

Wood

igus® solutions for the woodworking industry



plastics for longer life®...igus

..industry

... www.igus.eu/woodworking

Reduce costs ...



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No chance for chips!

Woodworking produces chips and dust. Therefore chip repellent or chip safe solutions are important. We would like to present you chip repellent igus® plastic solutions, which you can use to reduce logistics and assembly times, increase throughput and do away with maintenance.

igus® has products in its wide range that covers all requirements in the wood industry. If there is extremely fine dust involved, the use of the **new E4.64 light tube** is recommended as its integrated seal prevents the ingress of dust. The chainflex® cable range gives you reliability, for example with CF98/99 TPE control cables for the **smallest bending radii**, on a milling head. With chainflex® M, we also have very **inexpensive cables** for your application.

Take a look at our extensive range of dry-running linear guides and plain bearings; thanks to the **freedom from lubrication and maintenance**, they are a perfect choice for the wood industry, because dust, chips and dirt will not stop them!

Highlights for your industry:

- Dust-proof energy chains® – no ingress of fine dust into the stop dogs
- Enclosed energy tube – large, small, IP-tested
- Novel energy supply system replaces corrugated hoses
- Cost-effective chainflex® M cables for moving applications – up to 57% saving compared with standard chainflex® types
- Cables for extreme motions and radii from 3.8 x d
- 36 months guarantee for chainflex® cables
- Fully harnessed readychain® systems in 3-10 days
- 3,200 harnessed drive cables in accordance with 22 manufacturer standards
- Dry-running and dirt resistant plain and linear bearings
- Online configurators, product finders and service life predictors

Our online tools also enable you to reduce process costs. igus® delivers from stock in 24-48 hours! Also, see our industry website.

 www.igus.eu/woodworking

I look forward to speaking to you.

... improve technology ...



Photo courtesy of
IMA Klessmann GmbH

**... with motion plastics®
from igus® ...**

Dust-proof ... enclosed ...

A selection of the 100,000 e-chain® modular kit parts, for the wood machine industry. For example ...

... keep fine dust out



Integrated dust seal – E4.64L

- For use in dusty environments
- More cost-effective than steel chains
- Integrated dust seal
- Light
- Dynamic
- Inner height 64 mm

www.igus.eu/E464L

... affordable, large, enclosed



Protection against dirt and chips – R2.75

- Closed design and strong double stop dogs for high fill weights and unsupported lengths
- Cost-effective
- Inner height 75 mm

www.igus.eu/R275

... low vibration, smooth running, fast



For high speeds – system E6.1

- For highly dynamic applications
- For extremely smooth running and low vibrations
- From 38 dB(A)

www.igus.eu/E61

... unsupported corrugated hose



The corrugated hose that can do more – e-skin

- Defined direction of motion, supports itself
- Also for short unsupported lengths
- Modular extendible tube
- Cable-friendly interior separation design

www.igus.eu/e-skin

... small, strong, flexible



Small sized "allrounder" – E2 micro

- For the most confined spaces
- Double stop dogs for high fill weights and unsupported lengths
- Inner height 10 and 15 mm

www.igus.eu/E2

... Modular for all applications



The "allrounder" – system E4.1

- Strong, snap open e-chain® for large unsupported lengths
- Supplied also as enclosed tube
- Inner heights up to 162 mm

www.igus.eu/E4-1

... small radii ... cost-effective ...

A selection of the 1,040 chainflex® cable types, for the wood machine industry. For example ...

... save with less demanding requirements



PVC control cables CF130.UL & CF140.UL

- For medium duty applications
- PVC exterior jacket (CF140 shielded)
- Flame-retardant

www.igus.eu/CF130



PVC motor cables CF885/CF886

- igus® chainflex® M cable range – up to 57% cheaper than comparable chainflex® types

www.igus.eu/chainflexM

... for high demanding requirements, narrow rotational motion, small radii



TPE control cables CF98 & CF99

- For heaviest duty applications
- Especially for small radii
- TPE outer jacket (CF99 shielded)

www.igus.eu/CF98



PVC motor cables CF31

- For heavy duty applications
- PVC outer jacket
- Shielded
- Oil-resistant and flame-retardant

www.igus.eu/CF31

... EtherCAT-Bus cable, Hybrid-Servo cable



PVC-Ethernet cable/CAT5/GigE CFBUS.PVC

- For medium duty applications
- PVC exterior jacket
- Shielded
- Oil-resistant and flame-retardant

www.igus.eu/CFBUS

EtherCAT



PVC hybrid servo cables CF220UL.H

- For unsupported applications and medium duty for different drive manufacturers.

www.igus.eu/CF220UL.H



Save money with reliability and innovation ...
... 3 year igus® guarantee for every chainflex® cable.
100% tested at the igus® lab.

Guarantee statements reduce risk plant engineering. With our unique igus® guarantee for ALL chainflex® cables, we are providing predictable security for 36 months, or up to 10 million double strokes (5 million double strokes for very low-priced chainflex® M cables).

igus chainflex
cable guarantee

36
months
guaranteed

... the right solution ...

e-chains® and chainflex® cables: delivered from stock ...



Photo courtesy of IMA Klessmann GmbH



Guiding of larger hoses: extender crossbars

- Suitable for hoses with an outer diameter of up to 270 mm
- Openable crossbar (depending on the e-chain® series)
- Matching modular interior separation for perfect segmentation of the interior
- Cable-friendly design of crossbar and interior separation
- High retaining force of the crossbar

www.igus.eu/extender-crossbars



Chip-proof and unsupported on long travels: guidelok

- Smaller e-chain® dimensions possible for specified unsupported lengths
- More cost-effective than many steel chains or elaborate sliding systems
- Open trough system possible, chips can fall through

www.igus.eu/guidelok



Reliable guidance in all axes: triflex® R and CF Robot

- Multi-axis "3D e-chain", torsion ± 10° per chain link
- Enclosed type, chip-proof
- Can be shortened or lengthened as you wish
- Large range of torsionable cables

www.igus.eu/triflexR

www.igus.eu/CFROBOT

... for woodworking machines ...

... for all applications and conditions



Extremely tight sealing for direct use in chip areas: RX e-tube

- Snap open, IP-protected e-tube
- Applicable in direct chip area
- Rounded contour, chips fall off

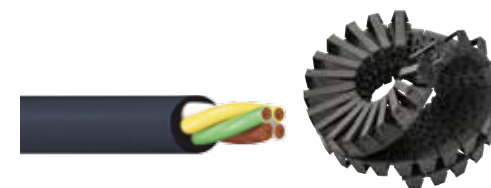
www.igus.eu/RX



Ready-to-install solutions, completely assembled: readychain®

- Ready-to-install systems, from connectors and harnessed cables up to complex energy supply modules
- Supplied in 3-10 days
- From batch size 1 or in series, customer defined production
- Assembly on site
- With system guarantee

www.igus.eu/readychain



Compact and space-saving for e.g. milling heads: twisterband and CF98

- Allows rotational motions 3,000°-7,000° in the smallest space
- Can be installed horizontally and vertically
- Easy to fill, modular

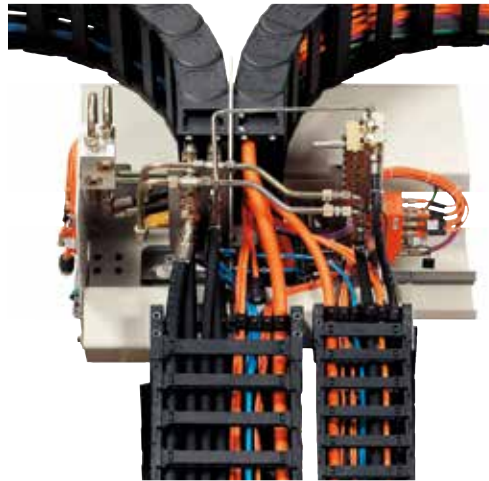
www.igus.eu/twisterband

www.igus.eu/CF98



... assembled systems ...

readychain®: chain – cable – guarantee... in 3 - 10 days



Assembled igus® readychain® systems: individual or serial production

readychain® – fully harnessed systems in 3-10 days

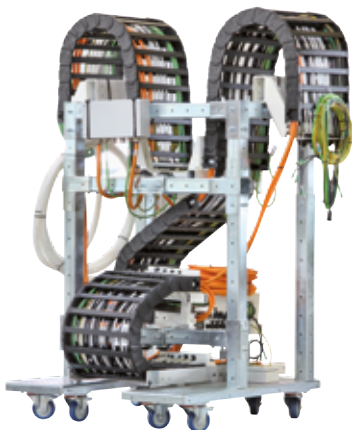
700 systems per week in 12 readychain® factories around the world – assembly time optimised to raise your cash-flow

- Lower storage costs for cables, e-chains® and connectors to zero
- Cut turnaround times by half
- Flexibility when orders vary
- Reduce the number of suppliers and orders by 75%
- Minimise your machine downtimes
- System guarantee – depending on the application

www.readychain.eu

readychain® assembly rack

80% savings during prototyping. Assembly transport rack for ready-to-install energy supply systems.



Delivered ready to install.

readycable®: harnessed drive cables ... in 24 - 48h



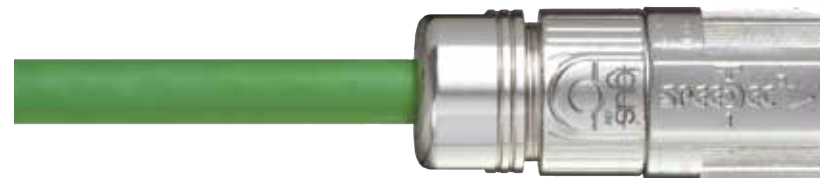
readycable® – in 24-48h or today

igus® provides more than 3,200 harnessed cables for drive technology to 22 different manufacturer standards. Professionally produced, 100% tested.

- Servo, motor and signal/encoder cables
- No cutting charges, no surcharges for small quantities and packaging

- Cable length accurate to the centimetre as per customer specifications
- Smallest bending radii from 7.5 x d
- Reduce storage costs and increase cash flow

www.readycable.eu



Intercontec SpeedTec

Service packs (starting at 1 piece) or harnessed directly to customer specifications. Also harnessed as an over-moulded version to your specifications

Dry-running, maintenance free ...

Dry-running made easy. For example ...

... low profile designs



drylin® N flat slides

- 100% lubrication free
- Low installation height between 6 and 12 mm
- Very low weight
- Numerous carriage options – also with pretension

www.igus.eu/drylinN

... as alternative to ball bearings



drylin® R shaft slides

- Dimension identical to standard commercial ball bearings
- Shafts, shaft support blocks and accessories available from stock,
- Replaceable liners

www.igus.eu/drylinR

... drive via trapezoidal, high helix or toothed belt



drylin® linear axes

- 100% lubrication free
- For format adjustments and quick small parts handling
- Extensive accessories

www.igus.eu/drylin-drive

... linear axis with motor, ready to connect



drylin® E drive technology

- Complete system delivered in 3-4 days
- With NEMA stepper motors / DC motors
- Can be configured online

www.igus.eu/drylinE

... and dirt resistant ...

Maintenance free plain and linear bearing solutions. For example ...

... the best shaft for your linear bearings

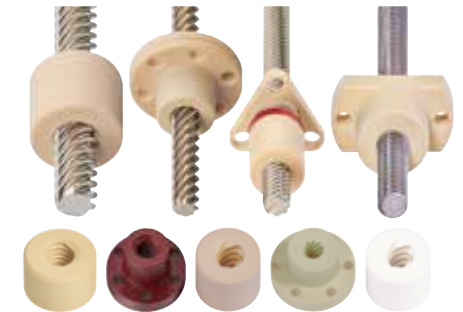


drylin® shafts

- 8 different shaft materials
- Low weight
- Round or fully supported

www.igus.eu/drylin

... linear drive systems

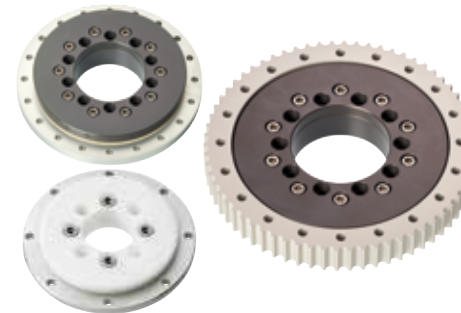


drylin® lead screw technology

- Efficient and durable dryspin® technology
- Self-locking trapezoidal and metric threads
- Lead screw nuts made from 5 iglidur® materials

www.igus.eu/leadscrew-technology

... lubrication free, dirt resistant slewing ring bearing



igidur® PRT slewing ring bearing

- Cost-effective, low maintenance, lubrication free
- Simple assembly, replaceable sliding pads
- High wear resistance
- For high load capacity, high rigidity
- Extensive accessories

www.igus.eu/PRT

... ball bearings dry running



xiros® polymer ball bearings

- Lubrication and maintenance free
- High corrosion resistance to temperatures up to +150°C
- Non-magnetic
- Low weight

www.igus.eu/xiros

... dry-tech® bearing technology ...

Linear travel without lubrication ...



Rolling and sliding for easy movement – drylin® hybrid bearings

- Combined sliding and rolling
- For low drive forces
- Single and double roller bearings or complete carriages
- Manual adjustment (doors and control panels)

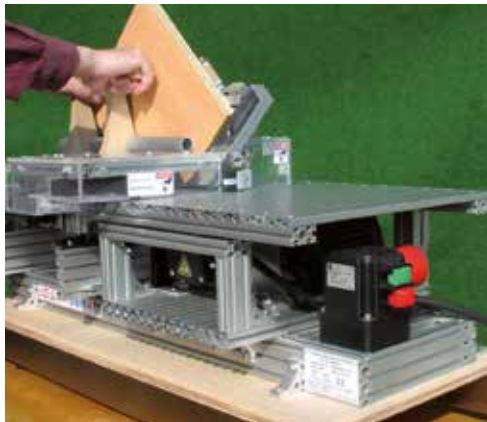
www.igus.eu/drylinW-hybrid



Linear guide system for virtually unlimited design freedom – drylin® W

- Modular kit with 14 different profiles and more carriage options
- Extreme flexibility, simple assembly
- Insensitive to dirt due to dry running
- Smooth and quiet

www.igus.eu/drylinW



Dimensions are identical to recirculating ball-bearing guides – drylin® T

- For applications in automation and handling
- Dimensions identical to recirculating ball-bearing guides
- Adjustable bearing clearance
- Automatic clearance adjustment

www.igus.eu/drylinT

... fit and forget.

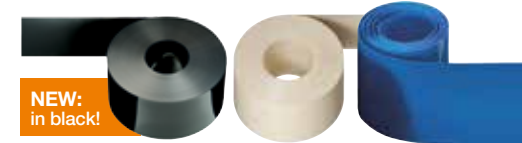
... made easy



Lubrication free and resistant to dirt – iglidur®

- Wear resistant polymers
- 16 standard materials for (almost) all applications
- Custom-made solutions – from batch 1
- High wear resistance
- High resistance to dirt
- Online service life prediction

www.igus.eu/iglidur



NEW: in black!

Easy to cut and glue – Tribo-Tape

- For the lining of tribologically stressed surfaces and shapes
- Easy to cut and glue
- Low space requirement
- With adhesive back

www.igus.eu/tribotape



Dirt resistant igubal® spherical bearings

- Self-adjusting bearing elements that are completely made of plastic
- Various models, such as spherical, flanged and pillow block bearings
- Various spherical ball materials
- Very cost-effective
- Online service life prediction

www.igus.eu/igubal



Tested! Service life ...

igus® chainflex® cables for e-chainsystems®. 2,700 cables tested per year. 58 test facilities. Tested, tested, tested ... For example:



Test 3089:
Ethernet-Bus cable
76 million strokes tested

Ethernet-Bus cable CFBUS.045 tested in e-chain®. More than 76 million strokes with a bending factor of 9.4 x d.

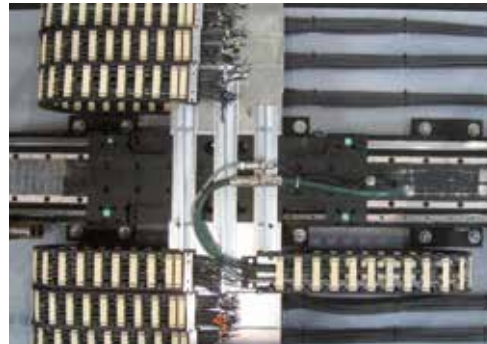
www.chainflex.eu/test3089



Test 3621:
Control cable
138 million strokes tested

Control cable CF98.05.04 tested in e-chain®. More than 138 million strokes with a bending factor of 3.2 x d.

www.chainflex.eu/test3621



Test 3479:
Measuring system cable
65 million strokes tested

Measurement system cable CF11.D tested in e-chain®. More than 65 million strokes with a bending factor of 7.1 x d.

www.chainflex.eu/test3479



Test 3841:
Servo cable
53 million strokes tested

Servo cable CF21 tested in e-chain®. More than 53 million strokes with a bending factor of 6.1 x d.

www.chainflex.eu/test3841

... predicted accurately.

Tested at the 1,750 m² Cologne lab. 4,100 tests, 7,512 findings added to the electronic database, 10 billion e-chains® cycles per year for chains and cables.



Part of the igus® laboratory, Cologne



Test for torsion and twisting with e-chains® and chainflex® cables



Service life experiments for e-chains® and chainflex® cables



Cold test at -40 °C for chainflex® cables and e-chains®



Polymer bearings technology: tested a thousand times ... under real conditions.



Visit our industry web pages for more information, products, application examples and useful online-tools.

www.igus.eu/woodworking



Quickly find and configure products and calculate service life – all online

Using our online product finders you can find the right igus® product and get a service life prediction.

www.igus.eu/online



The igus® delivery service

Over 97% availability of all catalogue items – no need for you to stock

- Over 100,000 products from stock
- No minimum order value
- No surcharges for small quantities
- No costs for cutting cables
- No packaging costs

www.igus.eu/24



Modern injection moulding technology

The igus® GmbH quality policy is based on the objective of identifying and meeting customer needs, and of always being a professional partner and reliable supplier. igus® has always been committed to producing products of the best possible quality and consistently developing innovative solutions.



The igus® lab

The industry's largest test lab (1,750m²) conducts more than two billion test cycles per year on a total of 107 test rigs.

- Extensive test databases
- Customised tests on request

www.igus.eu/test

For any task – in any batch size

Different industries need different solutions. Whether in mechanical engineering, automotive-manufacturing or in the robot industry – igus® offers customised support for specialised applications. igus® already has many years of experience and specialised resources in many industries.

www.igus.eu/industry

igus® motion plastics®

One vision has been driving us for over 50 years – motion plastics®: moving parts made of plastic that cost less and last longer. Our core technology consists of tribo-polymers – high-performance plastics, which we have optimised for friction and wear. The technology has made us into a world-wide leader for developing and manufacturing energy supply systems and plain bearings.



/9001:2008 /16949:2009

igus® is certified for energy chains®, cables, and harnessing, as well as plastic plain bearings in acc. with ISO 9001:2008 and ISO/TS 16949:2009.

/newsletter

Free of charge! Discover more about the latest trends and innovations from the world of igus® motion plastics® world. Many exciting applications and videos, even from your industry.

Register here: www.igus.eu/newsletter

/contact

Your personal contact person for your industry and your country: www.igus.eu/contact

igus®

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