potential in a matter of seconds - with igusGO®, our innovative app with artificial intelligence. Simply take a photo of your existing application and its environment, and the app's intelligent technology will immediately show you which igus® products can make your machine lubrication-free, low-maintenance and more efficient. This not only saves costs, but also raises the technical performance of your application to a new level.

The best thing: igusGO® provides you with insights into hundreds of successfully implemented solutions on comparable machines and components - from robotics and agriculture to furniture. You benefit directly from proven application examples and best practices. The app takes you directly to the shop, where you can find all the information on the proposed products, order them conveniently or make an enquiry without obligation.

Take the opportunity to improve your machines quickly and in a targeted manner. With igusGO® optimisation is not just easy, it's an experience. Try it out now for free and discover the potential of your application!

igus.eu/igusgo



Collaborative engineering in the igus® metaverse

The virtual world of the iguverse® makes the seemingly impossible become real

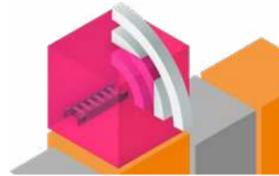
The iguverse® revolutionises engineering with digital twins and virtual 3D models. Replace physical prototypes, recognise weak points at an early stage and reduce development times by up to 30%. The platform helps you save costs for trade shows and transport, increases productivity by up to 25% and allows for immersive presentations, repairs and training - without any travel costs. Studies show: 35% better learning success and enhanced creativity. The iguverse® offers sustainable product development and fast decision-making in a user-friendly environment.

igus.eu/iguverse



Low Cost Automation

The ReBeL® Cobot is inexpensive, flexible and ideal for collaborative tasks, e.g. in gastronomy, production or assembly. The control system can be automated or virtual.



Industry 4.0 & internet of things

With our smart plastics for Industry 4.0 and the internet of things, you can extend product operating times and avoid system failures. i.Sense is used for condition monitoring and i.Cee for predictive maintenance.



Online configurator tools

With our online configurators, you can calculate the service life and other parameters of our motion plastics®. Thanks to the service platform kopla, you can now develop your own customised configurators in a fast and inexpensive way.



Marketplace & app for robots

RBTX® is our marketplace for Low Cost Automation, which connects users and suppliers and saves time and money. You can also use our App RobotCtrl to program robots from a wide range of manufacturers with universal software.



Individual special parts

motion on demand offers you the best solutions for your special parts: "speediPrint" 3D printing service with all igus® materials and manufacturing processes, CNC service for machined parts and tolerance checks.



Online consultation at trade shows

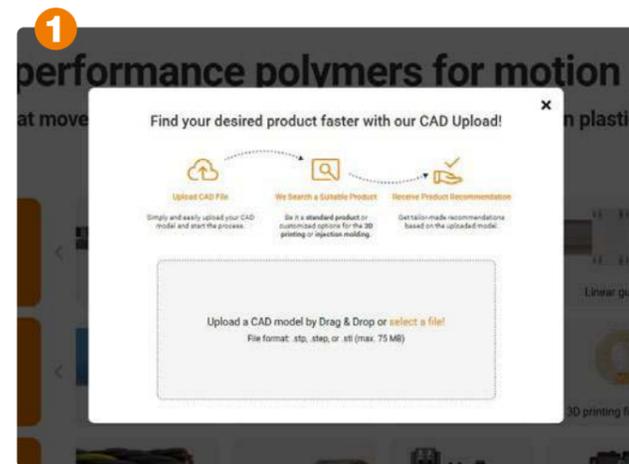
With the Remote Scout, we offer you a personal online consultation or presentations as an alternative to visiting the trade show. Our experts will take you on a tour of our trade show stand - as if you were on site.

Free download: igus.eu/enjoyneering

You can find all digital services and solutions in our brochure.



From CAD directly to motion plastics® solutions in less than a minute



AI service online with three manufacturing processes

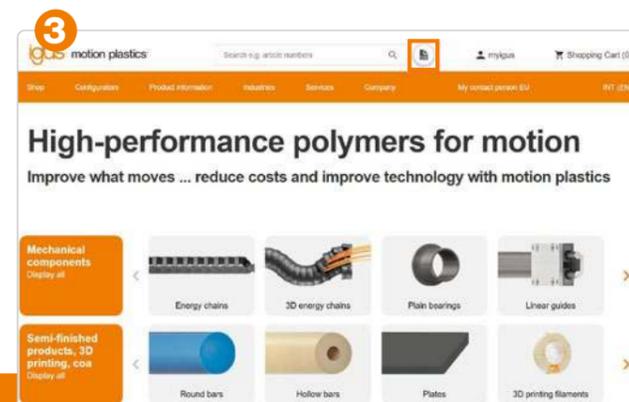
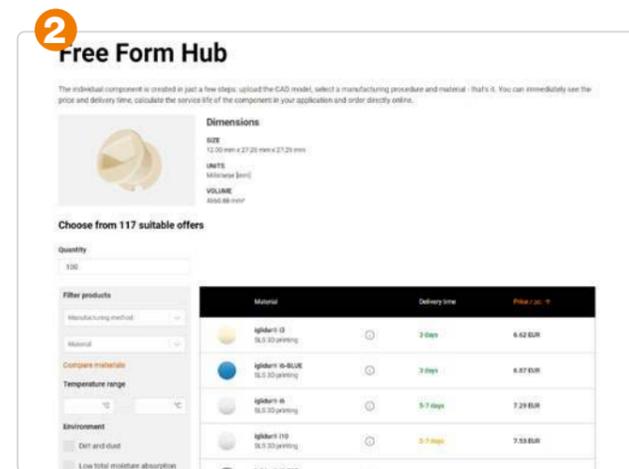
After uploading the file ① the CAD part is analysed using artificial intelligence and compared with the igus® product range. If they match, suitable standard solutions are suggested from which you can select the best option for your application.

If no igus® standard product can be found, at the tribo parts service we can calculate the production of your individual component using 3D printing, injection moulding and now also CNC service ②.

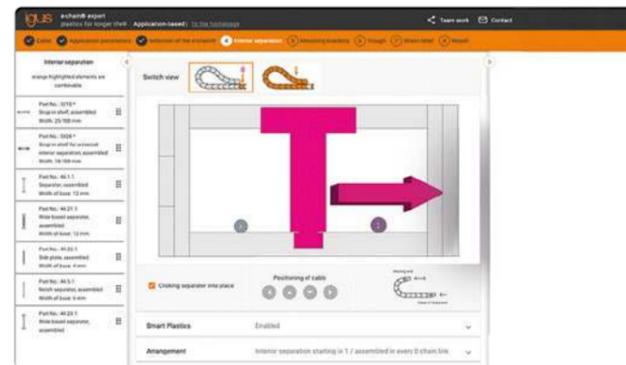
You can see the price and delivery time immediately and use filters to find the most suitable materials for you from over 62 motion plastics®. You can easily design your application to be lubrication-free and order or enquire about the solution online - with no minimum order quantity.

With igus® tribo-parts service you get your igus® solution faster - as a standard version or customised for you. This saves time and money: igus.eu/ffh

You will find the service right on the home page - directly next to the search field ③.



Further improved digital tools and services

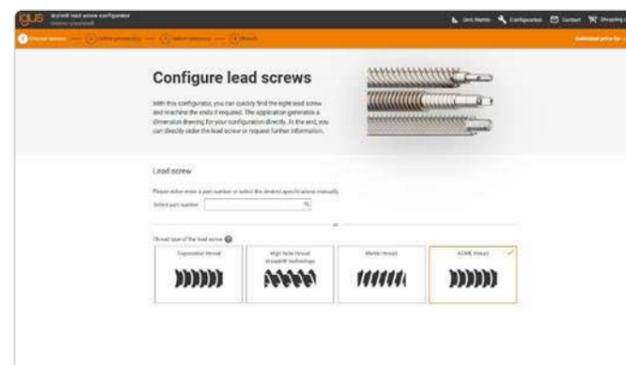


e-chain® expert

smart configuration

When configuring energy supply systems for linear movements, include the appropriate smart plastics components (EC.P, EC.W, EC.WLC) for predictive maintenance right away.

igus.eu/eke



Lead screw and shaft configurator

Configure inches

Configuration of lead screws and shafts with imperial dimensions including automated creation of 2D drawings.

igus.eu/dsk

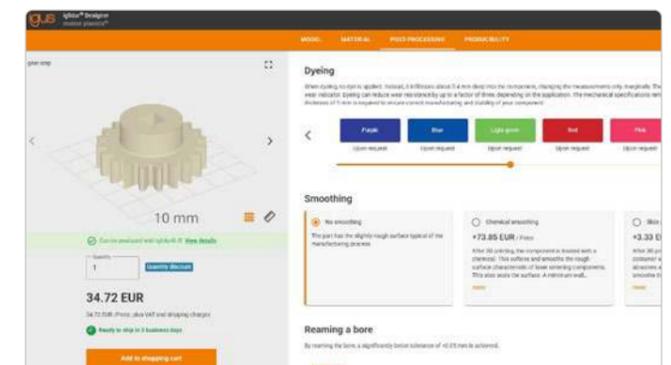


chainflex® service life calculator

Calculate faster

Faster calculation and modern design. Know exactly how long the cable will last in your application! Including certificate and price check of your selected cable to suit your individual application.

igus.eu/chainflexlife



3D printing service

Choose from 12 colours

With the igus® 3D printing service, you can find your customised component in just a few steps. The components can now be dyed in 12 colours.

igus.eu/idd

Does it have to be this way?

Improve what moves.

The world is moving constantly. And when something moves, that's where we come in and offer our customers technical innovations: **improve what moves!**

This is the guiding principle that drives our manufacturing efforts. We work with you to improve the technology of your applications or reduce your costs. Ideally, we achieve both: tech up, cost down. By developing products made from low-wear high-performance plastics, we improve motion worldwide, as our products always offer the following advantages:

- Long service life
- No additional lubrication necessary
- Up to 70% lighter than metal products
- Resistant to dirt, chemicals, corrosion, heat, and cold



Labelling 650,000 fewer bottles per year due to 13 hours of maintenance Does it have to be this way?

The company Krones goes lubrication-free - filling and packaging systems

Problem: 650,000 fewer bottles labelled per year due to 13 hours of maintenance

igus® solution: lubrication-free, smooth-operating plain and linear bearings that require no maintenance. The use of lubrication-free bearing technology eliminates the costs for maintenance during the year and increases efficiency. The system can be serviced in a controlled manner at the end of the year and does not require any additional attention from the operating personnel.



Further savings potential in our video series.



Sustainability

For example with the change® programme:

- Recycling made easy - as a manufacturer of high-performance plastics, the sustainable and resource-saving use of plastic is very important to us at igus® GmbH. Therefore, with Change®, we have created a platform for the circular economy to make the recycling of engineering and industrial plastics very easy.

Digital

For example with RBTx®:

- The RBTx® platform brings users and suppliers of low-cost robotics components together quickly and easily. Users can find linear robots, robot arms, end effectors, camera modules, control systems and much more centrally in one place - and can find individual components or assemble entire robots. At the same time, component suppliers can market their products on the RBTx® marketplace in a targeted and convenient way.

Tech up

For example with e-chains®:

- Over 80% less installation space possible
- Energy chains are the most modular and probably the most compact form of energy supply system, especially if energy, data, air and fluids have to be transferred in one system.

Proof

We are sure of one thing: our products last longer!

How do we know?

- From the more than 15,000 annual tests from our test laboratory, which we have been operating since 1985. From an increasing number of smart plastics that monitor material condition and notify us of replacement in good time. From our customers, who always give us valuable feedback.
- We therefore guarantee the long service life of our solutions and give you a guarantee of up to four years on all products that you can find in our online service life calculator.

Cost down

For example with iglidur® plain bearings:

- Our self-lubricating plain bearings reduce your maintenance costs and completely save additional expenses for lubricants - with no minimum order quantity up to high volume. Our plastic plain bushes are up to 89% more cost-effective than plain bearings made of steel or bronze.
- Example: €2.37/piece versus €0.25/piece Composite bearing steel/PTFE, size 2020 against iglidur® MSM-2023-20 (Price for a purchase quantity of 100 pieces)

Excellent products and services

... 2023
igus.eu/drive-chain 2.0
igus.eu/e-tract

2023
Plastic bicycle
igus.bike

2023/2024
Industrial metaverse
iguverse.eu

2025
Office Chain OCO
igus.eu/oco

Awards represent recognition of our achievements, and we are very pleased to receive them.

The awards range from renowned design awards, such as those from iF since 1987, up to recognition as a family-friendly company. This is also the perfect way to describe our company. Innovation is what drives us and we continuously strive for improvement, both in our products and in our greatest asset, our employees.

igus.eu/awards

2025



Product of the year
Award in the materials category from Kunststoff Magazin for the PTFE-free material iglidur® JPF

Nominated for Hermes Award
igus® Mobile Shore Power Outlet (iMSPO) has been nominated for the international technology award at Hannover Messe



2024

Port innovation of the year
Award from the Electric & Hybrid Marine Expo Europe for the igus® Mobile Shore Power Outlet (iMSPO)

Company with top career opportunities
Award from Focus Money, a German business magazine, and Germany's Test Seal

Germany's best training companies
Test winner among rubber and plastics industrial companies, honoured by Focus Money and Deutschland Test

2023

Employer of the Future
Award from the German Innovation Institute for Sustainability and Digitalisation

Fair Company 2023
Award from the Handelsblatt newspaper and the Institut für Beschäftigung und Employability

Company with top career opportunities
Award from Focus Money, a German business magazine, and Germany's Test Seal

Most crisis-proof companies in 2023
In the SZ Institut rating, igus® placed 281 on the list of 300 most crisis-proof companies in Germany

German Brand Award Winner 2023
Award for our iguverse®

2022

Excellence in Production / toolmaker of the year
iform toolmaking was honoured by RWTH Aachen University and the Fraunhofer Institute

North Rhine-Westphalia – Economy in transition
igus® is one of two award-winning companies in the category "SME & Group"

Rhineland Business Award
Change® recycling programme is the winner in the category "Sustainability"

Top Career Opportunities
Awarded the Deutschlandtest seal of approval by Focus and Focus Money

Germany's Favourite
Seal of approval for the igus:bike® concept, awarded by the Süddeutsche Zeitung

Digital Champion and Company of the Year
Honoured by Focus Money

iF World Design Index
igus® is among the top 25 companies in the industrial design category and among the top 100 design winners

2021

The 500 secret world market leaders
igus® in a special issue of WirtschaftsWoche

Cologne Business Award
Winner of the prize from Wirtschaftsclub Köln e.V.

Exemplary companies in the crisis
igus® among the 300 companies honoured by the IMWF and F.A.Z.-Institut

Highest reputation
1st place in the sector "Rubber and plastics industry companies", honoured by IMWF for DEUTSCHLAND TEST

Digital Innovators: the most innovative companies in Germany
igus® has 54% innovative strength according to CHIP.de

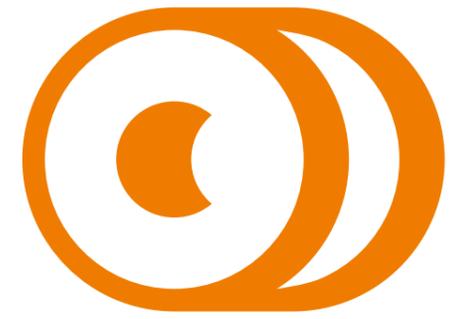
2020

Germany's top family business
igus® in 17th place, awarded by WirtschaftsWoche



GO ZERO Lubrication ... save lubrication time and costs

iglidur[®] rollers



- Tech up
- Cost down
- Proof
- Sustainability
- Digital

- 20** High UV resistance
iglidur[®] P360B
- 21** UV-resistant
high-performance roller adapters
P360BRLBM plastic outer
- 21** Durable, robust plastic rollers
JRLFM skate wheels

Quick consultation
anywhere at any time



In person
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+49-2203 9649-8309
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Chat
Online and
WhatsApp
igus.eu/chat

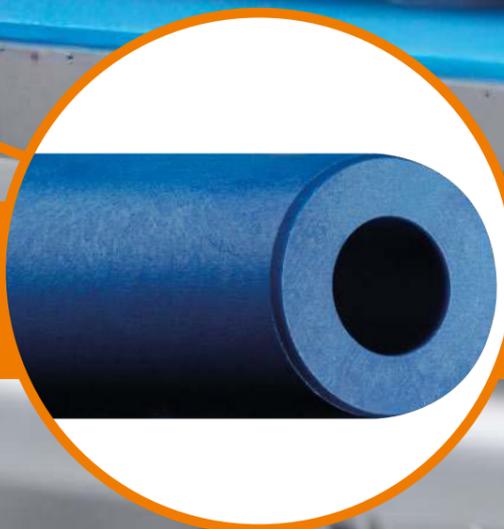


On site
Sales representative
Roadshow/Trade show
igus.eu/on-the-move



Tight belt deflection

In transport technology, Ishida relies on knife edge rollers made of iglidur[®] A250, an particular wear-resistant all-rounder material for the food industry.



3 steps to your required product

Simply click on the configurator, select the roller design and fill in the parameters: the customised CAD model is immediately available for download: igus.eu/CAD-rollers

igus.eu/news-rollers

High UV resistance



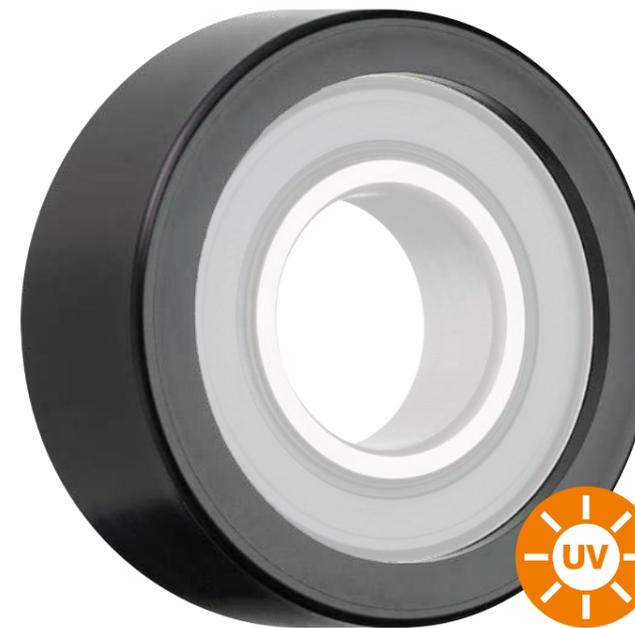
New

UV-resistant roller material for outer

iglidur® P360B

P360B is a new material that is particularly impressive due to its low-wear operation and cost efficiency - ideal for applications where economy and durability are required. Particularly noteworthy is the deep black colouring, which makes iglidur® P360B the preferred material for visible parts. The material remains strong and crack-resistant even when exposed to intense sunlight. Thanks to its excellent processing properties, P360B is ideal for customised solutions, even with complex geometries or special functional requirements.

- ▲ Quiet, low-wear and vibration-dampening
- ▼ Less maintenance work due to running rail-friendly design
- Material shows no effects of UV radiation after 2,000 hours of weathering (tested according to ASTM G154)
- No additional lubrication is required due to the incorporated solid lubricants



New

UV-resistant high-performance roller adapters

P360BRLBM plastic outer

The plastic outer made of iglidur® P360B is the all-rounder material for ball bearings when it comes to low-wear operation. It is not only lubrication-free and maintenance-free, but also UV-resistant. The extremely durable material extends the maintenance intervals, which is also cost-efficient thanks to new production options. The first available size is suitable for ball bearings of the installation size 6004.

- ▲ UV-resistant, quiet and wear-resistant
- ▼ Cost-effective, durable material; therefore longer maintenance intervals
- More than three times the service life compared to PA roller adapters, test parameters: 10km/h and 750N
- Zero lubrication required



Plus

Durable, robust plastic rollers

JRLFM skate wheels

Durable, economical and ideal for higher loads. The lubrication-free plastic skate wheels are the ideal endurance runners for surface pressures up to max. 10MPa. They are now available in five dimensions between 19 and 40mm. The size with an outer diameter of 40mm is new.

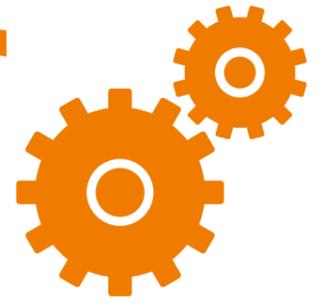
- ▲ 1:1 replacement possible with ball bearings of the same size, such as e.g. installation sizes 635 and 16100
- ▼ Resistance to dust, dirt and grime; less maintenance costs
- Six times longer service life compared to standard POM skate wheels, test parameters: 2MPa and 0.6m/s
- Lubrication-free operation saves resources and protects the environment





GO ZERO Lubrication ... save lubrication time and costs

drygear[®] gear and gearbox technology



- ▲
Tech up
- ▼
Cost down
- Proof
- Sustainability
- ◐
Digital

24 **For long travels**
Aluminium profile with plastic gear rack components

25 **Robust lane adjustment with self-locking**
Apiro[®] trapezoidal lead screw with 4:1 ratio

25 **Chemical resistance**
iglidur[®] A500 gears

Quick consultation anywhere at any time



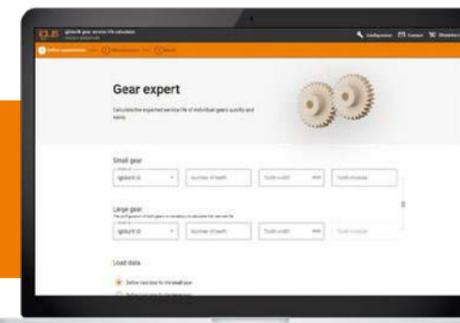
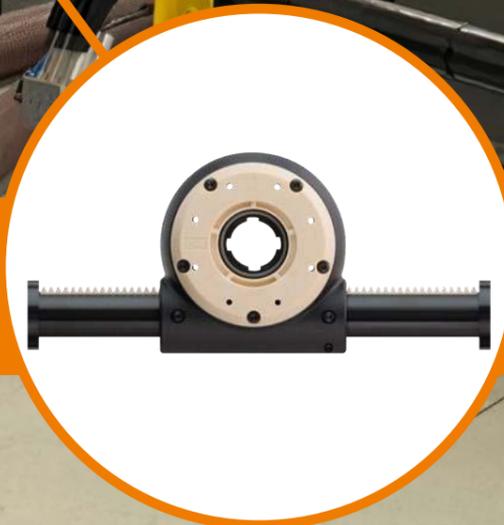
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Chat
Online and WhatsApp
igus.eu/chat



On site
Sales representative Roadshow/Trade show
igus.eu/on-the-move



Individual configuration
With our gear configurator you can configure straight-toothed helical gears (single and double) as well as straight-toothed double gears:
igus.eu/gear-expert



Efficient automation
Boka Automatisierung GmbH relies on drygear[®] Apiro[®] gearboxes for format adjustment of various load-bearing sizes.

igus.eu/news-drygear

For long travels



New

Customised rack lengths

Aluminium profile with plastic gear rack components

Long travel lengths with cost-effective S180GM-GR-100 rack and pinion elements and black anodised aluminium profile.

- ▲ Quiet
- ▼ Individual elements interchangeable instead of the entire rack
- Achieved service life of more than 2,000 hours at 2.5Nm and a speed of 65rpm
- Lubrication-free operation saves resources and protects the environment



Update

Robust lane adjustment with self-locking

Apiro® trapezoidal lead screw with 4:1 ratio

The robust RL-A10 self-locking lane adjustment is characterised by the use of the Apiro® trapezoidal lead screw with a 4:1 ratio. In continuous operation, the lane adjustment is capable of achieving a torque of up to 2.5Nm and works completely lubrication-free, which minimises maintenance requirements.

- ▲ Lightweight and efficient thanks to the use of motion plastics®
- ▼ Up to 98% less downtime thanks to automated lane adjustment
- Tested in an application at igus® with 5kg load at a belt distance of 200mm
- 100% lubrication-free



Update

Chemical resistance

igidur® A500 gears

Gears made of iglidur® A500 are available with 20, 30 and 40 teeth with tooth module 1 and approved for direct contact with food. iglidur® A500 is a dimensionally stable material with excellent wear resistance even at high temperatures.



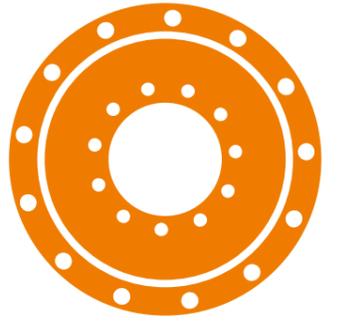
- ▲ Resistant to 93% of the chemicals tested
- ▼ The endurance runner for high temperatures in the food sector, compliant with EU Regulation 10/2011 EC
- Up to three times higher wear resistance than conventional high-temperature material at 64rpm, 1,440° pivoting and 2.25Nm up to tooth root breakage
- Environmentally friendly, no additional lubricants needed





GO ZERO Lubrication ... save lubrication time and costs

igidur® slewing ring bearings



- ▲
Tech up
- ▼
Cost down
- Proof
- Sustainability
- 📡
Digital

28 **Compact and durable**
igidur® PRT-02-20-AL-CP

29 **Flush mounting**
igidur® PRT-02-20-AL-DRI

30 **Large and low weight**
igidur® PRT-05-94-PC

Quick consultation anywhere at any time



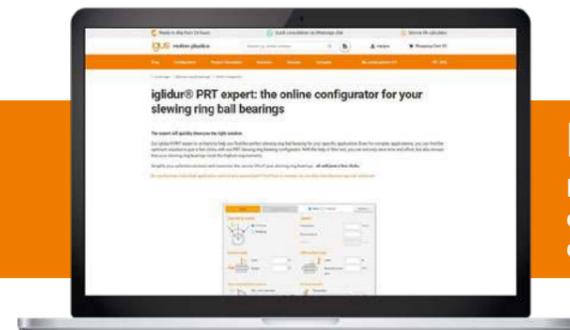
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On site
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Easily configure slewing ring bearings

Determine the PRT slewing ring bearing for your individual application, the corresponding service life and the best price-performance ratio simply, quickly and effectively: igus.eu/PRT-expert

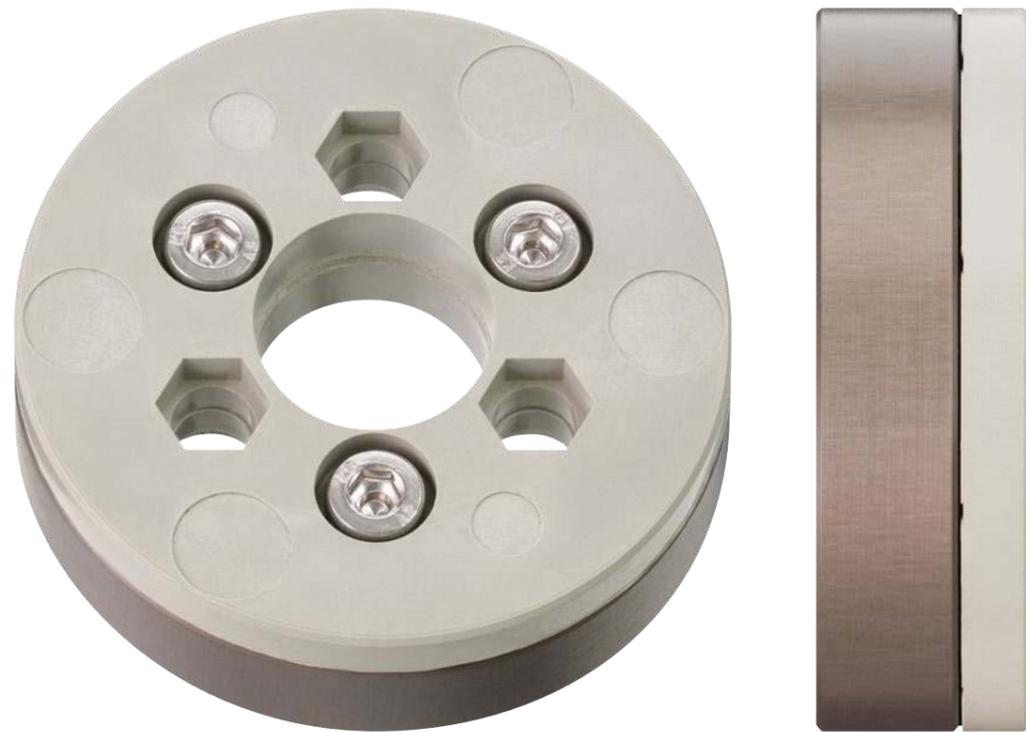


Less effort, more efficiency

igus® supplies lubrication-free components and motion solutions - economical, sustainable, immediately available for your systems and machines, and a cost-effective solution.

igus.eu/news-prt

Compact and durable



New

Compact solution for tight installation spaces

iglidur® PRT-02-20-AL-CP

The new PRT-02-AL-CP is space-saving, strong and lightweight - ideal for tight installation spaces. The slewing ring bearing is available in various installation sizes.

- ▲ Compact design for cramped installation conditions
- ▼ Cost-effective alternative to the PRT-04-CP with savings of up to €70
- Achieves an axial load capacity of up to 45,000N
- Lubrication-free operation saves resources and protects the environment



Flush mounting



New

Slewing ring with integrated spacer ring

iglidur® PRT-02-20-AL-DRI

The new PRT-02-20-AL-DRI with spacer ring enables simple, flush installation on flat surfaces - without any undercut or cut-out. The slewing ring bearing is available in various installation sizes.

- ▲ Integrated spacer ring for simple, flush installation
- ▼ No additional machining work on installation surfaces
- Derived from the proven PRT-04 design with spacer ring
- Maintenance-free through lubrication-free bearing technology



Large and low weight



Study

Now also for larger applications

iglidur® PRT-05-94-PC

The solid plastic slewing ring bearing PRT-05-94-PC offers durable slewing ring ball bearings at a low price - in a new size and with at least 75% regranulate for maximum sustainability.

- ▲ New installation size for higher loads
- ▼ Simplified design consisting of only two components
- Tested in the iglus® laboratory: 20,000N static axial load capacity
- Made from at least 75% regranulate



From development

Think big, develop cost-effectively

With the PRT-05-94-PC, we are expanding our low-cost slewing ring series with a larger installation size in direct response to feedback from the market. Until now, the PRT-05 series was only available in a small version, designed for simple, space-saving applications. But it soon became clear that the concept was in tune with the times - and there are many areas of application where a larger diameter is required.

"Many customers wanted precisely this simple, cost-effective and sustainable solution - but for larger applications," says Jonas Kemp, developer of slewing ring bearings at iglus®. "For example, for panelling, lightweight control panels or display adjustments. So we have expanded the PRT-05 series accordingly."

What makes the PRT-05 so special is its consistent focus on efficiency and sustainability. The rotary table is made entirely of plastic - without any balls or metal components - and is quick and easy to assemble. The new PRT-05-94-PC also follows this line and offers a robust solution for applications where durability, lightweight and an attractive price-performance ratio are more important than maximum precision.

"It was never our intention to develop a high-end bearing," emphasises Jonas Kemp. "It's a well thought-out, affordable solution for simple rotary movements - and that's exactly where the PRT-05-94-PC comes into its own. The larger installation size opens up new fields of application in which users can rely on a maintenance-free,

lightweight and inexpensive alternative - for example in furniture technology, presentation systems or simple machine superstructures. This turns a lean, low-cost idea into a solution that combines functionality with sustainability and at the same time offers significantly more flexibility."



Jonas Kemp
Development engineer iglus®

From premium to budget solutions!

Always lubrication-free always iglus®



**Slewing ring bearings
PRT-02-30-AL
from €54.77**

**Particularly
lightweight**



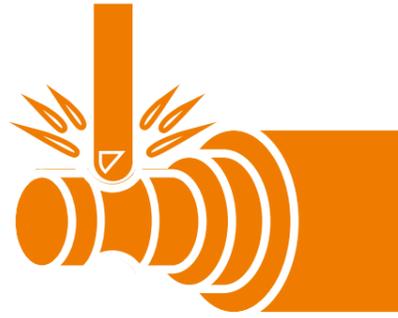
**Slewing ring bearings
PRT-05-15-PC
from €9.66**

**Most favourable
low-cost solid plastic
slewing ring bearing**



GO ZERO Lubrication ... save lubrication time and costs

iglidur® bar stock



- ▲
Tech up
- ▼
Cost down
- Proof
- Sustainability
- ◐
Digital

- 34** **Versatile, robust and sustainable**
iglidur® C300 round bars
- 36** **Mechanical load capacity**
Chain guide profile
- 37** **New design, new features**
CNC service
- 38** **Supportive sliding**
iglidur® liner tribotape® A160 soft
- 39** **Maximum adhesion**
Anti-slip tape

**Quick consultation
anywhere at any time**



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Jörn Küppers
+49-2203 9649-7466
jkueppers@igus.net



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Self-locking device

To ensure that the movement unit of the eClimber functions smoothly and maintenance-free, iglidur® liners and plain bearings are used on the main spring and cable deflection.



Price and service life in 3 minutes

Supported by helpful functions such as multi-part upload, feasibility analysis, tolerance check and express option, you will receive all the relevant information in just a few minutes: igus.eu/cnc

igus.eu/news-barstock

Versatile, robust and sustainable



New

Low coefficient of friction, high wear resistance

iglidur® C300 round bars

Bar stock made of iglidur® C300, currently available in Ø 25mm, impress with excellent sliding properties, low moisture absorption and extreme wear resistance, whereby remaining dimensionally stable even under high loads of up to 60MPa. They are ideal for mechanical engineering, automotive and conveyor technology. In addition, iglidur® C300 scores with its chemical resistance.

- ▲ Chemical-resistant
- ▼ Long service life
- Withstands temperatures up to +150°C
- Environmentally friendly, zero lubrication required
- 🔗 Order individual machined parts made of bar stock online: igus.eu/cnc



From the development department: interview with David Fingass, Development Engineer bar stock iglidur® C300 bar stock: for the highest demands

How did you come up with the idea of optimising iglidur® C300 specifically as a material for plain bearings?

David Fingass: The idea arose from the increasing requirements in plain bearing technology. Our customers were looking for a material that would function reliably over the long term even under high mechanical loads and at the same time remain dimensionally stable under changing environmental conditions. At the same time, we saw a gap in the temperature range. Our specially developed iglidur® C300 can withstand temperatures of up to +150°C - this precisely fills the gap between materials that can only be used up to around +100°C and materials that can withstand significantly higher temperatures, but are also considerably more cost-intensive. If customers require a product for applications designed for up to +150°C, they can choose a more cost-effective solution with iglidur® C300. This creates a real alternative and increases flexibility for technical applications.

Can you explain the sliding properties of iglidur® C300 in more detail? What makes it particularly suitable for plain bearings?

David Fingass: iglidur® C300 has a naturally smooth surface and a low coefficient of friction. In practice, this means that iglidur® C300 plain bearings can work effectively with no lubrication - an advantage for applications that rely on lubrication-free systems, such as in automotive or conveyor technology.

In addition to the sliding properties, wear resistance plays a key role.



Our CNC service enables you to order your machined parts quickly and easily: igus.eu/cnc

Which areas of application do you see as particularly suitable for plain bearings made of iglidur® C300?

David Fingass: iglidur® C300 plain bearings are ideal for mechanical engineering, especially for applications with high loads, precise guides and lubrication-free movements. The material iglidur® C300 has also already proven itself in the automotive industry, for example in chassis components or joints. Likewise, iglidur® C300 plays a major role in conveyor technology, where durable bearings are required that work reliably even with constant movement and high abrasion. Thanks to its versatility, iglidur® C300 is a real all-rounder in plain bearing technology.

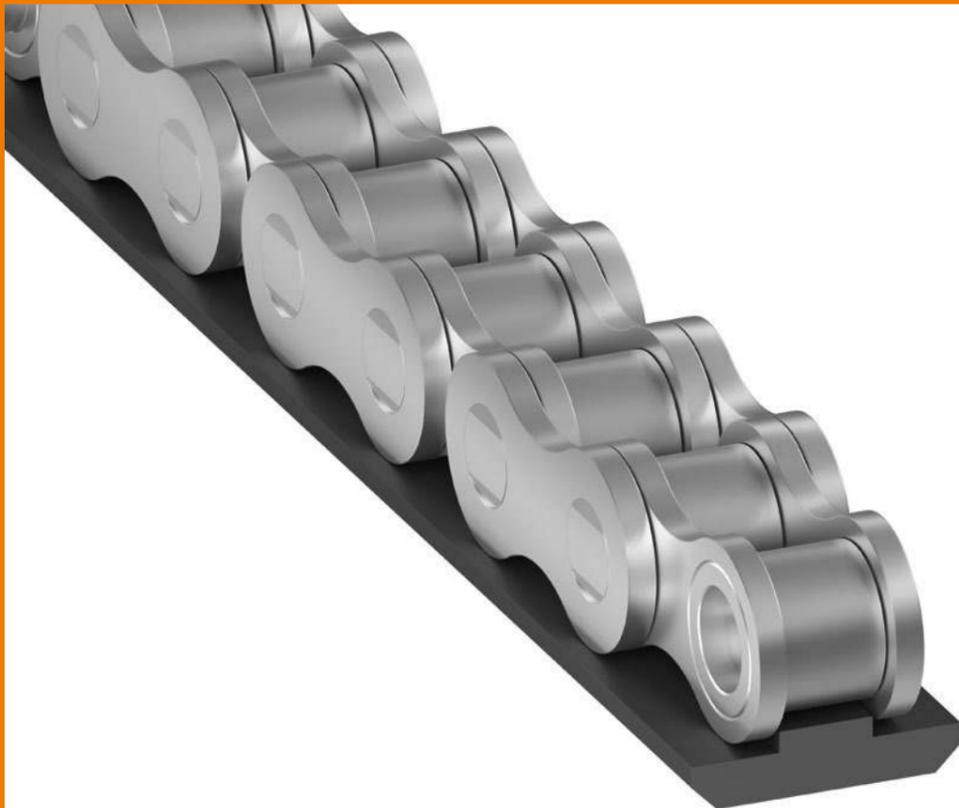
Technical data

Min. temperature: -30°C
 Max. temperature: +150°C
 Rotating coefficient of friction [μ]:
 0.09 - 0.15 at +23°C,
 1MPa and 0.3m/s against steel
 Rotating wear [μm/km]:
 0.43 at +23°C, 1MPa and 0.3m/s
 against 304 stainless steel



David Fingass
 Development Engineer bar stock

Mechanical load capacity



New

High media resistance

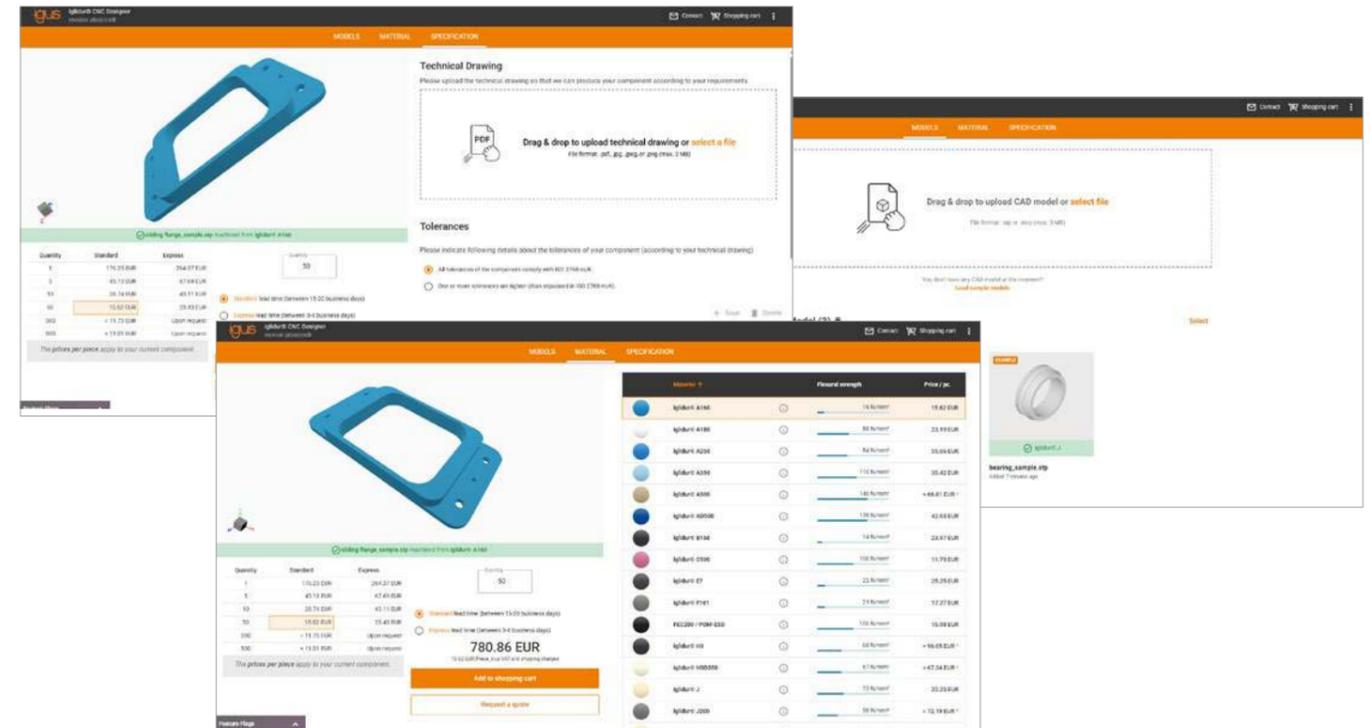
Chain guide profile

Chain guide profiles, such as our SFCG-12B1-25-10, have excellent wear behaviour and the high mechanical load capacity make them ideal for dynamic applications. It also impresses with its resistance to moisture, chemicals and temperature fluctuations.

- ▲ High wear resistance
- ▼ Maintenance-free properties reduce costs for lubrication and maintenance
- Developed at the customer's request and successfully in use for five years
- 100% lubrication-free



New design, new features



Update

Now even lighter, faster, better

CNC service

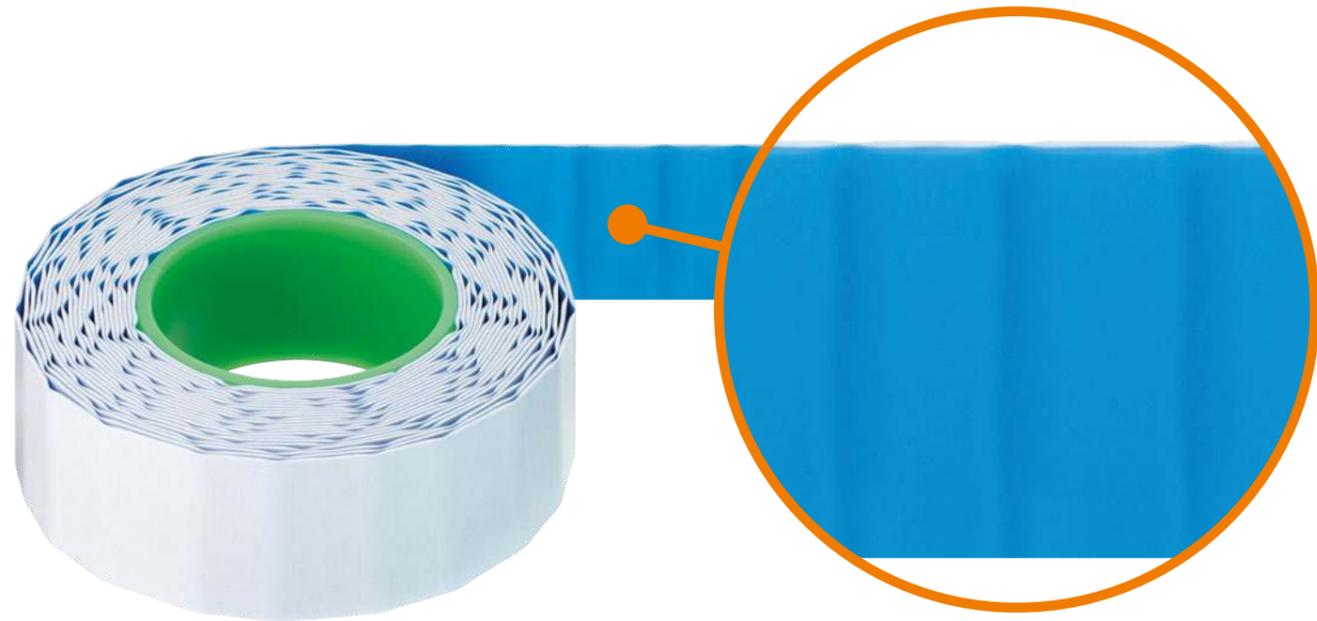
Our CNC service has a new design and offers improved operation and other new features. In addition to machined parts, it is now also possible to calculate components that require combined machining processes. You also benefit from a simplified and streamlined configuration of tolerances, threads and surfaces.

- ▲ Optimised user interface with interactive price table
- ▼ Improved overview and comparability for faster purchasing decisions
- Prices for almost 50 materials are directly comparable
- Lubrication and maintenance-free machined components

Find out for yourself: igus.eu/cnc



Supportive sliding



New

The tried and tested iglidur® tribotape® A160 - now with foam

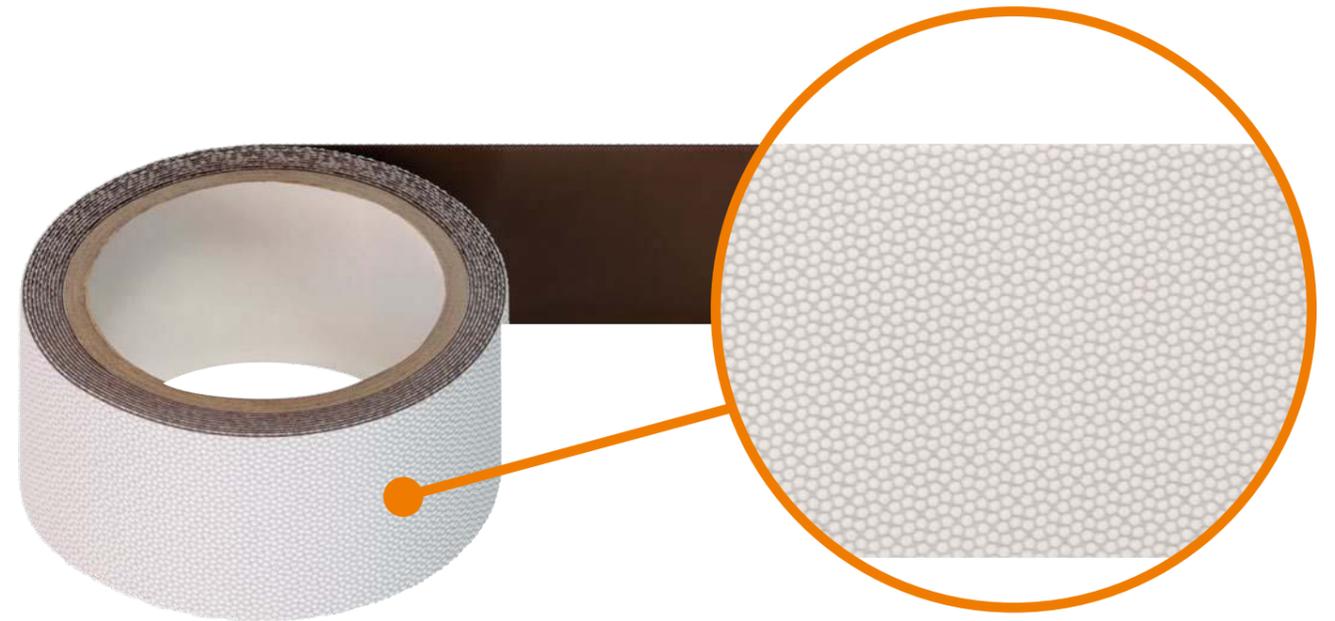
iglidur® liner tribotape® A160 soft

The new iglidur® A160 (A160-TS-005) liner with an integrated foam layer is available in three widths (100, 200 and 500mm) and reduces friction and shocks e.g. when transporting sensitive products such as bottles on conveyor belts, which minimises damage and makes the process much safer. The material iglidur® A160 is characterised by outstanding sliding properties, food suitability (EU/FDA-compliant) and high abrasion resistance, while the foam provides additional shock absorption.

- ▲ Dampening properties
- ▼ Up to 10 times more wear-resistant than other liners
- Successfully in use for over 10 years
- Wear protection prolongs your system's service life



Maximum adhesion



New

Prevent slipping and moving

Anti-slip tape

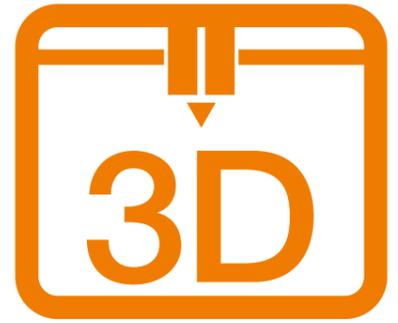
Unlike conventional materials that promote sliding, the anti-slip tape has been specially developed to hold products or objects in place. The non-slip surface guarantees precise fixation, while their robust material composition ensures long-term reliability. The anti-slip tape (AS100-T-005-050-G, AS100-T-005-100-G) is available in two widths: 50 and 100mm.

- ▲ Reliable hold for all surfaces
- ▼ Protection against damage
- Maximum adhesion validated by igus®
- Conservation of resources



GO ZERO Lubrication ... save lubrication time and costs

iglidur[®] 3D printing



Tech up



Cost down



Proof



Sustainability



Digital

42

It also works without PTFE

iglidur[®] i2000 resin for DLP 3D printing

**Quick consultation
anywhere at any time**



In person

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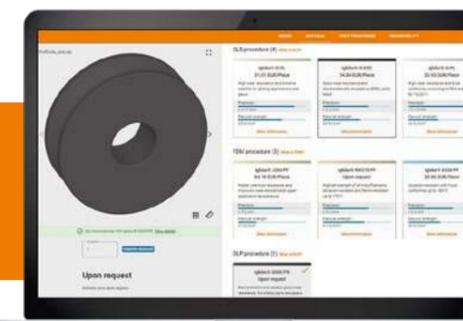
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ROGER DUBUIS



Floating in the display window

Thanks to the 3D-printed gears made from the tribologically optimised plastic iglidur[®] i3, vibrations are drastically reduced enabling a smooth mechanism.



Customised components in 1-3 days

With the igus[®] 3D printing service, find your individual component in just a few steps: upload your CAD model and choose a manufacturing procedure and material. You can also calculate the service life - that's it: igus.eu/idd

igus.eu/news-3d-printing

It also works without PTFE



New

Innovative, powerful, sustainable - completely without PTFE

iglidur® i2000 resin for DLP 3D printing

The new triboresin iglidur® i2000 for 3D printing impresses with its excellent friction and wear properties - completely without PTFE. It opens up new possibilities for heavy-duty applications with simultaneous environmental awareness.

- ▲ PTFE-free and PFAS-tested - sustainable and environmentally conscious. Further information: igus.eu/ptfe-free
- ▼ No minimum order quantity, no tool set up costs
- Coefficient of friction is halved compared to standard resins thanks to integrated solid lubricants, high strength, and good impact resistance. The service life is 50 to 80 times longer compared to standard technical resins.
- No additional lubrication necessary



From development

New 3D printing material for wear-resistant components without PTFE

Editorial team: You have developed a new 3D printing resin that is specially designed for moving, friction-loaded components and does not require PTFE at all. What exactly does that mean?

Expert: PTFE belongs to the group of PFAS, which are chemical compounds used in many plastics to reduce friction and minimise wear. Unfortunately, they are increasingly being criticised because they last long and are harmful to the environment. We have therefore developed a new material that does not require PTFE but still has excellent specifications for components that are constantly in motion during use, such as plain bearings or small gears.

Editorial team: Which 3D printers is this material intended for?

Expert: The resin can be easily processed using standard DLP, LCD or

SLA printers - devices that are already in use in many workshops, laboratories or development departments. No special hardware is required.

Editorial team: Why is this subject so topical right now?

Expert: There are clear plans to heavily regulate or ban PFAS in the coming years. Companies that switch to alternatives today are therefore on the safe side - both legally and in terms of sustainability. And this is exactly where we come in: our material is not only legally compliant, but also high-performance and ready for immediate use.

Editorial team: Who benefits from this new resin?

Expert: Especially companies that manufacture smaller functional

components - for example for prototypes, spare parts or batches in small quantities. Our material is a very interesting solution, especially where parts are moving and friction plays a role. As it can also be printed easily and precisely, there is often no need for time-consuming post-processing.



Daniel Cossu
Development Engineer
3D printing, Additive Manufacturing

Online 3D printing service

From concept model to component

Find the most cost-effective solution that works - with our service life calculation

With the igus® 3D printing service, you get your individual component in just a few steps: upload your CAD model and choose a manufacturing procedure and material - that's it. TIP: Use the service life calculator in the online tool and find the right material even faster.



igus.eu/idd

GO ZERO Lubrication ... save lubrication time and costs

igubal[®] spherical bearings

- ▲ Tech up
- ▼ Cost down
- Proof
- Sustainability
- 📱 Digital

46 **Lightweight and efficient**
Universal joint

48 **Maintenance without tools**
Pillow block bearing with quick-release fastener

50 **Designing without PTFE**
PTFE-free materials for the igubal[®] series

52 **From hot to hygienic**
Metal rod ends with plastic inner ring

Quick consultation anywhere at any time



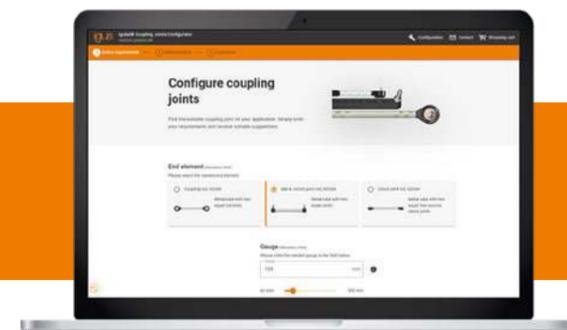
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3 steps to customised coupling joints

Select type, determine material and specifications and immediately receive suitable options including price. Download data sheet, share configuration or order directly: igus.eu/gcc



igubal[®] 2.0 rod ends

Our rod ends with iglidur[®] J inner ring enable maintenance-free precision in pedals from FATBLACKCAT for racing simulators.

igus.eu/news-igubal

Lightweight and efficient



Update

The new plastic joint: corrosion-free and lubrication-free

Universal joint

Our UJM plastic universal joint offers a clever alternative to metal: it is lighter, corrosion-free and reduces costs. There is currently a prototype for a 10mm shaft, which is fixed using a threaded pin. Further sizes and more compact designs are conceivable in the future - depending on the requirements of our customers and the respective areas of application.

- ▲ Corrosion-free, quiet and chemical-resistant
- ▼ Up to 45% more cost-effective than stainless steel versions
- Tested in the igus® laboratory: transmissible torque 6Nm at 25° deflection
- 100% lubrication-free operation - maintenance-free and clean



Interview with Jakob Fußbroich, Development Engineer igubal®

Plastic instead of metal: the facts

Jakob, what triggered the development of the new plastic universal joint?

Direct enquiries from our customers. Many users were specifically looking for universal joints that are corrosion-free and maintenance-free. This is exactly where our new plastic universal joint comes in.

What is the specific difference between the igubal® universal joint and conventional solutions?

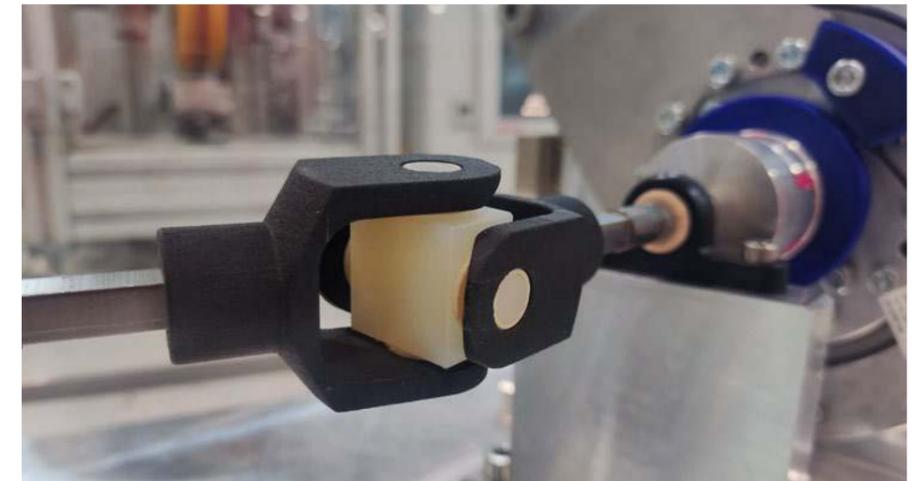
In addition to the points mentioned, a key difference is the weight: our solution is 30% lighter than stainless steel versions. With the help of FEM analyses, we have optimised the geometry of the joint so that it offers high strength and stiffness despite the reduced weight.

What are the specific savings provided by the new plastic universal joint?

The use of our universal joint eliminates maintenance costs, lubricants and the associated service calls. At the same time, users benefit from a long service life and consistently reliable performance. This not only reduces ongoing expenses, but also increases planning reliability in use.

Are there any limitations compared to metal universal joints?

Our universal joint is suitable for a wide range of applications. In certain areas



The prototype was manufactured from iglidur® i230 using the laser sintering 3D printing process and shows minimal wear of <0.2mm after 1,482,000 test cycles at 60rpm.

of application, such as high speeds, temperature resistance or high forces, it may make sense to take a closer look at the general conditions. That's why we consult closely with our customers in advance to find the right solution for the application in question.

How do you ensure that the universal joint is tailored to the specific requirements of your customers?

To do this, we use our self-developed test rig, on which we can individually configure key parameters such as torque, angle, speed and shaft connection. This allows realistic tests to be carried out that are precisely tailored to the respective customer application.

Jakob, what experience have you gained so far in test operation?

In tests to date, the joint has shown reliability. The performance remains strong over longer test cycles and the material behaviour meets our expectations. This confirms that our plastic universal joint offers a robust and reliable solution even under real operating conditions.

Do you have an application?

We look forward to receiving your message via our contact form. We would be happy to assist you!

igus.eu/igubal-universal-joint

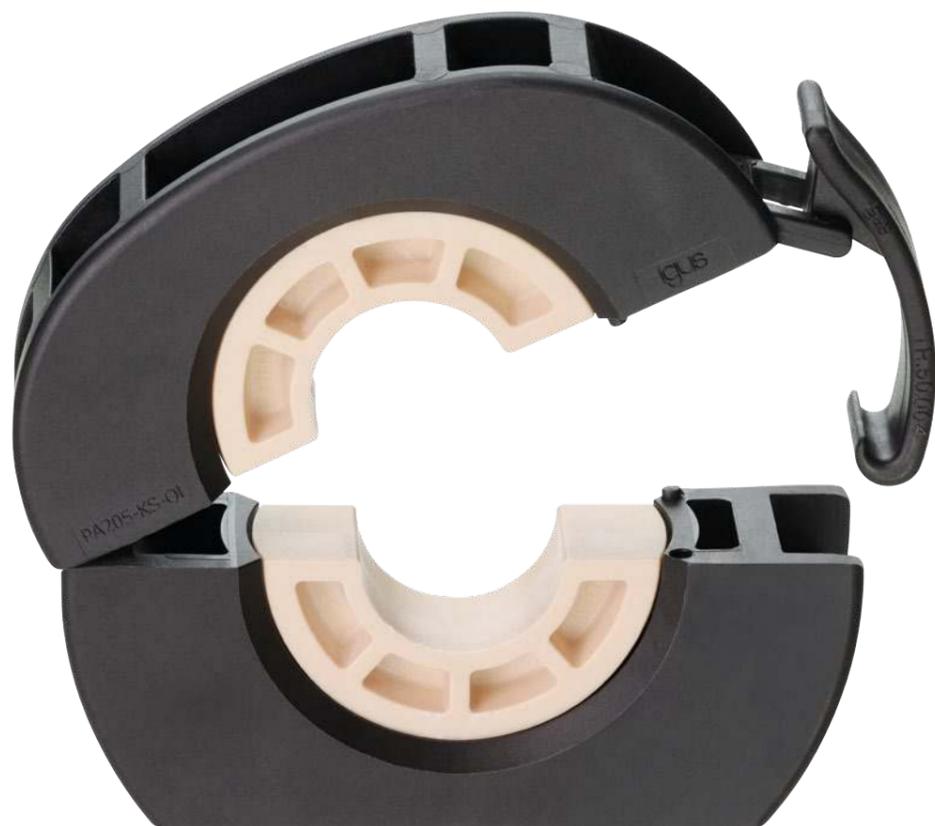


The UJM universal joint tested with 25° deflection.



Jakob Fußbroich
Development Engineer igubal®

Maintenance without tools



Update

Quick-release. Quickly done!

Pillow block bearing with quick-release fastener

The pillow block bearing with quick-release was designed for fast installation and spherical insert bearing replacement. It is ideal for applications that require frequent adjustments.

- ▲ Tool-free spherical insert bearing change in just a few seconds
- ▼ The time saved when changing bearings ensures low maintenance costs
- Up to 9kN static compressive strength (short-term) including safety
- Savings on lubricants



From development

Bearing technology rethought!

In the past, we have achieved significant improvements in fast set-up changes in production with innovative solutions. This includes our pillow block bearing with quick-release, which was already presented as a prototype at HMI 2025. This product innovation is now available as an injection moulded version and ready for delivery!

Imagine if maintenance was no longer an effort. No tools, no delays - just one simple step and your system is running reliably again. With our new pillow block bearing, we are setting new standards in terms of efficiency. The spherical insert bearing can be changed in just a few seconds, without tools and without loosening any screws.

It has never been so easy: open the lock, remove the spherical insert bearing, insert a new one, close - done.

This solution saves valuable time, minimises downtime and maximises productivity. The new pillow block bearing shows its strengths particularly in conveyor technology, where every second counts. Whether transporting paper, glass or concrete slabs - the quick and uncomplicated change of spherical insert bearings reduces downtimes and increases the efficiency of your processes.

In production, where machines have to be regularly maintained and adjusted, the quick spherical insert bearing replacement minimises downtimes. Bearings are also realising their potential in other industries. In the agricultural, food and construction industries, we also see potential to increase efficiency through our new product and reduce operating costs by eliminating the need for lubricants.



The pillow block bearing with quick-release in a tensile test.

Thanks to our injection moulding process, we are able to produce the quick-release bearing quickly and reliably. Each component is manufactured with maximum repeat accuracy and process reliability. This means: consistent quality and reliable function. Production cycles are short, delivery times are correspondingly fast and stock is available with no minimum order quantity. This enables flexible planning and a reliable supply.

The pillow block bearing was extensively tested in our in-house test laboratory to determine reliable load data. The results show a maximum static compressive strength of 9kN including safety. The current version is designed for a 25mm shaft diameter. 20mm or 30mm shaft diameters are conceivable in the future. Our experts will be happy to analyse your application and work with you to create the right solution.

One bearing - many advantages.

With our quick-release pillow block bearing (PA205-KS-J3EM-25-17-SP-QL), you can rely on a solution that speeds up bearing replacement times, conserves resources and reduces your downtime. The combination of easy handling, spherical insert bearing replacement in seconds and tested durability makes this new product the ideal solution for a wide range of applications.



Julian Lewerenz
Development Engineer igubal®

Designing without PTFE



Study

Movement for the environment - without PTFE

PTFE-free materials for the igubal® series

With iglidur® J3, iglidur® R and the proven housing material igumid® G, we rely on innovative materials, completely without PTFE and without compromising on performance.

- ▲ iglidur® J3 offers better wear properties compared to the PTFE-based iglidur® J
- ▼ Our plastic alternatives are up to 40% more cost-effective than comparable metal solutions
- Free from PTFE and critical PFAS, according to test method SQP M1227 (LC-MS/MS and GC-MS)
- Sustainable due to the absence of PTFE or perpetual chemicals



From development

Technology with responsibility

As a manufacturer of industrial components made from high-performance polymers, we use numerous materials that demonstrate their strengths in a wide range of applications. PTFE enables low-friction dry operation and replaces lubricants. A clear advantage in many industrial applications.

Some of our plastics benefit from PFAS (per- and polyfluorinated alkyl substances), which make them more robust, more wear-resistant and more resistant to weathering, chemicals and extreme temperatures. These specifications have made PFAS-containing materials an indispensable component of many technical solutions for decades.



The split PTFE-free igubal® flange mounted bearing made of igumid® G and iglidur® J3 in compressive strength test.

Their high resistance makes PFAS technically valuable, but ecologically problematic. The EU is therefore currently examining the possibility of regulating or banning certain PFAS compounds.

What are PFAS and PTFE?

PFAS are a group of synthetic chemicals that consist of carbon and fluorine atoms and can be gaseous, liquid or solid. Their structural diversity leads to a wide range of specifications. According to various sources, the group of



Ready today for tomorrow: iglidur® R, iglidur® J3 and igumid® G as PTFE-free materials for igubal® components.

substances comprises several thousand compounds - exact figures vary depending on the definition and source.

Precisely because PFAS materials are more cost-intensive to produce, they are usually used specifically where their special specifications are technically necessary. Substitution is therefore not always easy and requires well thought-out alternatives.

Sustainable solutions for the future

As a company that attaches great importance to sustainability, we are continuously developing future-proof material solutions. We already offer PTFE-free alternatives today. Our iglidur® J3 spherical balls and spherical insert bearings as well as the low-cost spherical balls made of iglidur® R. Our tried-and-tested housing material igumid® G is also completely PTFE-free. All three materials were tested for 96 particularly critically classified PFAS compounds - and the result showed that none of these substances were present.

In our in-house test laboratory, iglidur® J3 showed at least as good results as our proven all-rounder iglidur® J in

terms of load absorption and wear behaviour. iglidur® R offers a cost-effective alternative with somewhat lower mechanical performance, but is excellently suited for applications with moderate requirements.

The combination of igumid® G and the materials iglidur® J3 or iglidur® R enables a completely PTFE-free solution without loss of quality.

Interested?

Our shop only shows a part of our possibilities - if you need PTFE-free spherical insert bearings and spherical balls in different dimensions, please contact us.

igus.eu/igubal-ptfe-free



Julian Lewerenz
Development Engineer igubal®

Metal rod ends with plastic inner ring

From hot to hygienic



Material	Area of use
igidur® J	High wear resistance
igidur® A181	FDA and EU 10/2011 conformity
igidur® X	High temperatures
igidur® G	Dynamic loads

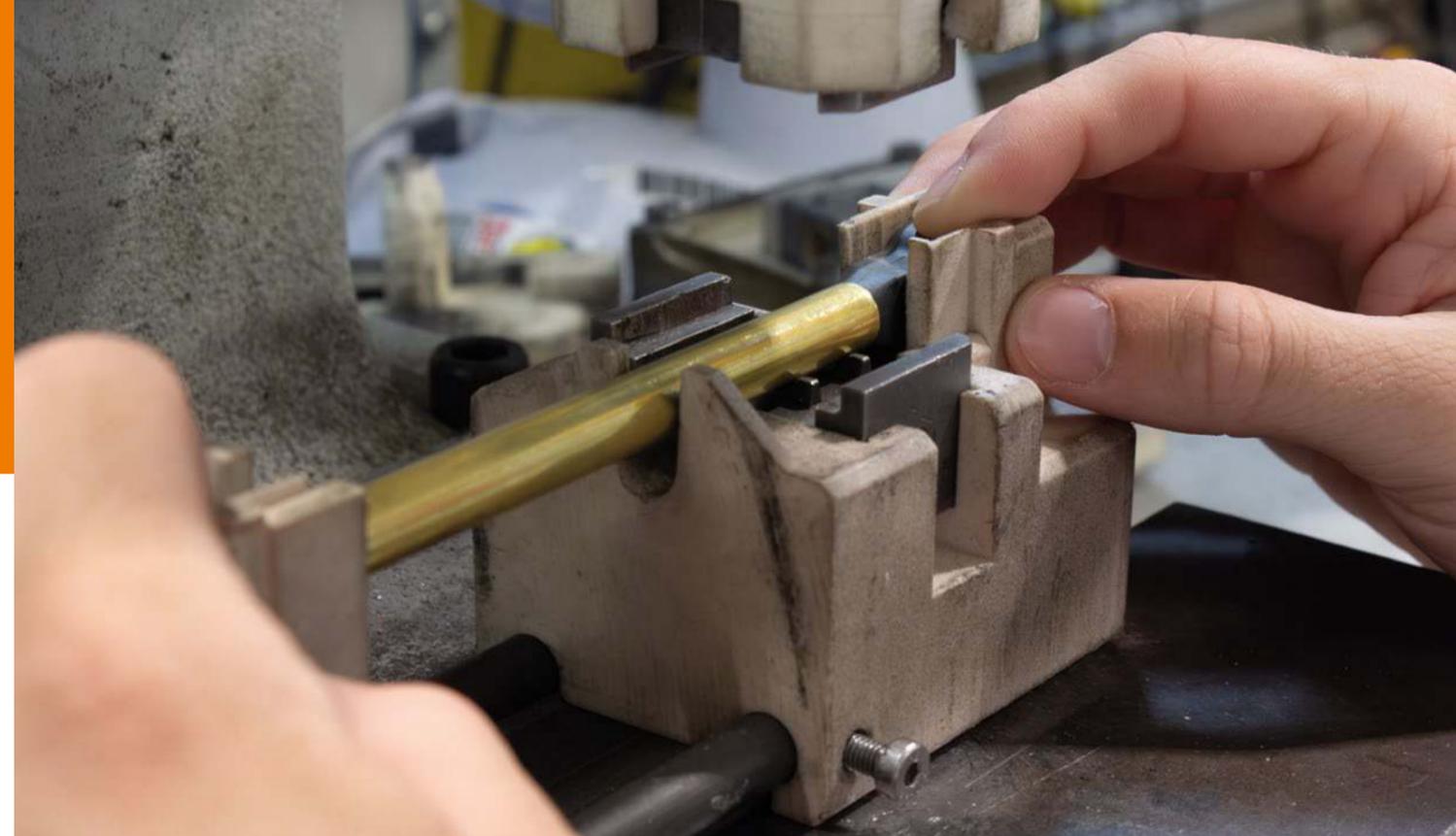
Update

Four materials, full selection

Metal rod ends with plastic inner ring

Four iglidur® materials, all thread types, full flexibility: igubal® 2.0 rod ends available for shaft diameters of 6-20mm and with no minimum order quantity.

- ▲ Expanded product portfolio enables customised solutions for a wide range of applications
- ▼ The use of plastic inner rings permanently eliminates the cost of lubricants
- iglidur® X is temperature-resistant from -100°C to +250°C, short-term up to +315°C - ideal for demanding environments with thermal stress. iglidur® A181 is FDA-certified and fulfils the EU 10/2011 standard.
- All variants enable applications without additional lubricants



Connected strength

Wide selection. Highest quality.
Available immediately with no minimum order quantity.
Our extensive standard range offers injection-moulded and crimped coupling joints - freely configurable in terms of material, end piece and length.



Curious about the details?

Read our white paper to find out more about variants, production and testing methods and in which industries and applications our lubrication-free and maintenance-free connection solutions are already proving their worth:

igus.eu/wp-igubal-connections

Does your application require a special solution?

Our igubal® design is the right place for you. Bring movement to your ideas - with us!

igus.eu/igubal-special-parts

GO ZERO Lubrication ... save lubrication time and costs

xiros[®] ball bearings



Tech up



Cost down



Proof



Sustainability



Digital

56

Great abrasion resistance
Cleanroom ball bearings

57

Endurance runner with dimensional stability
Conveyor roller with ceramic bearings

57

Maximum service life with axial loads
Thrust bearing made of xirodur[®] B180 with cage made of iglidur[®] J3B

Quick consultation anywhere at any time



In person

Marcus Semsroth
+49-2203 9649-202
msemsroth@igus.net



Chat

Online and WhatsApp
igus.eu/chat



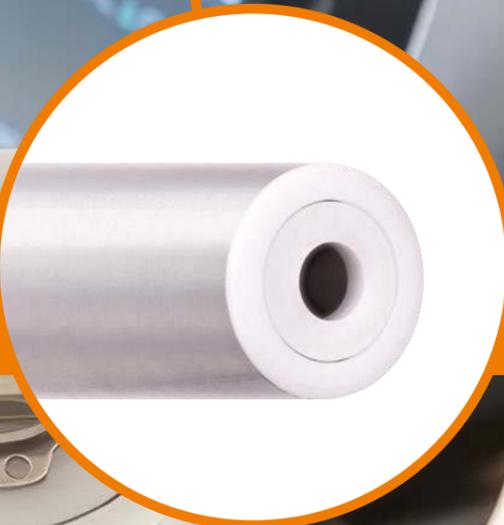
On site

Sales representative Roadshow/Trade show
igus.eu/on-the-move



Format adjustment in test system

Wipotec uses xiros[®] guide rollers to ensure format adjustment under FDA requirements as well as under high loads and in continuous operation.



Service life calculation in seconds

Find the perfect solution for your application quickly: simply enter your requirements and get the suitable ball bearing with a service life statement: igus.eu/XLR

igus.eu/news-xiros

Great abrasion resistance



New

Resistant in chemical applications

Cleanroom ball bearings

The cleanroom ball bearing with new xirodur® C161 race material and A161 cage material, currently available in installation sizes 608, 6000 and 6001 (other sizes upon request), was developed for highly sensitive applications in battery production and the semiconductor industry, among others. It offers outstanding abrasion and chemical resistance and minimises particle emissions. All of this is essential for processes with the highest cleanliness requirements. It has been validated in our in-house cleanroom laboratory and fulfils the strict standards of modern production environments. Customer-specific tests and documentation are possible at any time in order to optimally fulfil individual process requirements.

- ▲ Low particle emission due to abrasion-resistant material
- ▼ High running performance with simultaneous reduction of downtimes
- Tests in the igus® in-house ISO 1 cleanroom laboratory, Fraunhofer test for official classification in preparation
- No material contamination from particles



New

Endurance runner with dimensional stability

Conveyor roller with ceramic bearings

The new stainless steel conveyor rollers with ceramic bearings made of zirconium oxide in PEEK adapters are currently available in the sizes Ø 30mm for a shaft diameter of 8mm and Ø 38mm for a shaft diameter of 10mm. They are characterised by high material stability, excellent temperature and chemical resistance and a low-maintenance, durable design.

- ▲ It can be used up to +250°C and is resistant to chemicals
- ▼ Low material fatigue leads to longer service life and extended maintenance intervals
- Test parameters in the igus® laboratory: 50N, 500rpm, 2,800,000 cycles: 40 times longer service life compared to high-temperature plastic material
- 100% lubrication and maintenance-free



New

Maximum service life with axial loads

Thrust bearing made of xirodur® B180 with cage made of iglidur® J3B

In addition to the thrust bearings without cage with races already available in the standard range, igus® is now launching a variant with cage. This offers an improved service life at moderate loads and higher speeds. The following installation sizes will be available as standard: 51100 and 51104.



- ▲ Less wear at higher speeds compared to the standard without cage
- ▼ Cage increases service life, which reduces maintenance costs
- Test parameters in the igus® laboratory: 100N, 500rpm, 120,000 cycles: thrust bearings with cage exhibit 60% less weight wear than thrust bearings without cage
- No environmental pollution due to lubrication-free components



GO ZERO Lubrication ... save lubrication time and costs



drylin® linear technology



Tech up



Cost down



Proof



Sustainability



Digital

60

Sustainability in every installation situation

Liner iglidur® JPF

62

Precise positioning

drylin® W single bearing with pretension

63

Clever and secure end of prism rail

drylin® NSV-20

64

High load capacity with left/right extension

Telescopic guide drylin® NT-60-DS

Quick consultation anywhere at any time



In person

Michael Hornung

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mhornung@igus.net



Chat

Online and

WhatsApp

igus.eu/chat



On site

Sales representative

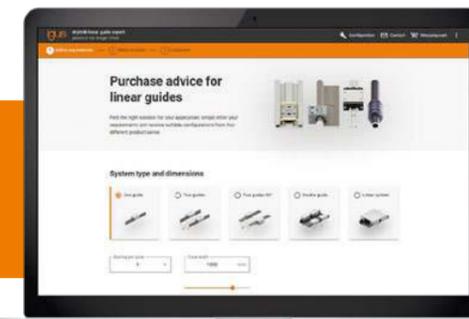
Roadshow/Trade show

igus.eu/on-the-move



Maintenance-free movement in deposit machines

Linear and plain bearings in self-service vending machine from Selfmaker guarantee a long service life outdoors

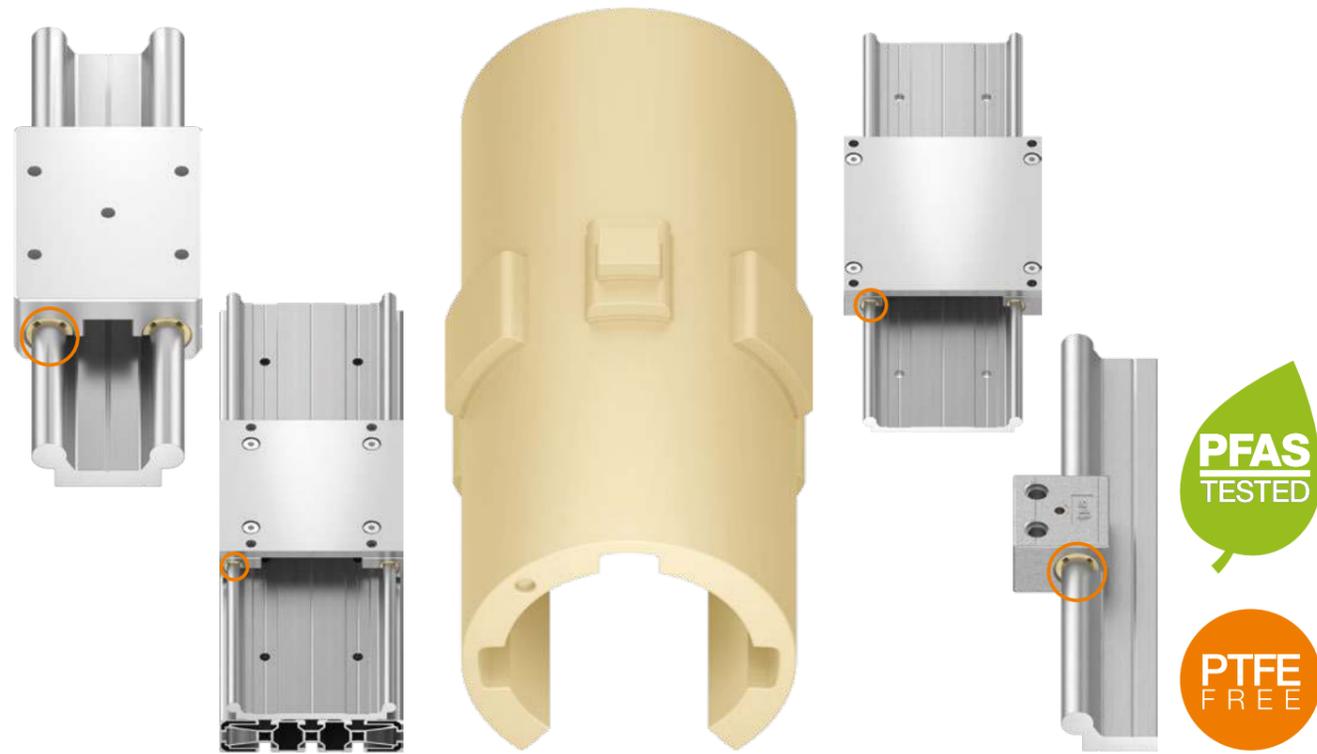


Advise, calculate, buy

Find the right solution for your application: select the installation position, enter application parameters, select the system and order. Comes with a guarantee on the calculated service life for up to max. four years. igus.eu/dlx

igus.eu/news-drylin-linear

PTFE-free liner



New

Sustainability in every installation situation

Liner iglidur® JPF

The new PTFE-free and PFAS-tested liner made of iglidur® JPF in installation size 06 will be used in various drylin® W components from autumn - for maximum flexibility and environmental compatibility.

- ▲ Individual bearing housings made of robust zinc die-casting or lightweight aluminium enable flexible assembly in a wide variety of installation positions
- ▼ Pre-fitted carriages offer simple integration into existing designs
- Miniature carriage T415 with monoblock system - dimensionally identical to recirculating ball bearing guides - for quick installation in just one step
- With iglidur® JPF, igus® is setting an example for sustainable technology - without compromising on performance, service life or ease of assembly



Modular system extension drylin® W Small liner, great variety

The drylin® W linear guide in installation size 06 is the smallest solution in the drylin® W modular system - developed for applications with minimal installation space and maximum design freedom. Whether in medical technology, laboratory automation or the food industry, the compact miniature guide impresses with its versatility and ease of integration. With drylin® W, you can rely on a smart solution for linear movements - lightweight, quiet, maintenance-free and PTFE-free. The liner is now available for a large number of the proven drylin® solutions and can also be easily retrofitted to your systems.

Miniature linear system with mono-slide carriage

The miniature mono-slide carriage WW-06-20-T415 impresses with its compact design and simple assembly. Designed as a monoblock, the carriages can be installed with just one movement - for maximum reliability and minimum downtime. With identical connection dimensions to the miniature size 15 with recirculating ball bearings, the T415 series enables a quick system change from recirculating ball bearings (lubricated) to a linear guide system (lubrication-free).

Complete carriage in various widths and lengths

In addition to the narrow rails WS-06-20, the WS-06-70 rail width offers a high degree of design flexibility. Flat design, discreet appearance, quick connection plus wide support and three carriage lengths (60/80/100mm).

Slim Line carriage and linear housing

Narrow drylin® W linear plain bearings can be installed on the inside of the housing. The design of the linear system thus saves up to 15% in width. When installed on aluminium construction profiles in installation sizes 06-70, the system does not protrude. The linear housings are available individually for assembly into a customised carriage or as a complete system in silver or black anodised.

Pillow blocks

Single bearing housings for variable bearing distances and installation positions, whether horizontal, vertical, sideways or overhead. They are available as fixed and floating bearings. Housing materials are zinc die-casting or aluminium; matching rails are available in hard-anodised, silver or black anodised aluminium and stainless steel.



The material won the first place in the competition for the products of the year 2025 in the materials category.

Slim Line carriage



Miniature carriage



Complete carriages Pillow blocks



PTFE-free highlights in linear technology



NWV-41/42

New installation size of pre-load prism slides with a width of only 20mm



TW-42

drylin® T linear guide, four installation sizes with identical connection dimensions to recirculating ball bearing guides



NT-60-4

Telescopic rails (full-extension/partial extension) with extension length up to 1,000mm

drylin® W single bearing with pretension

Controlled adjustment



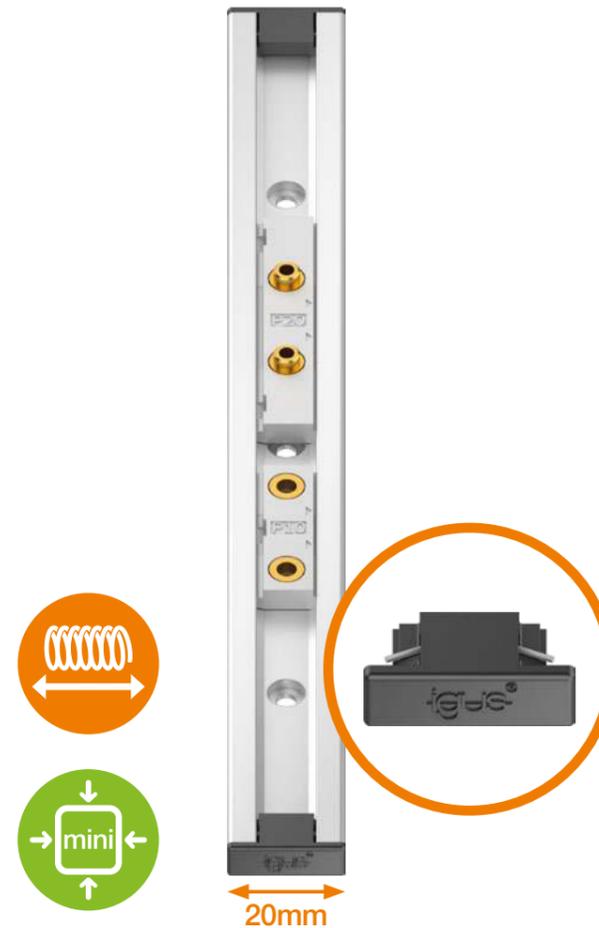
Plus

Precise positioning

drylin® W single bearing with pretension

Discover the new generation of drylin® W single bearings in installation size 25 - now with integrated spring pre-load for clearance-free movements and strong positioning.

- ▲ Controlled adjustment with individually selectable displacement forces
- ▼ Strong positioning: The bearing remains reliably in place after adjustment - without any additional clamping
- Tested: drylin® W linear system installation size 25, load 300N, 2,000mm, carriage 150mm, 0.05m/s, 0.3m/s², result 4,298,156 double strokes
- 100% lubrication-free operation



New

Clever and secure closure of prism rail

drylin® NSV-20

The miniature pre-load prism slide drylin® NSV-20 impresses with its compact dimensions - just 20mm wide and 8mm high. It offers a decisive advantage, particularly in vertical installation situations: simply slide and release - the carriage automatically remains in position. And matching end caps are now available for a secure rail end.

- ▲ For a clean end and secure edge protection
- ▼ Quick installation: simply clip in - done
- Tested: drylin® pre-load prism slide 27, stroke length 150mm, load 15N, 0.2m/s, 1m/s², result 1,256,000 double strokes
- No external lubrication, clean and hygienic - perfect for cameras, sensors, headrests or extensions in automotive, medical and measurement technology



Lift system for yachts

The first lift systems that H+B developed and built around twenty years ago are still in use today. This speaks for the structure but also for the individual components, which also include the energy supply system. Around two thirds of the lift systems are permanently under water, which is why they have to be extremely corrosion-free and therefore made of high-quality stainless steel. The installation space is also an important issue, as the space for the swivel drive is very limited.

igus® products are also used for another special H+B solution, the overhead crane, which can pick up a boat and park it in the garage using a winch. The crane's trolley moves with the help of a drylin® W linear profile guide made of stainless steel. The associated guide carriage is also made of corrosion-free stainless steel. And the sliding elements are made of iglidur® high-performance polymers with incorporated lubricant. igus.eu/drylin-yacht



Extension from both sides



New

Use more installation space with extension left and right

Telescopic guide drylin® NT-60-DS

The new drylin® NT-60-DS has been specially developed for applications where high rigidity with medium loads and maintenance free operation are required - and all this with a low dead weight. High load-bearing capacity thanks to anodised aluminium profiles, easy, quiet sliding with iglidur® high-performance polymers. Infinitely extendable - up to 2,000mm total length, thereby enabling full, partial and over-extension.

- ▲ The NT-60-DS can be extended in both directions - ideal for applications with access from both sides or limited installation space. This significantly expands the range of applications and enables access from two sides for medical devices or mobile workstations
- ▼ Space-saving integration in compact housings or drawer systems
- Tested: drawer assembly with 2x NT-60, vertical installation position, centric load 200N, requirement of 25,000 cycles (opening and closing) achieved
- The sliding elements are PTFE-free and PFAS-tested, rails (silver clear anodised/black anodised), springs and threaded inserts are REACH/RoHS-3-compliant



Stepless expansion of installation space

Lightweight, quiet, can be configured online

The igus® NT telescopic rails in size 60 allow infinitely variable extension in both directions, from 200mm to 1,000mm in each direction. They are available as full-extension or partial-extension, and a combination of both variants is also possible. With a compact design that is 60mm wide and 24mm high, they are versatile. The silver or black anodised rails slide quietly on PTFE-free sliding segments made of the material iglidur® JGPF. The rail profiles are available in silver and black anodised, and we offer flat (NTKA-60) and high end caps (NTKB-60) as edge protection. Dry operation without external lubrication makes the telescopic rails maintenance-free and fail-safe.

drylin® NT-60 telescopic rails can be configured online and ordered directly with the desired extension length igus.eu/dtc.

- Infinitely extendable in both directions from 200mm to 1,000mm in each direction
- Compact design: 60mm wide, 24mm high
- Extendable from both sides as a full-extension or partial-extension
- Sliding elements made of PTFE-free material
- Rail profiles available in silver and black anodised
- No balls, fail-safe and quiet
- Clean and hygienic

Aluminium profiles (outer and centre-rails) silver/black anodised

Durable deflection rope Ø1mm, 12-strand braided and stretched, extremely tear-resistant and low-stretch, working elongation <1%, high breaking load 1.95kN



PTFE-free sliding elements made from igus® high-performance polymers

Stainless steel clamping sleeves

White paper: Lubrication-free drylin® NT telescopic rails

Durable and lightweight in camper vans, corrosion-free and robust in water treatment plants ... With pretension, coating for high temperatures or almost invisible thanks to black anodising ...

Find out in the new white paper what advantages drylin® telescopic rails offer in your application



igus.eu/wp-telescope

GO ZERO Lubrication ... save lubrication time and costs



dryspin[®] lead screw technology



- Tech up
- Cost down
- Proof
- Sustainability
- Digital

68 Largest ever rolled DST high helix lead screw from igus[®]
Extension of the product range

70 Saving through universal exchange
New dryspin[®] lead screw nut geometry

72 Machined lead screw nuts made from bar stock
New pitch with DS32x32-RH

Quick consultation anywhere at any time



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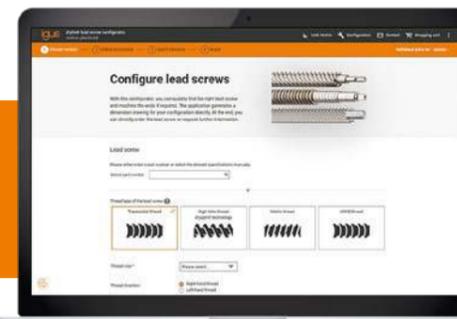
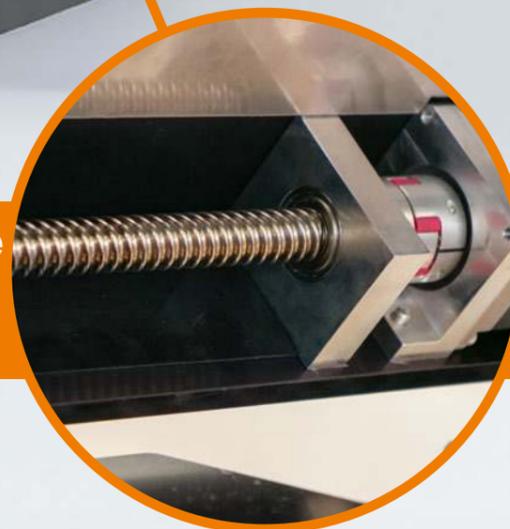


On site
Sales representative
Roadshow/Trade show
igus.eu/on-the-move



e-master edge milling machine

The high helix lead screws enable low-friction and lubrication-free drive technology that prevents wear and is up to two thirds more cost-effective than ball screw systems.



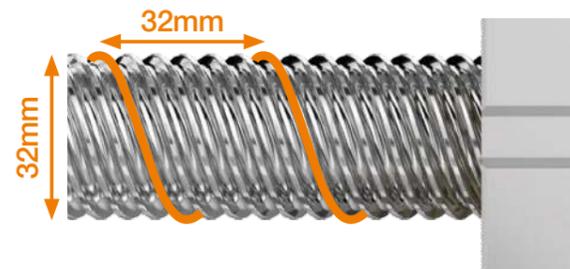
Configure lead screws online

Individual machined end without CAD software.
2D dimensioned drawing and 3D step file, generated directly online.
igus.eu/dsk

igus.eu/news-dryspin

Extension of the product range

Larger, faster, longer lasting



Plus

Largest ever rolled DST high helix lead screw from igus®

Extension of the product range

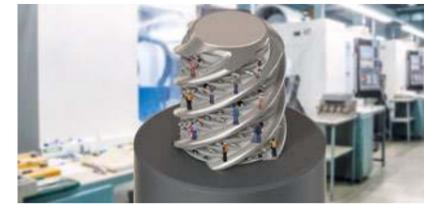
The product range is being expanded to include the new dryspin® dimension DS32x32, a new maximum diameter in the DST thread product range. All dryspin® lead screws can also be custom-machined. Configure online or send us your drawing for quick quotations.

- ▲ Quiet due to thread geometry, longer service life
- ▼ Up to 30% longer service life
- Ongoing test program in the in-house test laboratory [igus.eu/dryspin-testreports](https://www.igus.eu/dryspin-testreports)
- Lubrication-free operation and clean
- 🔗 Free online tool for lead screw machining without previous CAD knowledge, including 2D dimension drawing and live price [igus.eu/dsk](https://www.igus.eu/dsk)



DST thread geometry - THE alternative to trapezoidal threads

More operating smoothness, less vibrations



2013

The patented dryspin® high helix thread technology was developed by igus® in 2013 and offers numerous advantages compared to conventional high helix threads. Due to the flat thread angle, it efficiently converts the force introduced into a linear movement. With specifications and geometries matched to the plastic nut and spindles, dryspin® provides an even longer service life and more efficiency for high helix threads.

Quiet operation

Due to the rounded tooth geometry, the contact surface between the lead screw nut and the lead screw is reduced. This is due to the fact that the greater the contact of two surfaces moving against one another, the more vibrations are transmitted, which can be perceived as a rattle or squeak. The rounded teeth minimise this effect and the thread moves vibration-free and virtually noise-free.



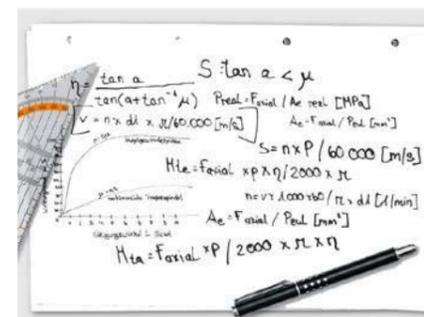
Asymmetry = Longer service life

Due to the larger distances between the individual dryspin® thread turns, the thread perfectly matches the specifications of the lubrication-free igus® high performance polymers. The proportion of the tribologically optimised polymer in the thread turns can be enhanced by a factor of 1.3 for all sizes. More wear-resistant material and higher levels of efficiency are crucial for a service life that is up to 5 times longer compared to standard thread geometries.



Dry-operating - sustainable

Our lead screw systems are developed for maintenance-free dry operation. Basically, you should not compare a lubricated lead screw system one-to-one with a dry-operating system. Due to the external lubrication, the coefficient of friction is lower compared to a dry-operating lead screw system. However, the lubricant also causes a high maintenance effort and additional costs that are often not accounted for.



Higher efficiency due to optimised flank angle

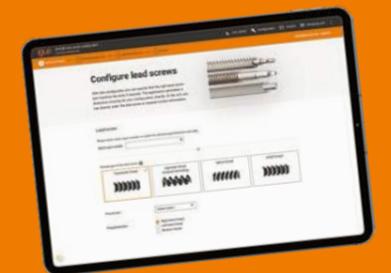
Due to a flatter thread angle in dryspin® high helix lead screws, the applied force is efficiently converted into a translational motion. Compared to a steeper thread angle, this means a lower power loss and therefore a more efficient system.

Lead screw configurator

With this configurator, you can quickly find the right lead screw and individually machine the pins at both ends. The application generates a dimension drawing for your configuration directly. At the end, you can directly order the lead screw or request further information.



Configuration of lead screws and shafts with imperial dimensions including automated creation of 2D drawings.

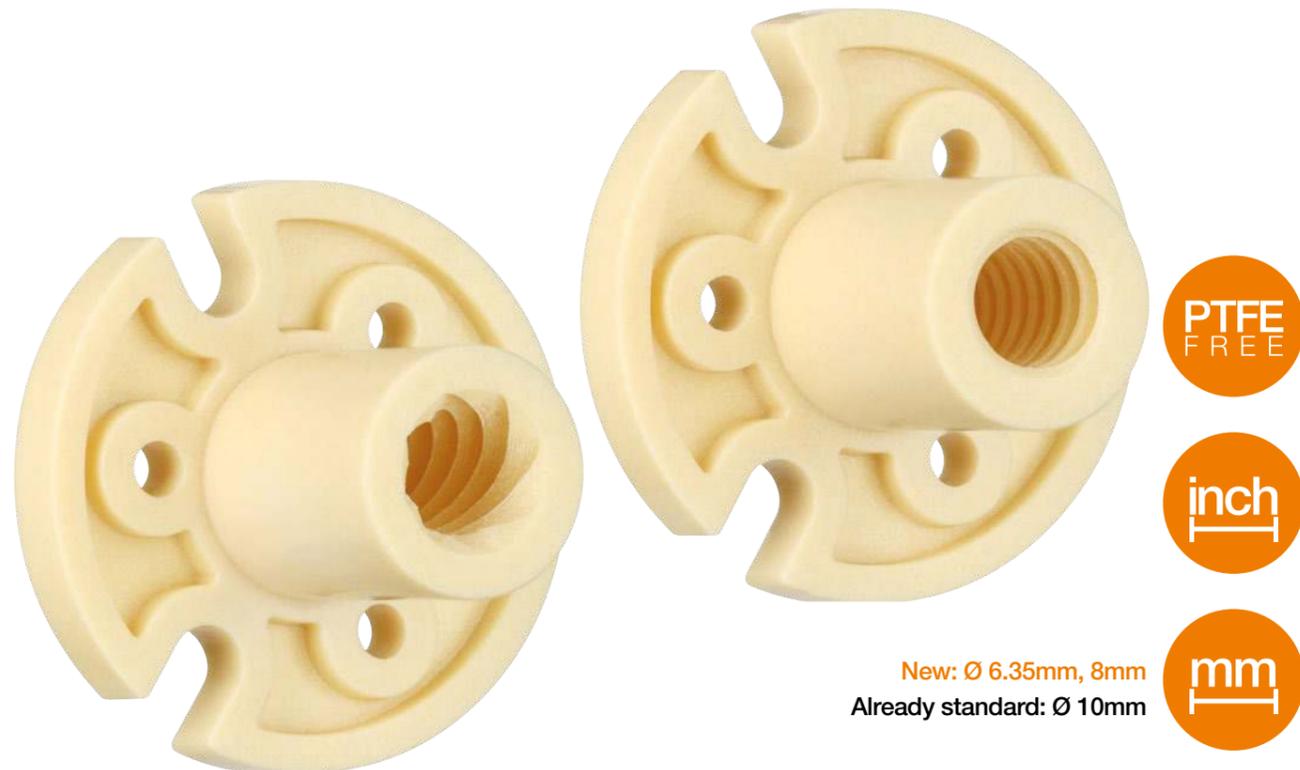


[igus.eu/dsk](https://www.igus.eu/dsk)

Single start trapezoidal lead screws achieve efficiencies between 20% and 48% in dry operation. Ball screw drives achieve efficiencies of up to over 90%, depending on the system. dryspin® high helix lead screws achieve efficiencies between 35% and 80% in dry operation.

New dryspin® lead screw nut geometry

PTFE-free, interchangeable



Plus

Saving through universal exchange

New dryspin® lead screw nut geometry

The lead screw nut made of iglidur® JPF is characterised by its versatile fixing options on the flange. Injection-moulded, ensuring high precision and load capacity. For more specific applications or technical details, please visit our website or contact our experts. We can then provide a quick quotation.

- ▲ Quiet due to thread geometry and longer service life due to the dryspin® asymmetrical thread geometry
- ▼ Low replacement costs due to identical connection dimensions - no redesign necessary
- Ongoing test program in the in-house test laboratory igus.eu/dryspin-testreports
- Lubrication-free operation, PTFE-free and PFAS-free



Lead screw nut made from iglidur® JPF: dryspin® universal lead screw nut with flange

Combination of versatility and environmental friendliness

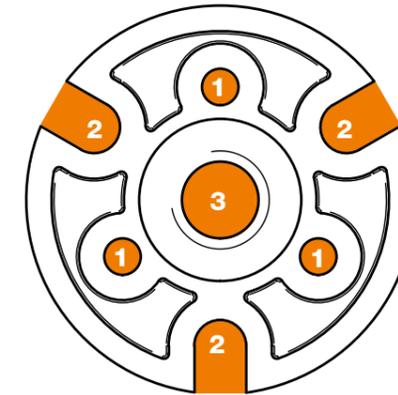
The material: iglidur® JPF

By dispensing with PTFE and PFAS, iglidur® JPF contributes to more sustainable production and fulfils the increasing requirements for environmentally friendly materials.



The material took first place in the competition for the products of the year 2025 in the materials category.

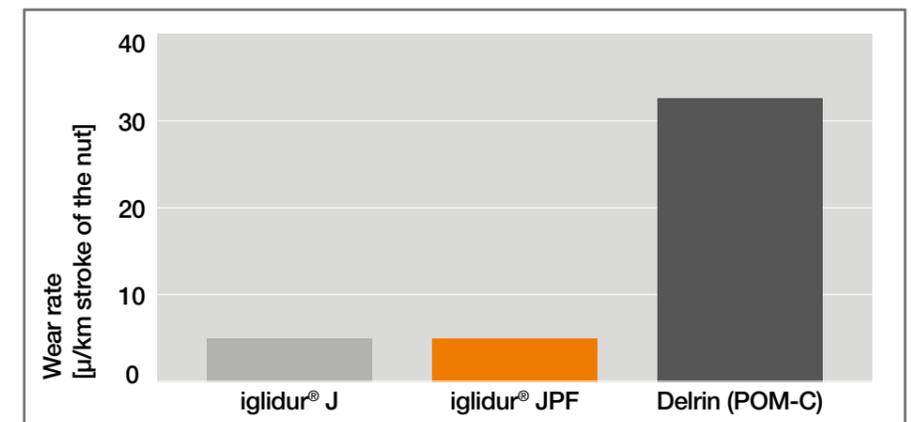
The lead screw nut made of iglidur® JPF represents an innovative solution for numerous industrial applications. It is manufactured using the injection moulding process. Thanks to the wide range of fixing options on the flange, it can be installed flexibly and replace many competitor solutions 1:1, making it easier to adapt to different requirements. This saves time and costs during installation and enables projects to be realised quickly and efficiently. This versatility makes them a favoured choice in various industries, from the packaging industry to medical technology.



Screw-on dimensions of the flange lead screw nut with 19.05mm (1, 2) Distance for 6.35mm thread diameter (3).

Screw-on dimensions of the flange lead screw nut with 22.2mm (1) and 28.6mm (2) for 8 or 10mm thread diameters (3).

Flexible screw connection through elongated hole (2).



Same coefficient of friction and wear as our all-rounder iglidur® J: wear test iglidur® J and iglidur® JPF vs. Delrin (POM-C) (DS10x2) Stroke length 200mm / Force 250N / 200rpm / 0.8MPa / 2,000 cycles

Simple replacement!

Identical connection dimensions as many other solutions.

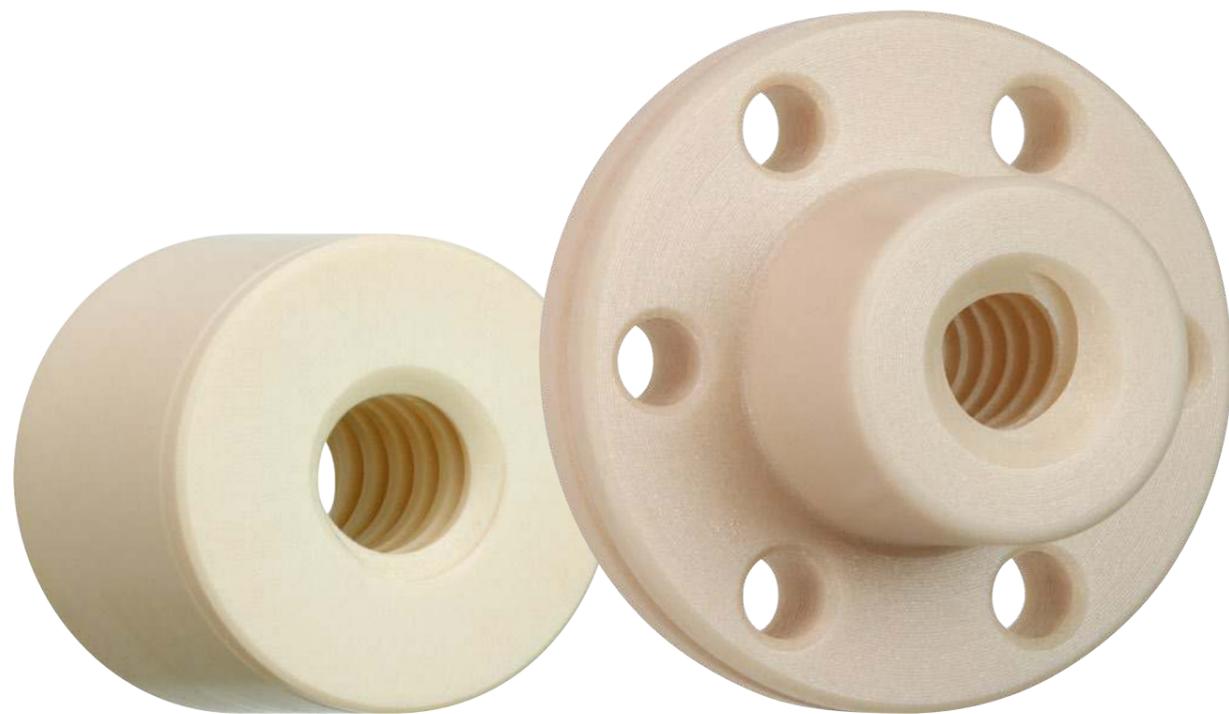
- Easy replacement possible without design changes to the nut mount
- PTFE-free material
- Service life calculation incl. guarantee

Request free sample here: igus.eu/dryspin-sample



New pitch with DS32x32-RH

Flexible, quickly customised



Plus

Machined lead screw nuts made from bar stock

New pitch with DS32x32-RH

The new dryspin® lead screw nuts made from bar stock in a cylindrical, flange or spanner flat version.

- ▲ Quiet operation due to tighter manufacturing tolerances and rounded tooth geometries by default
- ▼ Up to 50% lower cost than metallic lead screw nuts
- Up to 25% less wear compared to POM+PTFE igus.eu/dryspin-testreports
- No lubricating grease or oil in the lead screw drive
- 🔗 Online calculation tool for service life



Get to know the variety of dryspin®



Simply request a free sample card.

igus.eu/dryspin-sample-request





GO ZERO Lubrication ... save lubrication time and costs

drylin® drive technology



Tech up



Cost down



Proof



Sustainability



Digital

76

Maximum stability with minimum space requirement

drylin® linear module SLW-06-70-FLS

77

Small, corrosion-free, hygiene-compliant

drylin® linear module SLW-0620-BB-ES

80

Strong linear module with new pitch

drylin® linear module SLR-60-32x32

82

Control unit - test box for stepper motors

DLE-CU-9 quick and easy to set up

83

Emergency Stop!

DLE-CU-7 easy, safe and quick to install

**Quick consultation
anywhere at any time**



In person

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Online und

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igus.eu/chat



On site

Sales representative

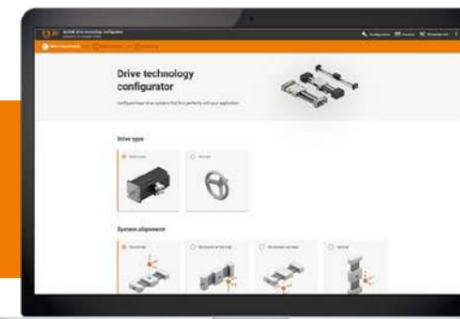
Roadshow/Trade show

igus.eu/drylin-roadshow



E-scooter lift

Lubrication-free linear axes for an e-scooter lift
in Deutsche Bahn's idea train

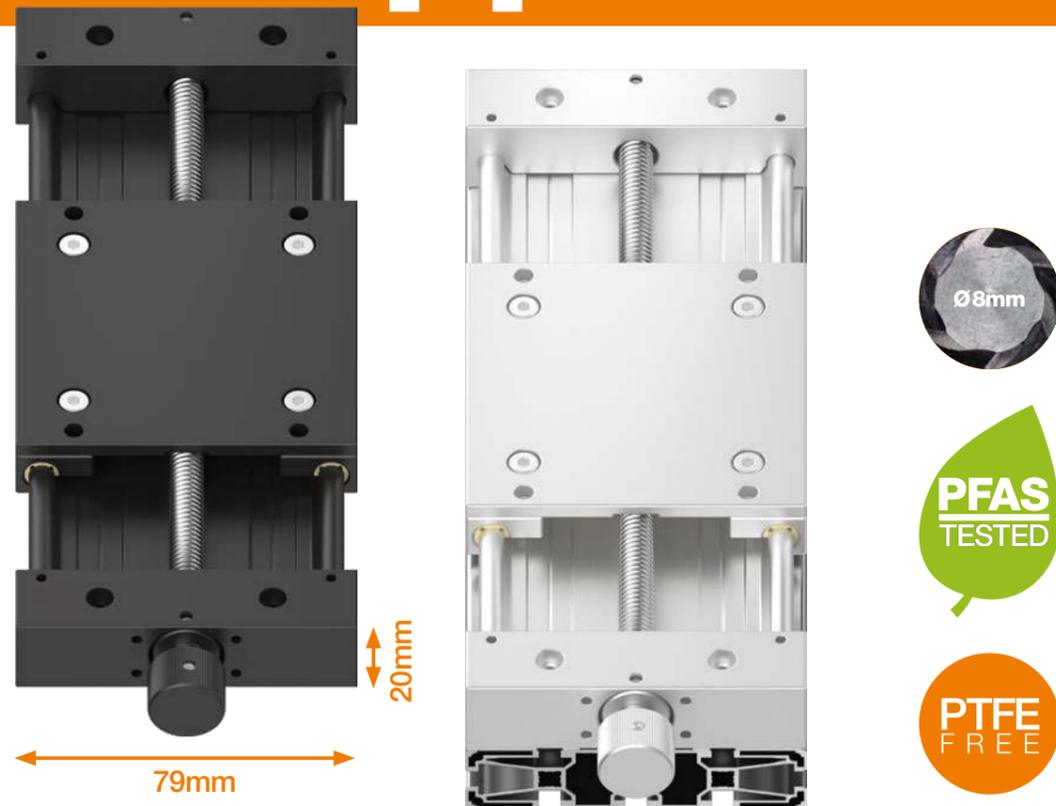


Up to 4-year guarantee

Select the suitable linear module and receive information on function, service life or used motor capacity. Click on the shopping cart and order, with a guarantee certificate if required. igus.eu/ddx

igus.eu/news-drylin-drive

Flat design, wide support



New

Maximum stability with minimum space requirement

drylin® linear module SLW-06-70-FLS

The new wide version of the SLW-06 linear module is based on the WS-06-70 linear guide and offers maximum stability with minimum space requirements. Whether manually or electrically adjustable - the SLW-06-70-FLS combines precision, strength and environmental awareness in one compact linear module.

- ▲ Large support spacing (79mm) for increased rigidity and precise movements - ideal for compact areas with tough requirements
- ▼ Save installation space thanks to low profile (20mm). Optimised carriage width (79mm) flush with standard construction profiles (80mm)
- Tested: SLW installation size 06, Ds8x15, 75N load, stroke length 200mm, 0.2m/s, 0.6m/s², 100% duty cycle, result 271,000 double strokes

- Sustainable and safe: for the first time, all bearing points can be designed PTFE-free and PFAS-tested - for use in sensitive sectors such as medical technology, laboratory automation or the food industry



Plus

Miniature axis for up to 40% longer stroke and service life

drylin® linear module SLW-0620-Ds08

Maximum performance in the smallest space. The SLW-0620 linear module with dryspin® high helix thread Ds Ø08 is the compact solution for longer strokes and smooth operation for demanding linear movements in medical technology, laboratory automation and equipment manufacturing.

- ▲ Two-part carriage for increased zero clearance and strong guidance
- ▼ New: dryspin® thread size 08 for longer strokes and particularly smooth operation - even at higher speeds
- Tested: dryspin® lead screw 8x15 in SLW, load 30N, stroke length 150mm, 0.2m/s, 1m/s², 100% duty cycle, result 877,000 double strokes
- For the first time, all bearing points can be equipped with PTFE-free and PFAS-tested plain bearings



Plus

Small, corrosion-free, hygiene-compliant

drylin® linear module SLW-0620-BB-ES

The SLW-0620 linear module is the most compact unit in the SLW series - ideal for precise adjustments in the tightest of spaces, manually or electrically. Flexible pitches from 1 to 25.4mm/rev allow fine adjustments or fast movements. The stainless steel version with FDA/EU-compliant plain bearings is perfectly prepared for hygiene-critical areas.

- ▲ Compact and powerful: combination of drylin® W guide 0620 and dryspin® lead screw technology Ds6.35
- ▼ Customised stroke lengths up to 250mm and pitches up to 6.35mm
- Tested: SLW installation size 0620 with dryspin® high helix thread Ds6.35x5.08, 100mm stroke, result 426,000 double strokes at 20°C

- Stainless steel version with FDA/EU-compliant plain bearings - 100% lubrication-free, 100% maintenance-free



drylin® stainless steel linear module SLW-ESAX500-1040-FDA

Conductive and FDA-compliant



New

Linear axis for ESD and food applications

drylin® stainless steel linear module SLW-ESAX500-1040-FDA

The SLW-1040 linear module in stainless steel design - ideal for applications in sensitive environments such as the packaging, food or pharmaceutical industries. The use of iglidur® AX500 for all bearing components, including liners and lead screw nuts, makes the module 100% lubrication- and maintenance-free. AX500 combines good tribological specification with electrical conductivity and FDA conformity, making it perfect for manual format adjustments with limited loads and speeds.

- ▲ Stainless steel components for optimum conductivity and use in corrosion-critical environments. iglidur® AX500: conductive, FDA-compliant, lubrication-free
- ▼ Carriage with exchange bearing in less than 60 seconds - on the rail without disassembly
- Resistance values between 2.6 and 3.16 Ohm determined in the igus® laboratory prove the consistent conductivity in the system. Measuring points included the carriage plate, shaft end support, floor fixation and pillow block
- 100% lubrication-free, FDA/EU-compliant for contact with food



drylin® ZLW toothed belt axes - 24/7 reliability for vending machine technology

Whether it's a pizza vending machine or Smart Vending, the lubrication and maintenance-free drylin® ZLW toothed belt axes from igus® ensure reliable movement in automated processes. In the BistroBox pizza vending machine, they enable pizzas to be positioned quickly and hygienically - from cooling to baking and serving.

"I am confident that we have found the ideal solution with the ZLW-1040 toothed belt axis and the other igus® products installed in the BistroBox. The most important factors are their long service life and low maintenance requirements."

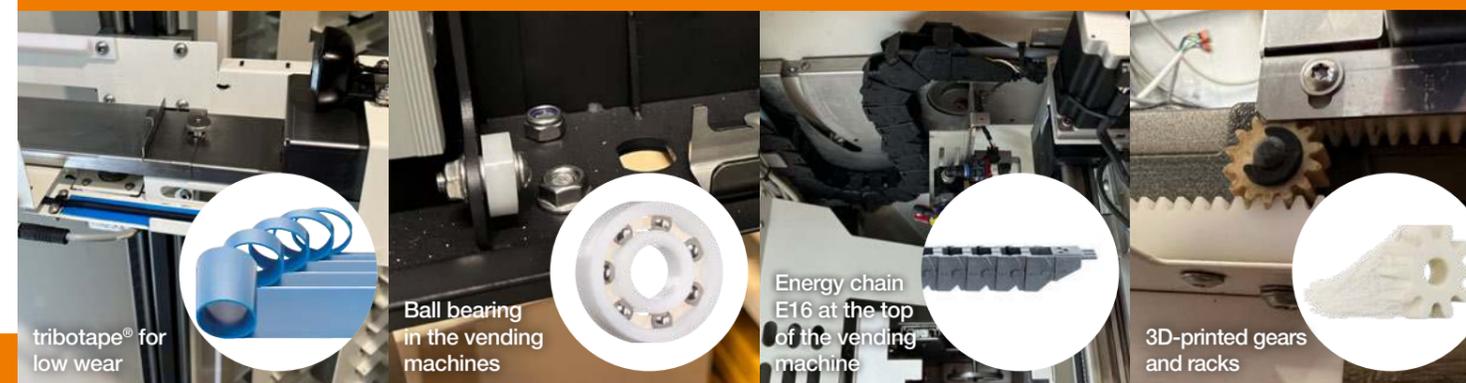
Jürgen Traxler, BistroBox



igus.eu/bistrobox



ZLW toothed belt axis moves the platform vertically



tribotape® for low wear

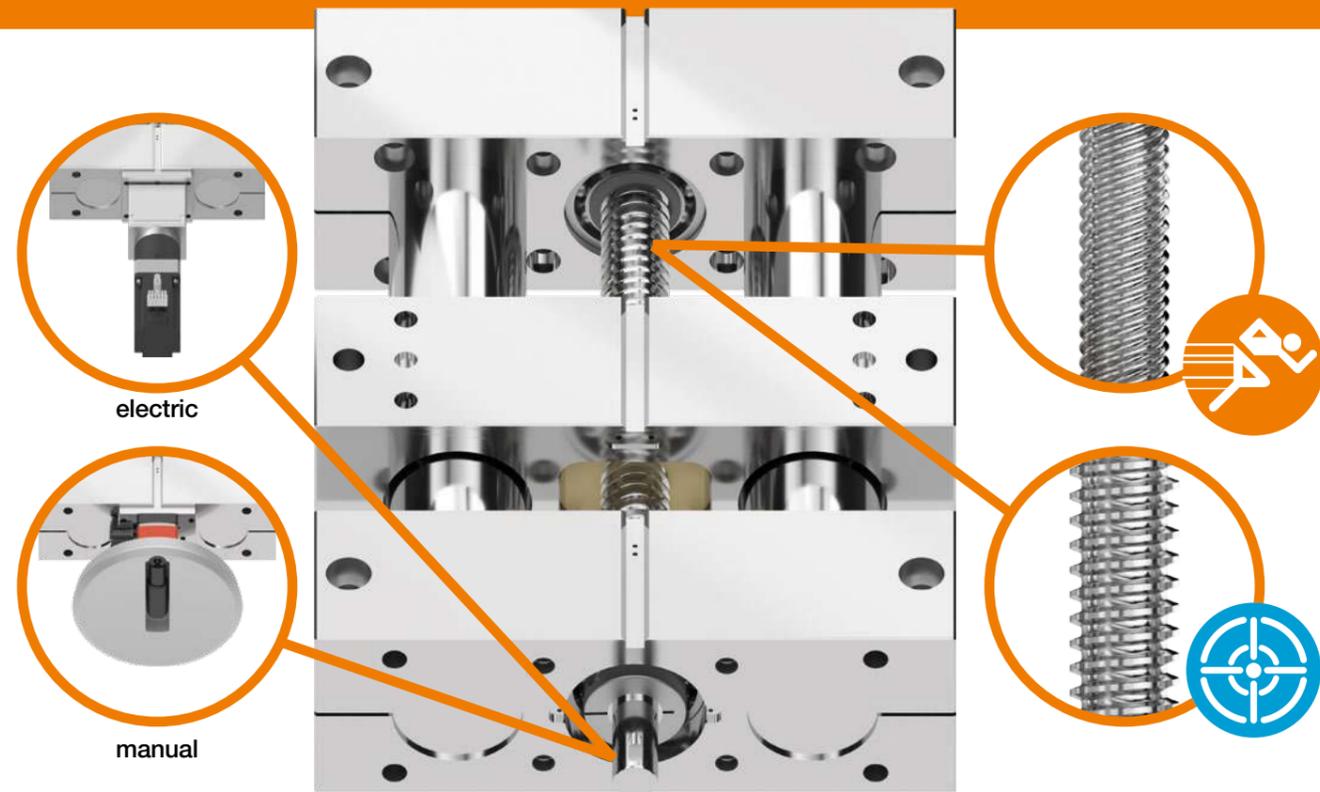
Ball bearing in the vending machines

Energy chain E16 at the top of the vending machine

3D-printed gears and racks

drylin® linear module SLR-60-32x32

Strong with up to 32mm/rev



Plus

Strong linear module with new pitch

drylin® linear module SLR-60-32x32

SLR in installation size 60 - with axial load capacity of up to 6,250N and radial load capacity of up to 25,000N. The series is ideal for applications with high forces and long travel lengths - as a single-carriage solution, with multiple slides or as an XY table. Quick and flexible integration is possible thanks to dowel pin assembly, integrated limit switches and motor compatibility.

- ▲ Interchangeable lead screw nut and centring sleeve holders
- ▼ Compatible with EC, stepper motor or gearbox drives
- Tested: SLR-60, stroke length 1,000mm, load 1,000N, speed 0.05m/s, acceleration 0.1m/s², horizontal installation position. Service life 191,000 double strokes
- 100% lubrication-free operation



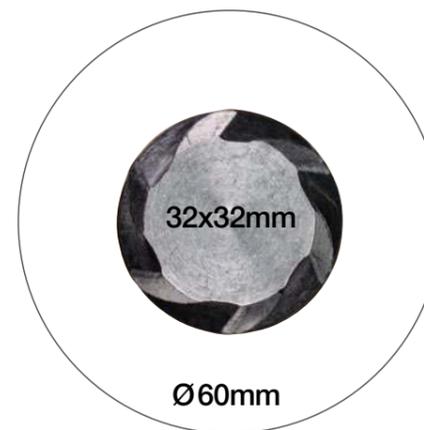
From development

High feed rates thanks to new dryspin® high helix thread

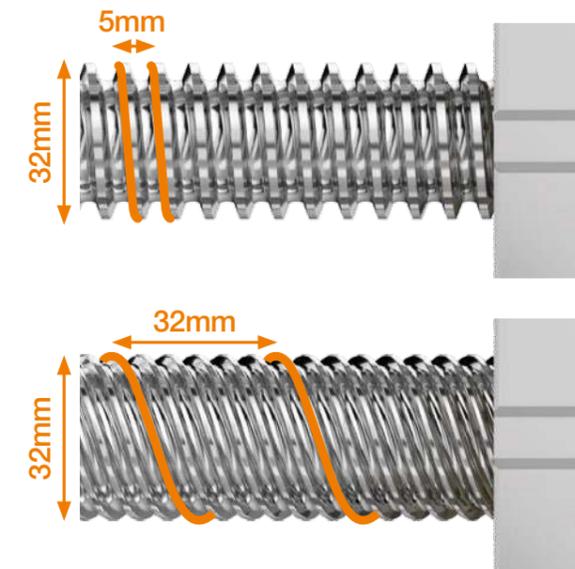
The plain bearing guide is lubrication-free and insensitive to dirt and moisture. From autumn 2025, the SLR-60 can be ordered with the new dryspin® high helix size Ds32x32, which ensures particularly

high feed rates with smooth operation and a long service life. Thanks to the high pitch, the number of revolutions per travel is reduced, which not only shortens cycle times but also increases

energy efficiency. Whether in automation, packaging technology or special mechanical engineering - the new 32x32 pitch offers maximum performance with minimum maintenance.



Ratio of shaft to lead screw, original size



Fighting the weeds with ease

The autonomous robot AX-1 from the Norwegian start-up Kilter is revolutionising weed control: with the help of artificial intelligence and modern sensor technology, it detects weeds in the field and applies herbicides precisely - not across the entire field, but drop by drop and in a targeted manner. The result: up to 95% fewer chemicals used and up to 35% higher yields thanks to healthier crops.

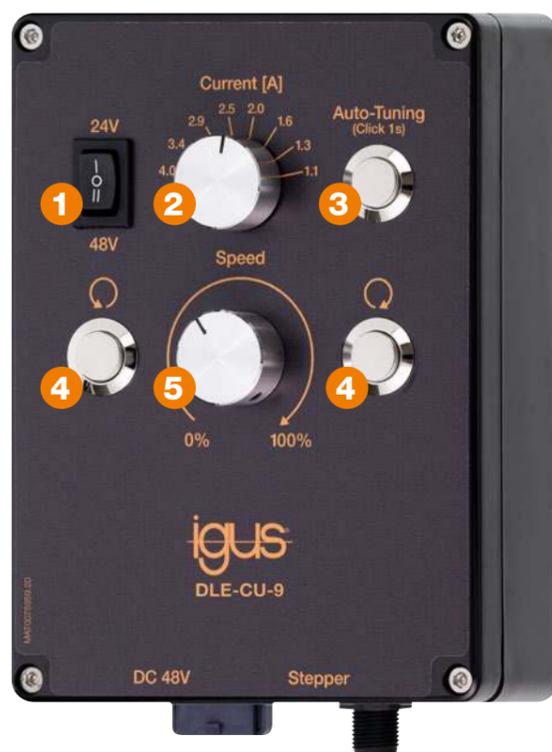
Kilter relies on the lubrication-free linear technology of the drylin® SLW-25120 series from igus® for the height adjustment of the spray module. The system is lightweight, maintenance-free and particularly robust against dust and dirt - ideal for use in agriculture. The linear unit adjusts the position of the

nozzles precisely to the plant height and works completely without lubricants.
igus.eu/spray-module



DLE-CU-9 quick and easy to set up

Stepper motor, simply tested



- 1 Motor supply voltage: 24/48V
- 2 Motor current selection
- 3 Automatic control adjustment of motor
- 4 Jog mode "left/right rotation"
- 5 Stepless speed controller

DLE-CU-7 easy, safe and quick to install

Emergency Stop!



Switch cabinet installation with freely positionable external emergency stop switch



- 1 Start signal
- 2 Stop signal, without switch-off
- 3 Emergency stop switch, immediate switch-off

New

Control unit - test box for stepper motors

DLE-CU-9 quick and easy to set up

With the new DLE-CU-9 test box, the function of stepper motors can be tested quickly and easily without external motor control system and wiring.

- ▲ Independent inching operation possible thanks to integrated dryve D8 motor control system
- ▼ Function without external motor control system
- All-in-one plug-and-play solution, no additional investment for a control system and additional power supply unit
- Reduces the need for additional testing devices



New

Stopped quickly in an emergency

DLE-CU-7 easy, safe and quick to install

The new DLE-CU-7 control unit offers users a safe and fast shutdown of a machine. It can be positioned ergonomically in the required position outside the workspace.

- ▲ Emergency stop switch. Additional start/stop toggle switches for "stopping" and "starting" the application
- ▼ Compatible with igus® solutions, save connection costs with plug-and-play
- Fast commissioning thanks to plug-and-play
- Maintenance-free, saves components thanks to all-in-one solution



24V



Siemens

Beckhoff

B&R

Plus

Stepper motors with 24V encoder

Expansion of the series of stepper motors with 24V encoder

Encoders enable precise position feedback for stepper motors and increase operational reliability through real-time monitoring. The series will include stepper motors in sizes NEMA17/23/24 and 34 from this autumn.

- ▲ Recognising and correcting step losses - important in dynamic applications with high demands on accuracy and process reliability
- ▼ 24V versions of the encoders are particularly relevant for industrial environments. They offer greater interference immunity and enable longer cable lengths without signal loss
- Compatible with higher-level control systems, especially PLC systems (e.g. Siemens, Beckhoff, B&R) with standard 24V signal level for digital inputs
- Energy-efficient operation



Plus

NEMA11 stepper motor with double shaft

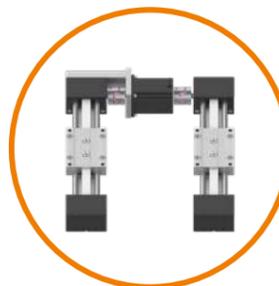
Expansion of the series of stepper motors with 24V encoder

Stepper motors with double-sided shaft output enable the simultaneous drive of two linear axes - ideal for space-saving machine concepts. The motor can be fully integrated into the installation space without protruding outwards.

- ▲ Space for connecting the second axis or for handwheels for manual adjustment, e.g. during power loss. For increased functionality and operability without additional installation space
- ▼ Savings when connecting additional components
- Already available in four NEMA versions (NEMA17, 23, 24, 34)
- Multifunctionality in a compact and lightweight design



28mm



Mobile drive technology on tour in Europe

Experience the world of drylin® drive technology live - with the igus® dryve bus, our mobile in-house exhibition full of electrical linear technology. From motors and control technology to complete linear axes: bus brings the latest products directly to your company premises - customised, free of charge and entirely according to your wishes.

Highlights:

- Live demonstration of drylin® linear technology, motors and control systems
- Personalised advice specifically for your application
- Drive two linear axes synchronously? No problem - experience it live!
- Manual adjustment, emergency stop scenarios, control concepts - everything at your fingertips
- No travelling or accommodation costs for your employees
- Flexible in terms of time - you determine the process



igus.eu/drylin-roadshow

igus®



GO ZERO Risk ... lubrication-free & cost-effective automation

Low Cost Automation



Tech up



Cost down



Proof



Sustainability



Digital

88

Automation to improve productivity throughout production processes
Automation at the motion plastics® specialist igus®

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Test what a humanoid robot can do today
Humanoid robot: iggyRob

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Cost-effective robot platform for a wide range of applications
Mobile robot platform - ReBeLMove Pro - from €39,800

96

Faster assembly and alignment
Linear robots with two or three axes

98

Robotics explained clearly: the new wiki for igus® Robot Control
igus® Robot Control - free and licence-free control software

Quick consultation anywhere at any time



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Chat
Online und WhatsApp
igus.eu/chat

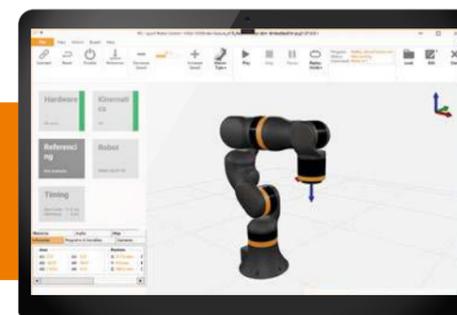
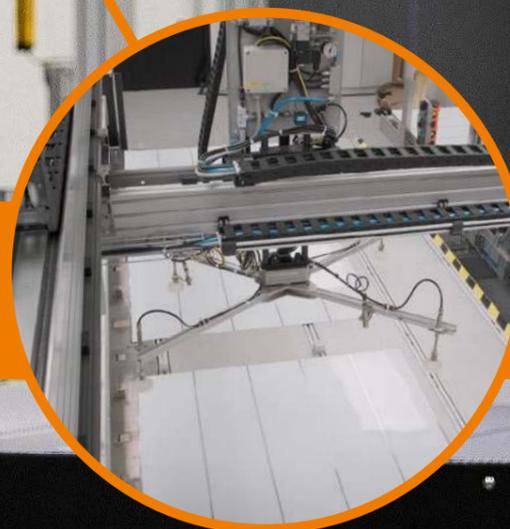


On site
Sales representative Roadshow/Trade show
igus.eu/lca-roadshow



XXL linear robots

Automated printing press loading at Metaprint



Intuitive robot programming

Intuitive software for programming and controlling robots that supports various kinematics such as delta, linear and multi-axis articulated robots. igus.eu/irc

igus.eu/news-LCA

The production of tomorrow



Update

Automation to improve productivity throughout production processes

Automation at the motion plastics® specialist igus®

At igus®, we are already successfully using our cost-effective robot solutions in production to automate monotonous and repetitive tasks. This takes the pressure off our employees and gives them room for more demanding activities. Let's find out together where there is potential for automation in your company.

- ▲ More consistent results and increased product quality
- ▼ Cost-effective automation solutions with fast ROI (return on investment 6-8 months)
- Over 2,500 proven automation applications in use in our own production facilities
- Lubrication-free robots thanks to the use of igus® high-performance polymers
- 🎮 Easy integration and programming of processes thanks to free igus® Robot Control



Automation using the example of igus® solutions

Discover the cost-effective automation options in your company

The plastics industry is facing enormous challenges. A shortage of skilled labour, rising quality requirements and cost pressure are increasingly demanding innovative solutions from companies. How can production processes be made more efficient and companies future-proofed? At igus®, one of the world's leading manufacturers of high-performance plastics, we rely on the power of automation.

"With over 800 of our own injection moulding machines, we know exactly what the challenges are. Our automation expertise flows not only into our own processes, but also into individual robot solutions that we use to help other companies optimise their production."
 – Alexander Mühlens
 (Head of the Robotics Automation Technology Business Unit)

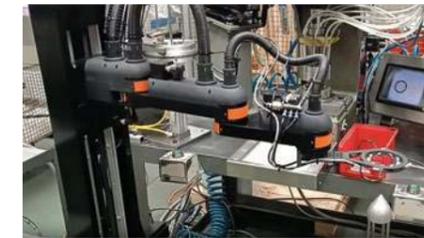
The potential of automation: How to optimise your production processes

When people talk about automation, impressive scenarios quickly come to mind - robot arms, conveyor belts and seamlessly networked systems. But how could a production line be optimised through automation? A look into the production hall shows possible approaches:



Linear robot for automated parts handling in an injection moulding machine: from €9,026*

1 After the machine, for example, robots take over the precise handling of parts from €9,026* by placing plastic components on the conveyor belt and preparing them for future processing steps. This is done quickly, error-free and around the clock.



Automated ring insertion and quality control with SCARA robot: from €6,000*

2 In quality assurance, e.g. collaborative robots (cobots) starting at €6,000* analyse the components using intelligent image processing. Defective products are automatically recognised and sorted out before they reach the next production stage. The result: fewer rejects, lower costs and consistent quality.



Mobile robot ReBeLMove in use in igus® production for the supply and removal of small load carriers for €30,703.30*

3 The autonomous mobile robots (AMRs) step in for material transport. Instead of manual transport, these robots for €30,703.30* undertake the to-and-fro transport of boxes and components between stations, thus avoiding wasted time and downtime in production.

4 At the end of the production line, during packaging and palletising, larger cobots ensure efficiency. They stack cartons and secure loads, which not only speeds up processes but also ensures consistent precision.

*The price shown is based on the German price list.

What automation can do for your company

Automation can be used across all industries and is no longer exclusively relevant for large companies. Whether plastics production, logistics or other industries - the step towards automation is not a vision of the future, but an opportunity that can be realised now.

Start your automation - simple and customised

Do you already have a concrete idea of which processes in your company could be automated? Contact us and get started with automation today:



Automation is worthwhile when:

- 1. High quantities are called for:** automation pays off exceptionally quickly from 100,000 units.
- 2. Ergonomics should be improved:** your processes contain unergonomic, monotonous or unhealthy tasks.
- 3. Quality problems exist:** increases precision, minimises errors and sustainably reduces rejects.



Kai Schmitz
 Outside Sales Low Cost Automation
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Vision? Reality! Test it today!



Update

Test what a humanoid robot can do today

Humanoid robot: iggyRob

iggyRob stands for the future of automation and robotics. With the ReBeLMove Pro as the basis, iggyRob offers plenty of scope for innovative developments to meet the requirements of modern applications. Whether in catering, retail or as support in everyday life - iggyRob combines versatility and flexibility and is constantly evolving to set new standards in robotics. The iggyRob can be equipped with various cobots, regardless of the manufacturer.

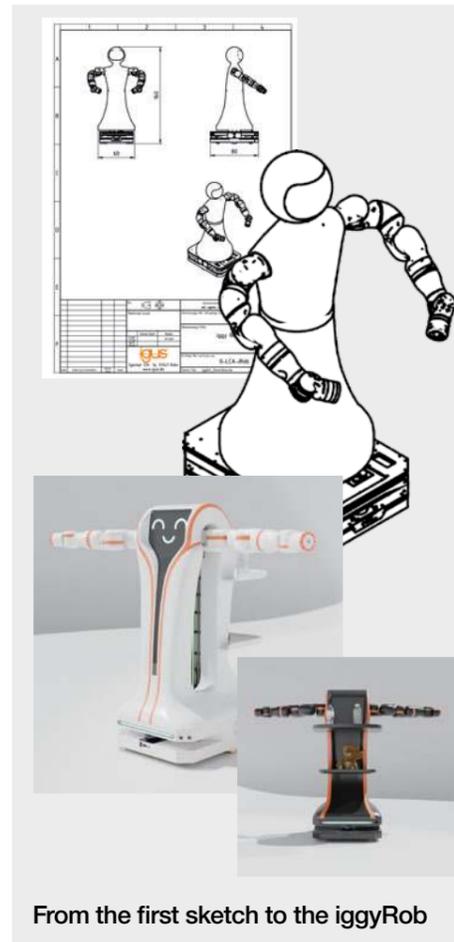
- ▲ Flexible and location-independent use at different workstations
- ▼ Particularly cost-efficient thanks to the use of motion plastics® components
- Test the automation capability of your application with our "Test-before-Invest" service
- Planned for flexible use in individual applications
- 🎮 Simulate and test humanoid robots and other mobile robots online: rbtx.eu/link/mobile



Application example

From concept to reality. Testing at your site today.

Every extraordinary idea begins with a vision - a concept whose potential only becomes visible through continuous development. This is exactly how the journey of iggyRob, our humanoid robot, began. It stands for the future of automation and robotics, which we are working on together. From the first line on paper to the current prototypes, iggyRob is the expression of progress and innovation - an evolution that has only just begun.



From the first sketch to the iggyRob

A new era of automation begins

The future of automation is becoming more human, more flexible and more accessible - and iggyRob is our step in this direction. At igus®, we combine proven technology with fresh, innovative approaches at every stage of development to create a humanoid robot that will enrich production facilities, office environments and many other fields of application in the long term.

Humanoid robots like iggyRob epitomise the idea that automation can become more human, more flexible and more accessible. Our vision is a world in which technology supports and inspires people - a world in which robots are not simply tools, but partners that grow with people's needs. Today, iggyRob may still have a lot of development ahead of it, but we firmly believe that humanoid robots will enrich production facilities, logistics environments and everyday life in the future.



From the idea to the technology: what makes iggyRob unique

The two ReBeL® cobot arms from iggyRob offer maximum flexibility with a reach of 664mm. The robot has also been designed so that robot arms from other manufacturers can also be used without any problems. Supplemented by the mobility of the ReBeLMove Pro, iggyRob already provides a solid basis for precise and versatile applications. Its intuitive control system make it easy to operate, even in challenging environments such as narrow aisles. This potential makes iggyRob a promising development that we are driving forward step by step in order to reshape the future of automation.

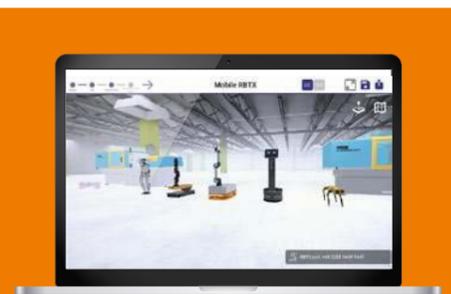
It is not about perfection in the here and now, but about paving the way for a world in which automation is accessible to everyone, without complexity or high



costs. With our "Test-before-Invest" approach, we invite you to try out the possibilities of iggyRob together with us, optimise it and implement individual requirements.

Our focus is not on robots, but on people and the collaboration that makes progress possible. iggyRob is our contribution to a future in which technology does not dominate, but inspires - a future that we shape with vision and determination.

Dimensions	160x60x80cm
Components up to approx	50x30cm
Arm reach	75cm
Reach over chassis	30cm



Test mobile automation of your production virtually and realistically!

Simulate your real production environment with high-bay warehouses and injection moulding machines, choose from over 15 robot models and control them interactively:
rbtx.eu/link/mobile

Let's move forward!



New

Cost-effective robot platform for a wide range of applications

Mobile robot platform - ReBeLMove Pro - from €39,800

The ReBeLMove Pro is a mobile robot platform for the automation of transport and handling tasks. Various systems such as Hook, Pick-by-Light, Lifter and Conveyor and Cobot Lifter enable efficient material provision, error-free picking and precise handling. It saves time, reduces errors and optimises production processes.

- ▲ Efficient transport and logistics solutions - safe and CE-certified
- ▼ Approx. 25% more cost-effective compared to other mobile robots
- Simply automate transport/handling from as little as €39,800, with rapid amortisation/ROI
- Enables employees to concentrate on more value-adding activities
- 🎮 Intuitive app for quick set-up and simple operation



Autonomous mobile robot

In the fast lane of production with the ReBeLMove Pro

Costs, a shortage of skilled labour and the pressure to be efficient - modern production is demanding. But who says you have to slow down? With the **ReBeLMove Pro**, you can easily switch to the fast lane. Equipped with smart navigation and state-of-the-art SLAM technology, this mobile robot is ready to master your daily challenges with ease.

Its true strength lies in its versatility: whether autonomous navigation of Euro pallets, skilful manoeuvring around obstacles or the safe transport of parcels - the ReBeLMove Pro brings impressive ease to every task. And for changing working environments or demanding transport requirements? No problem! With its maximum freedom of movement and the ability to adapt to your processes without any fixed structures, the ReBeLMove Pro is the perfect companion for dynamic production scenarios. From material handling and order picking to transport work, it completes every task dynamically, quickly and adapted to your processes.



ReBeLMove Pro for €39,800

Dimension	
Length	795.00mm
Width	560.00mm
Height	195.00mm
General properties	
AGV load capacity	250kg
Tensile weight	900kg
Operating time	approx. 8 hrs.
Speed	max. 2m/s



Versatile solutions for your production tasks

The ReBeLMove Pro is more than just a transport robot. With various system bundles, it offers solutions that are specifically tailored to the requirements of modern production environments:

- 1 Hook Trolley Bundle:** powerful transport of loads up to 900kg. Optimises routes, speeds up processes and makes order picking easier.
- 2 Pick-by-Light Bundle:** the intelligent shelving system uses light signals to indicate the correct picking points and eliminates the need for tedious searching. This saves valuable time, minimises errors and takes your order picking to a new level.
- 3 Lifter and Conveyor Bundle:** height-adjustable conveyor belts for effortless material transport with less manual intervention. Ideal for shelving, machines and assembly workstations.
- 4 Cobot Lifter Bundle:** a collaborative robot and height-adjustable lifting column for precise handling and safe transport of small load carriers (SLCs). Perfect for assembly environments.

5 iggyRob

The mobile robotplatform is the basis of the iggyRob, providing our humanoid robot with the ability to move.

These bundles make the ReBeLMove Pro a versatile tool that fits seamlessly into existing processes and saves both time and money. In addition to process optimisation, the ReBeL® Pro offers another decisive advantage: it takes over physically strenuous tasks such as

moving heavy loads and thus provides noticeable relief for employees. This reduces load on the musculoskeletal system and makes the workplace safer and more ergonomic.

Whether in warehouse logistics, just-in-time production, at assembly workstations or within production lines - the ReBeLMove Pro makes your production processes more efficient and flexible. Compared to stationary automation solutions, the mobile robot offers clear advantages. Lower installation costs and state-of-the-art SLAM technology enable it to recognise its surroundings and obstacles autonomously, plan routes efficiently and integrate seamlessly into your processes without the need for costly conversions. The result? Fewer errors, rapid amortisation and noticeable time savings. With the ReBeLMove Pro, you not only secure competitive advantages, but also position your production for the future in the long term. Invest in mobile robotics and benefit from intelligent automation that sustainably improves your work processes. Rely on mobile robotics and accelerate your success!



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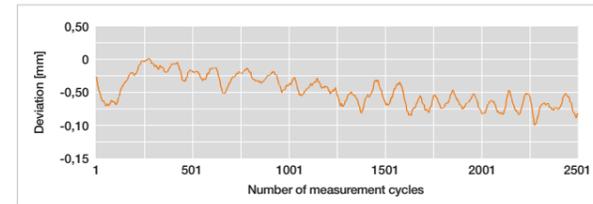
New

Forklift operation automated

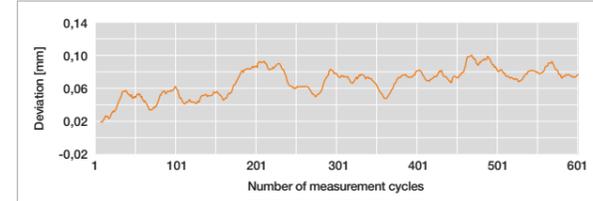
Autonomous forklifts

The ReBel® Pallet Mover autonomous forklifts are specially designed for highly efficient warehouse automation. With advanced navigation systems and intelligent environment perception, they optimise pallet handling, reduce costs and ensure smooth processes in dynamic warehouse environments.

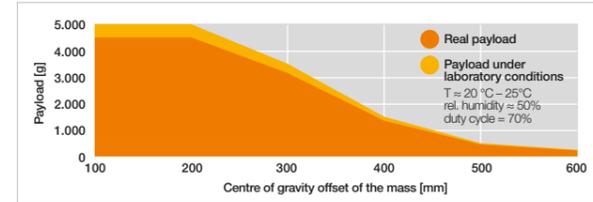
- ▲ Precise pallet handling thanks to intelligent navigation and compact design in three variants, payload from 300-1,500kg
- ▼ High load capacity, fast speed and long operating time maximise efficiency
- Join us at our "Mobile Robots" days and test your application
- Energy-efficient for environmentally friendly warehouse logistics
- 🎯 Seamless integration and optimised workflows thanks to digital control system



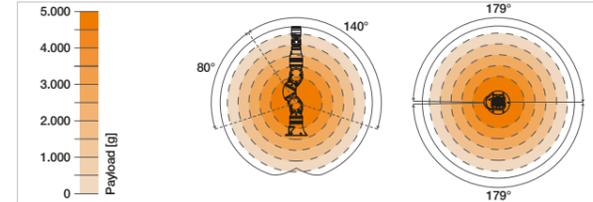
Repeatability



Referencing accuracy



ReBel-6DOF-03 payload



Payload in views



Update

REBEL-6DOF-03 new features and improvements

ReBel®

The REBEL-6DOF-03 has been further optimised and now achieves a referencing accuracy of $\pm 0.3\text{mm}$ (previously $\pm 1\text{mm}$) thanks to new encoder technology. In addition, extensive load tests enable a more precise representation of its payload capacity - for optimised planning of your applications.

- ▲ Greater precision and performance - service life increased by a factor of 4
- ▼ Most cost-effective European cobot thanks to motion plastics®
- Extensively tested in the LCA laboratory - you can find the results on the left
- Lubrication-free, thanks to the use of motion plastics®
- 🎯 Over 50 digital interfaces



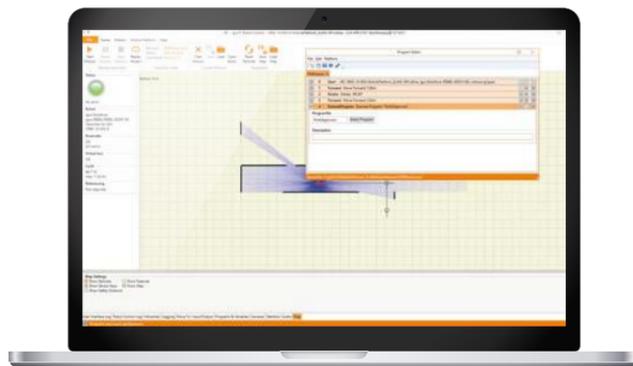
Update

Mobile robot for the education sector

Mobile robot platform ReBel® EduMove

The EduMove is an open-source learning platform for mobile robotics, ideal for education and research. Quickly programmable with the igus® Robot Control software, it now offers even more flexibility with a version with and without an integrated cobot. The mobile robot platform for educational institutions can be controlled and programmed via the igus® Robot Control. The EduMove can be controlled via LiDAR, sensors and 3D cameras with or without the ReBel® six-axis robot.

- ▲ Modular design that can be expanded to include additional functions, e.g. Lidar, camera technology, slam algorithm
- ▼ Easy programming of complex tasks
- Cost-effective AMR with industrial robot software
- Manufactured and developed in Germany
- 🎯 Free control software: igus.eu/irc



New

ROS 2 for your igus® robots

ROS 2 packages for ReBel® and EduMove

For the ReBel® and EduMove robots from igus®, we offer special ROS 2 packages - software modules that help you, e.g. to develop intelligent robot applications in research and development. This allows you to plan movement sequences with MoveIt2 and equip the mobile EduMove robot with LiDAR technology for navigation (LiDAR sensor sold separately).

- ▲ Direct integration into the ROS 2 ecosystem
- ▼ Packages are available to download free of charge
- Already in use at over 100 universities
- Promotion by the open source community
- 🎯 Load interfaces and sample programs





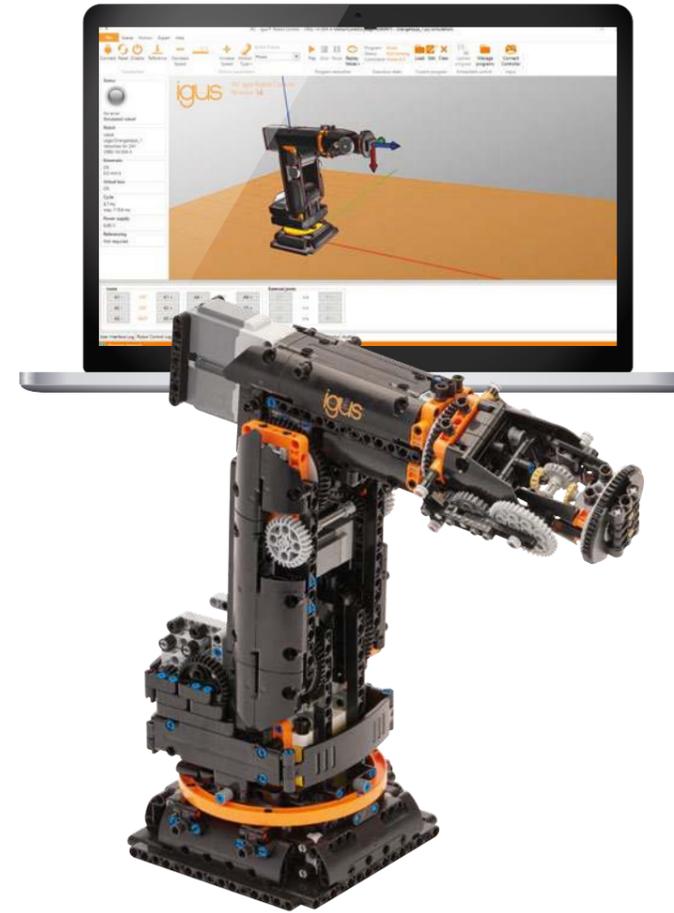
Plus

Over 100 sample programs and open interfaces

ReBeL® Environment

Quick and easy integration into any automation environment. You can find all resources in our own wiki.

- ▲ Versatile interfaces (PLC, Modbus TCP/IP, CRI, ROS, Python) for easy integration
- ▼ Example projects for igus® kinematics save time and effort
- Over 100 sample programs available for various robot types
- Digital simulation and DXF path generation save hardware tests
- 🔗 Cloud and Python interfaces for remote monitoring and workflows



New

Automate with ease

Operate robot kit with modular system and industrial robot software

Based on a popular plug-in and modular system, a customised "toy" robot was developed for igus®. The igus® Robot Control (iRC) software has been specially adapted and extended for this model. Plug-and-play - simple, direct and intuitive.

- ▲ Clamping modules meet automation: robots with professional control software
- ▼ Free-of-charge and royalty-free software
- Proven modular system - familiar since childhood
- Play - learn - program. Everything with one product
- 🔗 Now flexibly programmable with the iRC software: igus.eu/irc



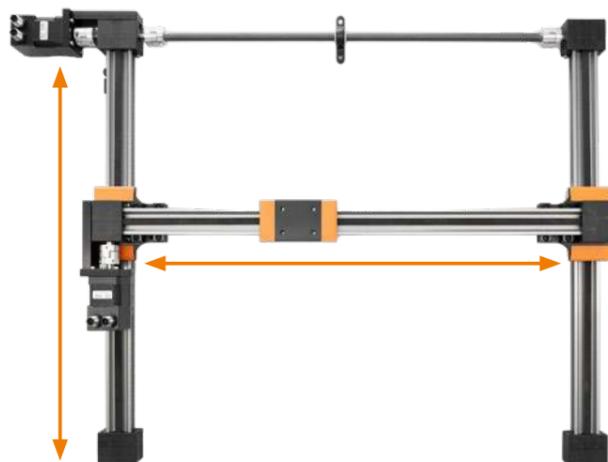
New

Faster assembly and alignment

Linear robots with two or three axes

The modular system has been optimised: slimmer design, standardised components and new accessories. With clear selection, faster alignment and assembly.

- ▲ Improved components for long-lasting use: an optimised drive shaft reduces torsion, improved bearing technology increases performance and new connection options for energy chains and accessories
- ▼ The optimised design with fewer components saves 40% time during assembly
- Extensive tests in the Low Cost Automation test lab
- The slimmer design with optimised number of components reduces material consumption
- 🔗 Configure and simulate online with iRC software at igus.eu/irc and receive a direct quote



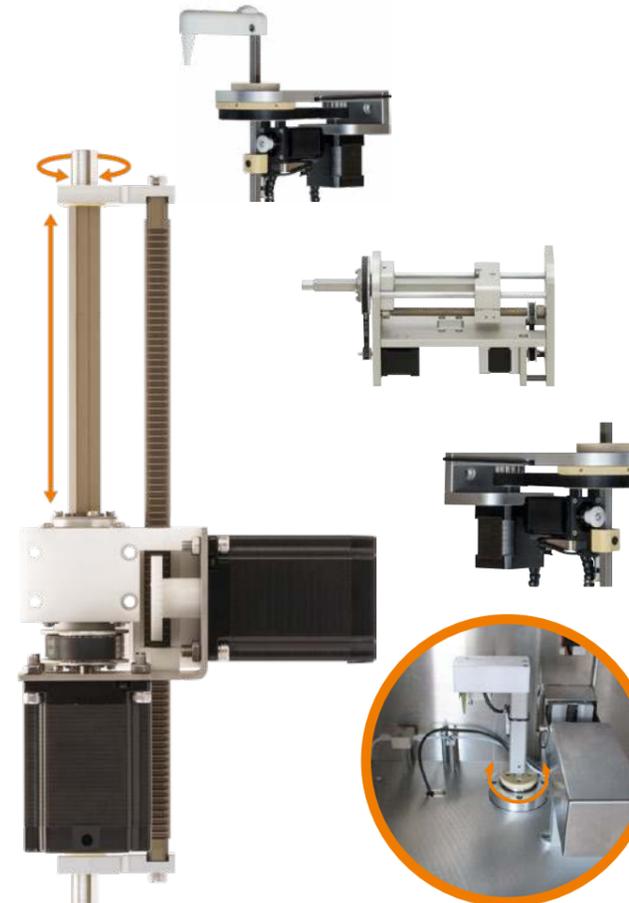
New

Lift and turn

Rotary-drive unit for laboratory and medical technology

The rotary-drive unit is a two-axis robot kinematic system that enables both lifting and turning. It is lightweight, space-saving and lubrication-free, which means it works without contamination. As a project solution, it is customised to specific applications. The main areas of application are laboratory and medical devices in which liquids or substances can be transported or analysed efficiently.

- ▲ Compact design and reliability thanks to customised project planning
- ▼ Particularly cost-effective thanks to plastic
- Over 10,000 units successfully in use
- Optimised number of components saves resources



Smart logic for smart projects



Update

Robotics explained clearly: The new wiki for igus® Robot Control

igus® Robot Control - free and licence-free control software

The igus® Robot Control is constantly being improved and simplifies robot programming. In the wiki you will find detailed step-by-step explanations of individual program instructions such as circle commands, matrix instructions or path commands. Supplemented by practical application examples with directly downloadable programs for use on your own robots.

- ▲ New features such as trail colours, constant variables and travel speed
- ▼ Already simulate and test robots in the software before purchase
- Over 4,000 robot control systems in use by customers
- One control system for all robots, which can be retrofitted
- 🎧 Download and test free software at igus.eu/irc



igus® Robot Control software

Easier programming, more efficient production

With the free igus® Robot Control software, programming and controlling robots has never been easier. Whether SCARA, delta or mobile robots - the software supports over 100 different types and offers intuitive operation via a user-friendly 3D interface. Motion sequences can be precisely simulated, ready-made project templates can be used and additional components such as grippers or cameras can be easily integrated. Thanks to the flexible I/O modules and powerful communication interfaces, both simple automation solutions and complex machine concepts can be easily implemented. A perfect process with just a few clicks - igus® Robot Control makes it possible.

Just like the interplay between the motor and gearbox, the combination of powerful software and high-quality hardware is crucial to the success of an automation project. For this reason, we are always going full throttle to continuously develop the igus® Robot Control and change the world of automation for the long term. Just in time for autumn, we have some exciting news for you - new features that will make programming your robot even easier and therefore make production even more efficient.

New content in the wiki

In the new wiki you will find step-by-step explanations of program instructions such as circle commands, matrix instructions and path commands, supplemented by practical application examples including downloadable programs.

Highlights:

- Pick-and-place with camera support: from camera setup to the finished download code.
- Adhesive applications: Practical descriptions for production processes.
- Pick-and-place with ReBeL®: Examples for the control of several stations and the positioning of laboratory bottles.

An additional added value: videos illustrate the finished applications in detail and make the wiki the central point of contact for robotics programming and inspiration.

Faster troubleshooting - trail colours

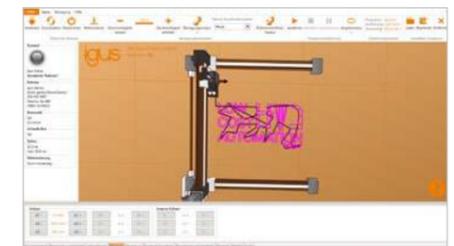
Thanks to the new trail colours, commissioning and error correction are now even more obvious. This visual support shows important information at a glance, such as the control of the inputs and outputs, the speed and the orientation of the robot. This allows problems to be identified immediately. If, for example, a gripper is moved too slowly, the corresponding trail colour indicates this directly so that you can rectify the fault quickly and specifically.



Trail colours for troubleshooting

Continue working seamlessly thanks to variables that remain

A power failure can occur at any time - and suddenly all information about the programmed process is lost. But that's now a thing of the past: you can now save additional variables that are retained even if the robot is intentionally or unintentionally electrically switched off. These variables include, for example, data such as positions or the number of objects on different stacks. After an interruption, the robot is therefore able to continue the process seamlessly and continue working without reprogramming. A big step towards greater efficiency and safety.



Simple commissioning and correction

Faster gluing: Travelling speed with the path instruction

The path instruction enables gluing applications to be precisely executed using a .dxf file. With the newly introduced travelling speed function, the entire gluing process can now be significantly accelerated - without increasing/slowing down the speed along the actual gluing path. The robot recognises whether it moves directly on the gluing path or between two path segments within the .dxf file and adjusts the speed accordingly. This intelligent differentiation noticeably increases the process speed, enabling more efficient production and time savings.

Get started now for free - download the igus® Robot Control software



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GO ZERO Risk ... automate your factory from €2,000

RBTX[®]



Robotix for less



Tech up



Cost down



Proof



Sustainability



Digital

102

Create more power for your configuration within five minutes
Machine planner - create the right robot solution online

104

igus[®] robot meets Siemens technology
Linear robot with Siemens S7 control system

104

Speed in XXL format
XXL 3-axis delta robot with up to 96 picks/min

106

Inform, optimise, profit
Practical tips and concrete solutions on the "Learn More" pages of RBTX[®]

107

Heavy lifting made easy
Palletising solutions from cobots and articulated robots to Cartesian robots

Quick consultation anywhere at any time



In person

Jens Klärner
+49-2203 9649-9449
jklaerner@igus.net



Chat

Online and WhatsApp
igus.eu/chat



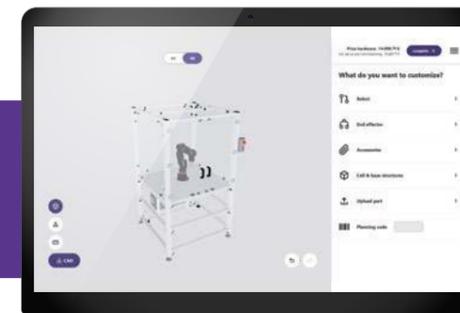
On site

Sales representative Roadshow/Trade show
igus.eu/lca-roadshow



Reliable quality control at GSK

Automated acceleration tester with articulated robot



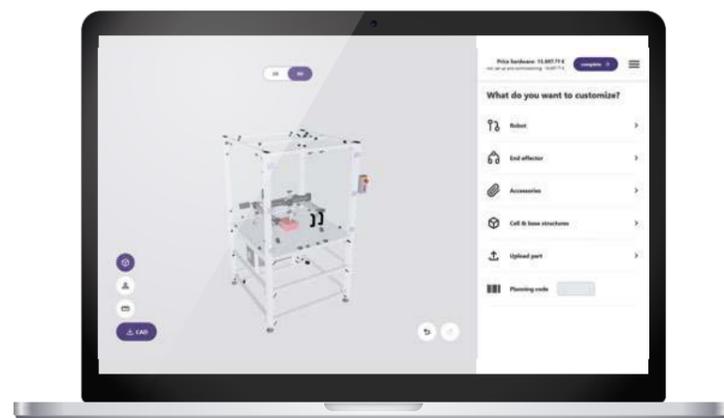
Configure robot in five minutes

Plan a complete machine consisting of cell, robot, gripper and accessories to realise your individual application.
igus.eu/machine-planner

igus.eu/news-LCA

Machine planner - create the right robot solution online

Robotix for less...



Update

Create more power for your configuration within five minutes

Machine planner - create the right robot solution online

The new updates not only make automation planning with the Machine Planner easier and faster, but also more efficient and precise. The Machine Planner now offers optimised configuration options and an improved marketplace connection. Your configurations are always provided with CAD data and CE, while robots and components are displayed in real time with live prices.

- ▲ 15 additional robot components available, new robot cell options such as double or single door design
- ▼ Complete package instead of hourly rates - transparent and cost-efficient, fixed price guarantee
- Already used by over 5,000 igus® customers
- Customised systems can be expanded at any time and always come with a compatibility guarantee
- 🔗 To the Machine Planner: configurator.rbt.com/mp



Machine planner - create the right robot solution online

Less ... risk, time and investment

RBTX® makes automation accessible to everyone. With over 1,000 robots and components from more than 250 leading manufacturers worldwide, the platform offers companies everything they need to optimise their production processes - and all from a single source: consulting, integration and implementation. Whether dosing systems, grippers, safety cells or complete robot solutions, RBTX® simplifies the entry into automation.

Your application counts - not the robot

In modern production, recurring tasks such as gluing, joining, quality testing and measuring are increasingly being automated in order to remain competitive. However, customers are not asking for a specific robot - they are looking for turnkey solutions that fulfil their individual requirements reliably and economically. This is precisely where the innovative Machine Planner from RBTX® comes in.

The Machine Planner - your robot solution in just a few clicks

With the Machine Planner, you can design your complete automation solution without CAD knowledge. Whether linear, delta or articulated robots, cameras, grippers or safety cells - the tool allows you to configure all components in a playful way and bring them together visually. In this way, customised solutions are created in the shortest possible time, tailored to your requirements and perfectly integrated.



Example glue cell:

Components	Price
Gluing application Robot cell	€6,585.60
igus® room linear robot	€2,315.50
Safety control cabinet	€7,640.88
Safety light curtain	€5,676.63
Sick safety control system	€1,026.26
Vieweg dosing system	€1,612.86
Integration incl. CE	€3,359.10
Pneumatic maintenance unit	€1,609.92
Total costs	€29,826.75

... less risk

Automation solutions with the Machine Planner are 100% compatible and ready for immediate use. You can integrate robots from igus® or third-party robots without compromising on safety. The tool guarantees that your solution remains CE-compliant and fulfils all safety standards - for maximum reliability and minimum effort.

... less time

Thanks to the intuitive operation, you can design your automation with just a few clicks: safety cells, base frames and control systems can be easily customised and directly compared. RBTX® supplies you with components from over 250 leading manufacturers - all from a single source and always with clear advice and implementation. You save up to 100 hours of development time on average.

...less invest

The solutions in the Machine Planner impress with transparent fixed prices - often under €10,000, regardless of the complexity of your application. The tool gives you direct price quotations and saves time and resources that would otherwise be needed for technical clarifications or CAD drawings.

More performance thanks to new updates

The latest updates make the Machine Planner even more powerful: thanks to the improved configuration options, you can customise your solution to your requirements, bring cost down and further simplify operation. Optimised logic also enables precise pricing and smooth integration - even when using third-party robots. You select a pneumatic gripper and the Machine Planner configures a compressed air maintenance unit directly in the background without you having to think about it. You select the safety light curtain and the required SLC is configured in the background.

Test the Machine Planner yourself now to realise your automation ideas. Your customised solution is just a few clicks away: configurator.rbt.com/mp



Robin Julia Trute
RBTX®
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rtrute@igus.net
RBTX.com



Update

igus® robot meets Siemens technology

Linear robot with Siemens S7 control system

The harmonised bundle of linear robot and Siemens S7 control system enables simple and fast integration into your production environment - developed in close cooperation between Siemens and igus®.

- ▲ Maximum compatibility thanks to fully customised control system bundle, modularly expandable
- ▼ Ready-to-use complete solution without additional development effort
- Proven by leading machine manufacturers with the highest safety and control conformity requirements
- Resource-saving integration and future-proof components
- 🔗 Easy to order via the RBTX® marketplace



Plus

Speed in XXL format

XXL 3-axis delta robot with up to 96 picks/min.

The low-cost delta robot LCA-DR1000-03 offers a reach of 1,000mm and can handle up to 96 picks per minute. Ideal for end-of-line tasks such as sorting, packaging or assembly in the food industry and manufacturing. It can be extended by a rotary axis.

- ▲ Fast picking and precise turning of products thanks to the optional 4th axis
- ▼ With a high speed of up to 96 picks per minute, production times can be reduced and more products manufactured in less time
- Tested in the Low Cost Automation test lab
- One robot for several process steps saves resources



Up to 96 picks/min.



1,000mm



New

Intelligent automation on four legs

Four-legged robot with cobot

The SID-1Lite3 combines manoeuvrability, precision and versatility at an affordable price. With its robust design, it is ideal for a wide range of automation projects and research. It can also be extended with the ReBeL® cobot.

- ▲ Thanks to its 12 degrees of freedom, the robot dog enables movement on difficult terrain
- ▼ Affordable and flexible solution for a wide range of automation tasks
- Test the automation capability of your application with our "Test-before-Invest" service
- Durable materials and modular design thanks to the use of plastics
- 🔗 Test the robot dog online in a real production environment: rbtx.de/link/mobile



New

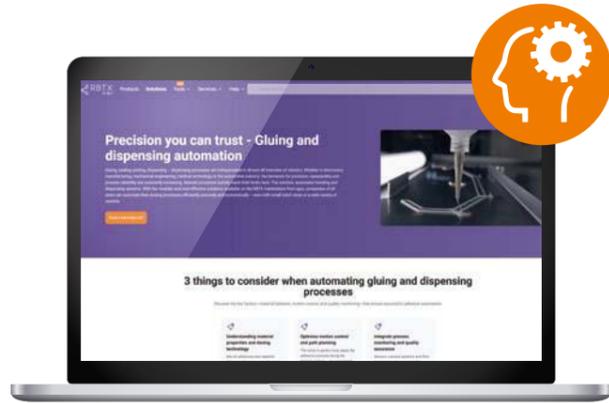
Small installation space, large stroke

Customised telescopic lifting units for your automation solution

Based on already implemented telescopic lift solutions, we realise your project individually and cost-efficiently. We develop your individual solution from carbon plastic, stainless steel plastic or aluminium plastic.

- ▲ Sliding surfaces made of iglidur® plastics enable a wide selection of material combinations
- ▼ Compact design saves space and resources
- Over 1,000 systems successfully in use
- Lubrication-free, durable and low-maintenance, outdoor use possible
- 🔗 Find the ideal solution for your application in a remote appointment with RBTXpert: rbtx.eu/rbtxpert





New

Inform, optimise, profit

Practical tips and concrete solutions on the "Learn More" pages of RBTX®

Our "Learn More" pages are your introduction to the world of automation. Each page is dedicated to a specific category, such as gluing, pick-and-place, quality control and many more.

- ▲ Learn more about automation: tips, benefits and success factors
- ▼ By informing us in advance, you save subsequent costs and unnecessary rework
- Access to over 600+ specific application templates on RBTX®
- Efficient decision-making reduces waste of resources
- 🌐 Available in over 45 countries - benefit from digital expertise and global exchange



Update

Test robots playfully

RBTX® Online tools

With the new games, we are expanding the interactive possibilities of the Mobile RBTX® tool! Test our mobile robots in a race now or experience our humanoid robot iggyRob picking and placing boxes in real production speed and environment.

- ▲ On Mobile RBTX® you can test more than 15 humanoid robots, mobile robots, robot dogs and cobots
- ▼ Move mobile robots interactively and test workflows before you buy
- Test mobile robots in real time under real production conditions - from high-bay warehouses to injection moulding machines and production plants
- Informed decisions thanks to live price and compatibility guarantee
- 🌐 Try it out for yourself: rbtx.de/link/mobile



Palletising solutions from cobots and articulated robots to Cartesian robots

Flying high



New

Heavy lifting made easy

Palletising solutions from cobots and articulated robots to Cartesian robots

We offer palletising applications from various manufacturers such as Fairino, Dobot, igus® and Fanuc. Our solutions enable precise palletising with a high load capacity, smart control system and flexible configuration - for greater productivity and less manual effort. A telescopic robot station is available as an option.

- ▲ Powerful performance with high load capacity and reach for maximum flexibility
- ▼ Cost-efficient automation thanks to affordable robot integration minimises downtimes
- Test the automation capability of your application with our "Test-before-Invest" service
- Lubrication-free, maintenance-free components
- 🌐 Find the ideal palletising solution remotely with RBTXpert: rbtx.eu/rbtxpert



motion plastics®



Bicycle components



iglidur® plain bearings



iglidur® rollers

Page 18



drygear® gear and gearbox technology

Page 22



iglidur® slewing ring bearings

Page 26



iglidur® bar stock

Page 32



iglidur® 3D printing

Page 40



igubal® spherical bearings

Page 44



xiros® ball bearings

Page 54



drylin® linear technology

Page 58



dryspin® lead screw technology

Page 66



drylin® drive technology

Page 74



Low Cost Automation

Page 86



RBTX® marketplace

Page 100



e-chains® and e-chain systems®



smart plastics



chainflex® cables



readycable® readychain®

Bicycle components



Bike frame made of plastic - made in Germany



Rotomoulded wheels



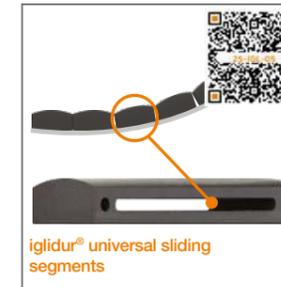
Guide pads made of iglidur® GLW



Pulleys made of iglidur® JB



Apiro® trapezoidal lead screw with 4:1 ratio Page 25





drygear® universal joint

iglidur® slewing ring bearings



New 10/25



iglidur® PRT-02-20-AL-CP Page 28

New 10/25



iglidur® PRT-02-20-AL-DRI Page 29

New 10/25



PTFE-free materials for the igubal® series Page 50

New 10/25



Metal rod ends with plastic inner ring Page 52



Split flange mounted bearings



Sheet metal pillow block bearing with split spherical insert bearings

New 10/25



Study: iglidur® PRT-05-94-PC Page 30



iglidur® PRT-05 with angle stop



iglidur® PRT-04 compact version



iglidur® PRT-04 with angle stop



Spherical insert bearings made of iglidur® H3



Coupling joint with threaded ball stud



Study: Heavy duty pillow block bearing



Split fixing collar for square profiles



iglidur® PRT-04 with PTFE-free sliding elements

iglidur® bar stock



New 10/25



iglidur® C300 round bars Page 34

New 10/25



Chain guide profile Page 36

xiros® ball bearing



New 10/25



Cleanroom ball bearings Page 56

New 10/25



Conveyor roller with ceramic bearings Page 57

New 10/25



Thrust bearings with cage Page 57

New 10/25



CNC service Page 37

New 10/25



iglidur® liner tribotape® A160 soft Page 38

New 10/25



Anti-slip tape Page 39



iglidur® W301-Round bars



Ball bearings made of ceramic and high-performance plastic



Saturn ball transfer unit



Conductive ball transfer unit

drylin® linear technology




iglidur® ECO A500 round bars



iglidur® B250 round bars

iglidur® 3D printing



New 10/25



iglidur® i2000 resin for DLP 3D printing Page 42

New 10/25



Liner iglidur® JPF Page 60

New 10/25



drylin® W single bearing with pretension Page 62

New 10/25



drylin® NSV-20 Page 63

New 10/25



Telescopic guide drylin® NT-60-DS Page 64



iglidur® i4000 resin for DLP 3D printing

igubal® spherical bearings



New 10/25



Universal joint Page 46

New 10/25



Pillow block bearing with quick-release fastener Page 48



drylin® W installation size 06-70



Slim Line linear housing in installation size 06



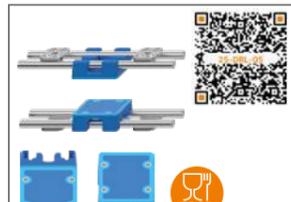
Slim Line linear carriages in installation size 06-70



Curved guide in installation size 06



drylin® W exchange bearings made of zinc die-casting



Narrow linear carriage for food technology



Pre-loaded hybrid roller bearings



Linear carriages with pre-loaded hybrid roller bearings



Expansion of the series of stepper motors with 24V encoder **Page 84**



drylin® NTM telescope with motor



drylin® SLX linear module



drylin® ZLW-1050-ES-EX and ZLW-1050-ES-HYD



Pre-load prism slide in installation size 20



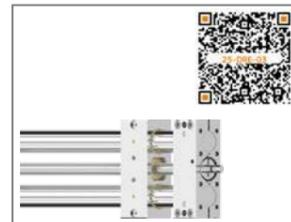
drylin® NSV pre-load prism slide in installation size 20



dryspin® lead screw technology



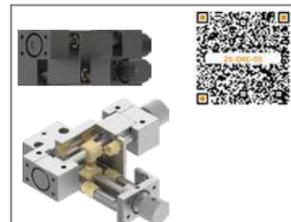
Extension of the product range **Page 68**



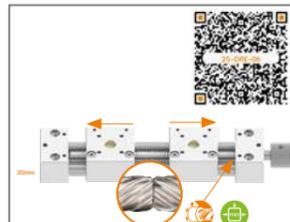
drylin® SLR linear system new in installation size 30



drylin® SLW XY tables



drylin® SLW XY tables



drylin® SLW with left-hand/right-hand thread



New dryspin® lead screw nut geometry **Page 70**



New pitch with DS32x32-RH **Page 72**



New dimensions: lead screw nuts



New dimensions: lead screw nuts with machined thread



Motor control system D1 with PROFINET/PROFIdrive



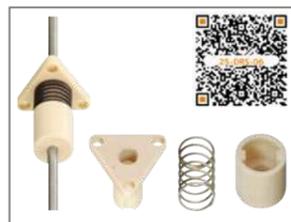
Control unit for inching and jog mode



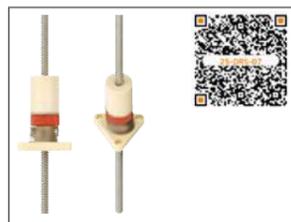
Hand wheels for double-shaft motors



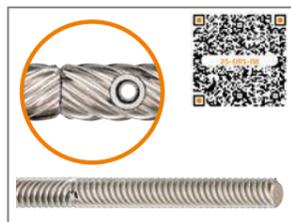
Stepper motors with brake in IP65



Pre-load lead screw nut with dryspin® thread



Zero-backlash lead screw nuts with dryspin® threads



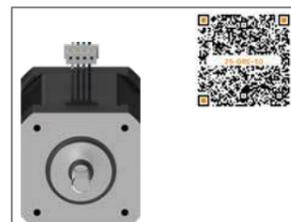
LH/RH lead screws



drylin® drive technology



Stepper motors with 24V encoder



Stepper motors in long version



Gearbox in installation size 60



Low Cost Automation



drylin® linear module SLW-06-70-FLS **Page 76**



drylin® linear module SLW-0620-Ds08 **Page 77**



drylin® linear module SLW-0620-BB-ES **Page 77**



drylin® stainless steel linear module SLW-ESAX500-1040-FDA **Page 78**



Automation at the motion plastics® specialist igus® **Page 88**



Humanoid robot: iggyRob **Page 90**



Mobile robot platform - ReBeLMove Pro - from €39,800 **Page 92**



Autonomous forklifts **Page 94**



drylin® SLR-60-32x32 **Page 80**



DLE-CU-9 quick and easy to set up **Page 82**



DLE-CU-7 easy, safe and quick to install **Page 83**



Expansion of the series of stepper motors with 24V encoder **Page 84**



Mobile robot platform ReBeL® EduMove **Page 94**



ReBeL® new features and improvements **Page 95**



ROS 2 packages for ReBeL® and EduMove **Page 95**



ReBeL® Environment **Page 96**

New 10/25



Linear robots with two or three axes **Page 96**

New 10/25



Operate robot kit with modular system and industrial IRC software **Page 97**

New 10/25



Rotary-drive unit for laboratory and medical technology **Page 97**

New 10/25



igus® Robot Control - free and licence-free control software **Page 98**

New 10/25



Linear robot with Siemens S7 control system **Page 104**

New 10/25



XXL 3-axis delta robot with up to 96 picks/min. **Page 104**

New 10/25



Four-legged robot with cobot **Page 105**

New 10/25



Customised telescopic lifting units for your automation solution **Page 105**

ReBeL® 03: new features and improvements



ReBeL® Environment: plug them together and get started!



ReBeL® Environment Firm grip guaranteed!



Study: Imitation allowed: Show to program



New 10/25



Practical tips and concrete solutions on the "Learn More" pages of RBTX® **Page 106**

New 10/25



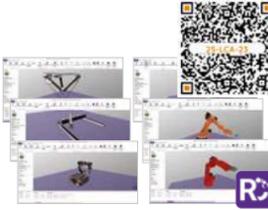
RBTX® online tools **Page 106**

New 10/25



Heavy lifting made easy **Page 107**

RobotCtrl - robot control system from RBTX® by igus®



ReBeL® EduLab



ReBeL® EduMove



ReBeLMove



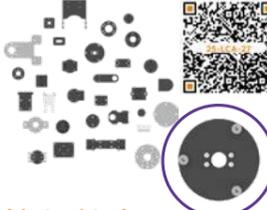
ReBeLMove Pro



Seventh axis for a reach of up to 6,000mm



Adapter plates for easy connection of grippers and robots



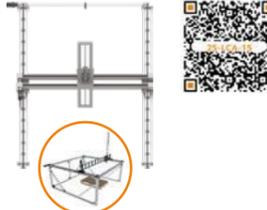
Live webinar with tips and tricks for your automation project



Complete solutions between €2,000 and €49,970



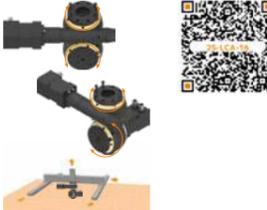
XXL linear robot for up to 25kg



Study: Profile axes for linear robots



Extending linear robots' degrees of freedom



Study: Stainless-steel delta robot



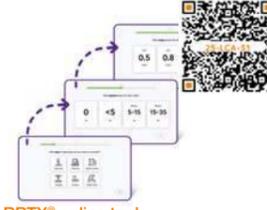
RBTX® Academy



Study: Universal step conveyor for separating small parts



RBTX® online tools: five clicks to your recommended price offer



Play before you pay: test robots interactively



Study: Pipetting robot



Modular robotics: endless possibilities



Study: RoboBuilder



Complete automation cells including CE service



ROI calculator: calculating instead of puzzling



AI robot expert: your robot solution is waiting



e-chains® and e-chain systems®



Office Chain Oval OCO.32.37.0



igus® Robot Control: program more than 100 igus® robots



igus® Joint Control (JC) for kinematics with one to three axes



RBTX® Marketplace



New 10/25



Machine planner - create the right robot solution online **Page 102**

E2.1 e-chain® product range made from igumid® CG LW



Extender crossbar clip for E2(i).26 / E2(i).38 / E2(i).48 series



Study: E2C.48 one-piece e-chain®



One-piece e-chain® E1





R4Q.64L



Extender crossbar clip for series E4.64L and E4Q



Study: Plastic-carbon hybrid chain YC.56



Study: YE.32



TR.CSCS.20.01.DD.LL.02.1



Study: SCARA Cable Solution TR.CSCS.20.0X.DD.LL.01.1.ESD



triflex® ESD product range



triflex® R light mounting bracket TL.50.01.Z0 & TL.50.01.Z2



Study: YE.200



guidelok slimline GLSL.P.S.2



guidelok swing for 038 width



Study: plane-chain mini



TRCF.65 radius stabilisation protector



triflex® R heavy duty - TRHD.142.300.0



e-spool® 4.0 for crane systems and handling equipment



e-spool® flex light variants



Study: pull-e-cable



Study: e-tract mini



e-tract DC



Study: glide-chain G4.42



Study: e-spool® theatre HD42e



e-spool® theatre HD42



e-spool® theatre HD30



Study: zig-zag E4.56



e-dispenser



Fraunhofer IPA Certification



C6.22 Cleanroom e-chain® and assembly tool



Strain relief separators C6.29, C6.38 and C6.22



ReBeL-Twist



Steel guide trough ST200



IMSPO cruise



smart plastics



GLO.56.CRF roller supports



e-skin® flat ESD



e-skin flat® strain reliefs



e-skin® flat layer holder



superwise - service rethought and made smart



Data concentrator BLE



BLE drylin® W condition monitoring



Intelligent residual length measurement for CF CASEs



SKF.S.10.055.01.0 e-skin® flat with support chain for e-skin® flat



e-skin® soft SKS28.100.02.1



e-skin® soft ESD



ESD SCARA Cable Solution TR.SCS.29.01.DD.LL.01.0.ESD



EC.WLC status indicator for the E4.Q system



Condition monitoring i.Sense for vertical e-chain systems®



Firmware release for i.Sense condition monitoring

chainflex® cables



New UL Temperature Rating for chainflex® servo/motor cables

PVC control cable CF130.40.04.UL

CFCRANE medium-voltage cable

chainflex® service life calculator 2.0

Fibre Optic Cable CFLG.LB

Servo and measuring system cables as single-cable solution

Special cable CFTHERMO.N.001

readycable® readychain®

New readycable® cables for industrial camera technology

readycable® adapter cables for Kuka Quantec 1 to 2

HARTING T1 Industrial Mini PushPull connector

readycable® cables for drive technology

New readycable® cables for drive technology

Extension readycable® hybrid cables

Extension readycable® drive cables

RFID access control for Module Connect interface

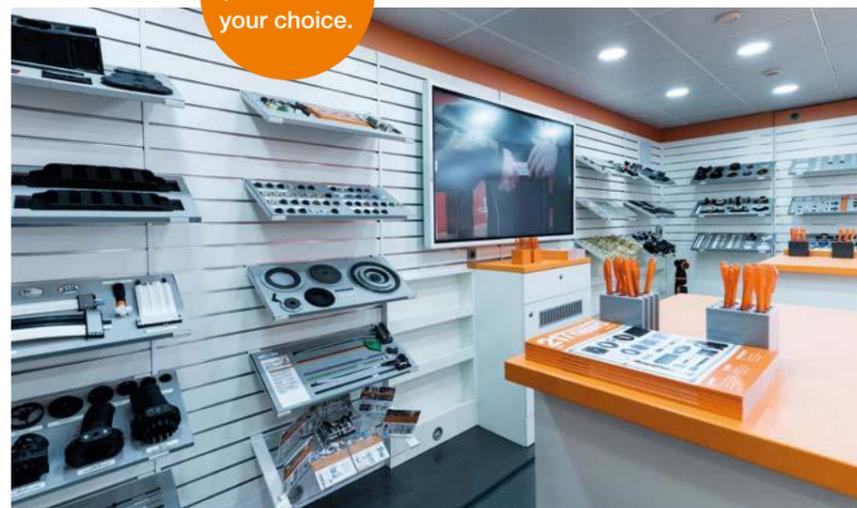
readychain® eco rack

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products of
your choice.



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- No cost for travel or accommodation
- Time-independent, fits your daily routine
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- Groups can be customised

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With
products of
your choice.



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- Use our watch list function. Add news products to your watch list and receive more information via e-mail.

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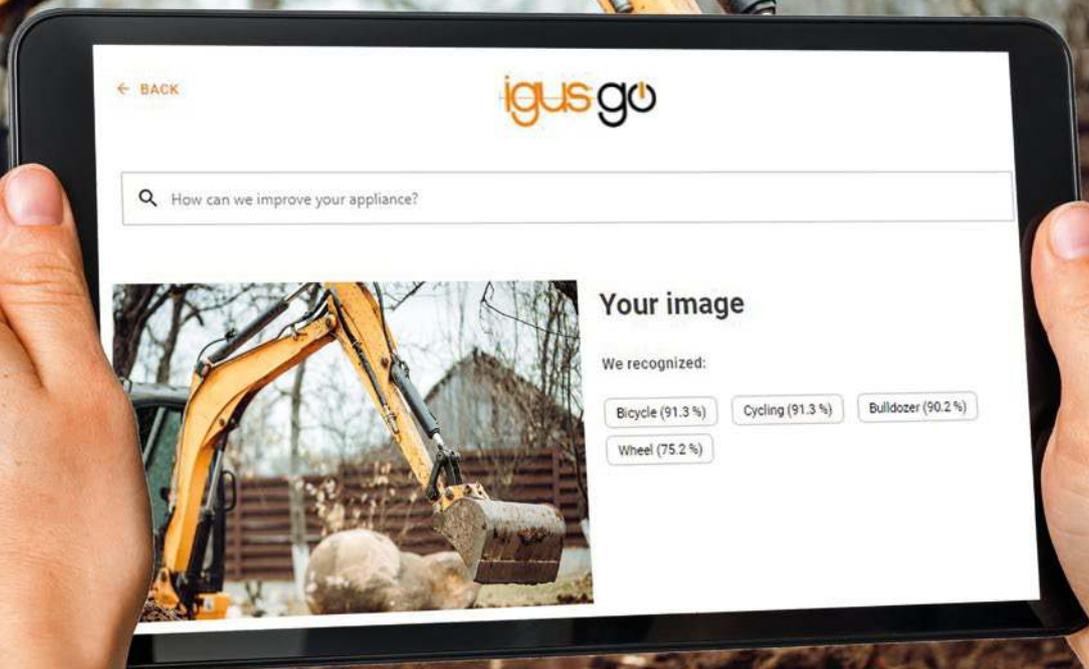


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