



NEW
from iwis

Solutions for chains with optimized maintenance characteristics

From low-maintenance through to maintenance-free – iwis offers a wide range of options for minimizing the outlay involved in relubricating drive and conveyor chains. The requirements are many and varied: In certain applications, chains can never, or only rarely, be relubricated. They may require emergency running characteristics between lubrication intervals or it may be necessary to maximize service life while at the same time keeping the exterior of the chain clean.

iwis chains that have been optimized for maintenance make a valuable contribution to sustainable, environmentally friendly application in the fields of mechanical and plant engineering.





Maintenance-optimized chains: Rarely or never need relubrication

From low-maintenance through to maintenance-free

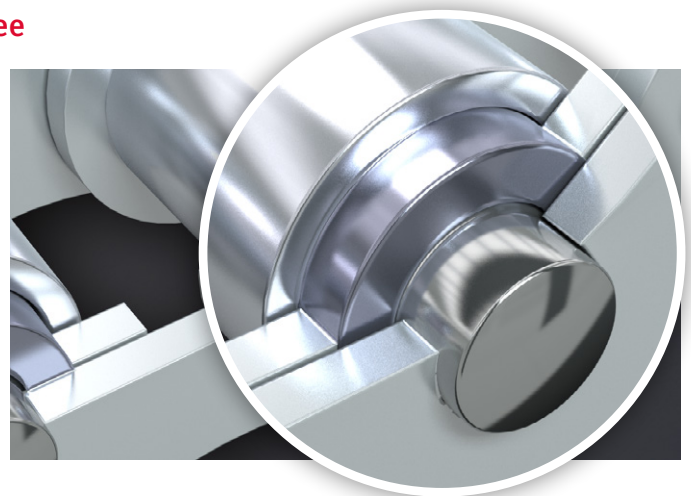
The life of a chain is dependent to a large extent on proper relubrication. As a result of the oscillating movements of the chain link, the lubricant is used up over time. A lack of lubricant causes dry friction, which in turn leads to the formation of fretting corrosion and increased wear of the chain. If it is necessary for no lubricant to be used or if relubrication is not possible, special link designs can reduce friction and significantly increase the service life of the chain.

iwis offers a range of different solutions for a wide variety of requirements in chain applications: In certain applications, chains can never, or only rarely, be relubricated. They may require emergency running characteristics between lubrication intervals or they may need to have a longer service life while the exterior of the chain remains clean and dry.



Maintenance-optimized chains from iwis are not only a cost-efficient option; they also allow for environmentally friendly, sustainable deployment in the fields of mechanical and plant engineering. This is because our maintenance-optimized chains extend the service life of roller chains, reduce the amount of lubricant used and require less energy, thus cutting down on the consumption of fossil resources.

iwis' contribution to environmental protection!



Cross-section of a roller chain:

Oscillating movement between the pin and the bush in the link is the primary cause of wear elongation in chains.

GOOD TO KNOW

“Maintenance-free” is not a rigidly defined term and is often interpreted differently by different people. There is a huge variety of ways of extending the service life of chains using special link designs. Depending on the performance delivered by each approach, iwis makes a distinction between low-maintenance and maintenance-free solutions.



Extended service life for your roller chains – even in the most demanding of applications

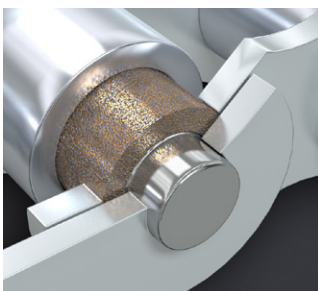


Maintenance-free chains

Wear resistance and the resulting overall service life are among the foremost performance characteristics of drive and conveyor chains. Maintenance-free iwis chains feature a special link design. This leads to a reduction in friction between the pin and bush in the chain. Furthermore, we have provided the individual elements with a special surface coating. This results in maintenance-free chains that you can use for an extended period without the need for relubrication.

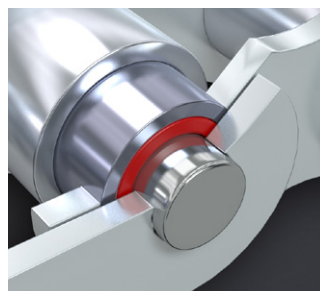
Low-maintenance chains

The specially treated surfaces of the individual components of our low-maintenance chains means that the chains have a prolonged service life. In many cases, this is enhanced by carefully selected high-performance lubricants. The use of low-maintenance chains allows you to considerably extend the relubrication interval compared with standard roller chains. And because you are not only cutting down on lubricants, but also reducing the outlay for maintenance, you will be saving money as well as protecting the environment.



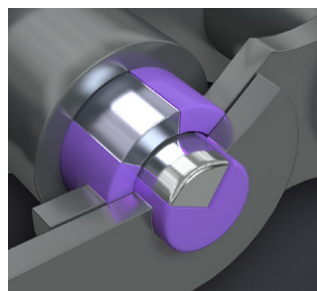
Maintenance-free
MEGAlife roller chains

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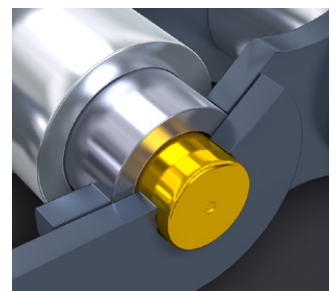
Maintenance-free
CF-b.dry stainless steel chains

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Low-maintenance
b.triton roller chains

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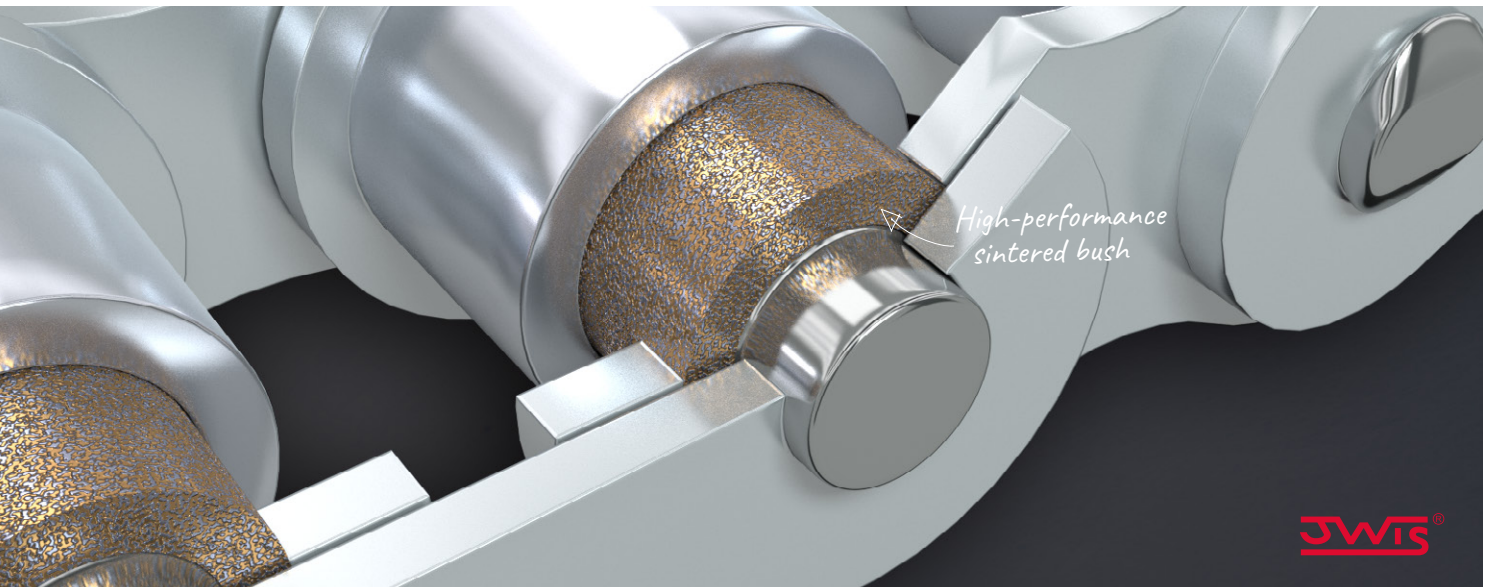


Low-maintenance
Super-Longlife roller chains

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SIMPLE TO REPLACE

Low-maintenance and **maintenance-free chains** from iwis have strength characteristics similar to those of the standard ranges. The benefit for you: Because the chains comply with the specifications in ISO 606, their dimensions are identical, which means that you can **easily** replace them in existing plant equipment.



Maintenance-free MEGAlife roller chains

iwis chains employing maintenance-free sintering technology in the chain link were developed for applications in which contamination from lubricants is not permitted or where it is difficult to relubricate the chain. The maintenance-free MEGAlife drive and conveyor chains feature a high-performance sintered bush and high-quality nickel-plated components. In conjunction with wear-resistant pins, this special link design cuts down friction in the link extremely effectively and reduces wear elongation over an extended period without the need for relubrication. The high-performance coating provides additional protection against wear and protects against external influences.

iwis MEGAlife chains can be deployed in many applications without the need for additional initial lubrication. The use of maintenance-free MEGAlife chains can significantly reduce the frequency of relubrication compared with standard roller chains! Furthermore, the extremely high tensile and fatigue strength provide an additional level of reliability in operation. The outstanding length of service life, coupled with reduced relubrication frequency deliver a clean chain application with fewer downtimes and lower outlay for maintenance.

Application

MEGAlife chains are used in all areas where relubrication is difficult or impossible. These include clean environments and applications where access for maintenance work is difficult in temperatures ranging from $-40\text{ }^{\circ}\text{C}$ to $+150\text{ }^{\circ}\text{C}$.

Highlights

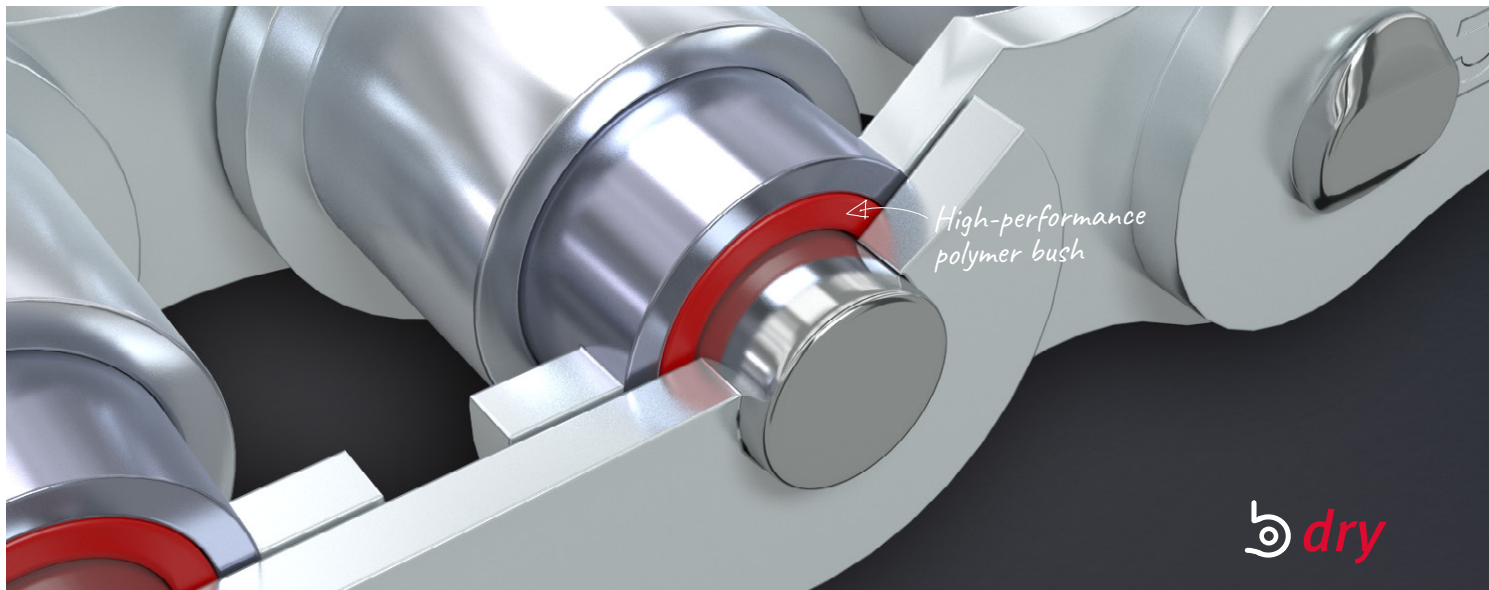
- Sintered bush made of a material specially developed for this application, hardened and treated to optimize its tribological properties
- High-performance lubricant for long-term lubrication in the chain link
- Pin with wear-resistant, friction-optimized coating
- Seamless roller with corrosion-resistant coating and geometry optimized to match the sintered bush
- Reduced downtimes and maintenance costs for machines and systems
- Available dry or with additional special lubricant

OTHER VARIANTS

Alongside roller chains, other iwis chains that are available in maintenance-free MEGAlife versions include roller chains with attachments, accumulating chains and many others. Have a word with us!

For further information, see our product flyer or visit www.iwis.com





Maintenance-free CF-b.dry stainless steel chains

The maintenance-free, high-alloy chromium steel roller chains can be used absolutely dry. This is made possible by the special, high-performance polymer b.dry friction bearing in the chain link. This friction partner avoids steel-on-steel contact between the pin and bush. This means that you can use the chain without any lubricants throughout its entire service life. A ball-drilled steel carrier bush surrounds the friction bearing, giving the chain additional strength.

Structure of the link

- **High-performance polymer bush 1**
from FDA-compliant material
- Thin-walled, seamless, **stainless steel bush 2**, ball-drilled
- Basic chain: **JWIS-CF stainless steel chain 3**



Application

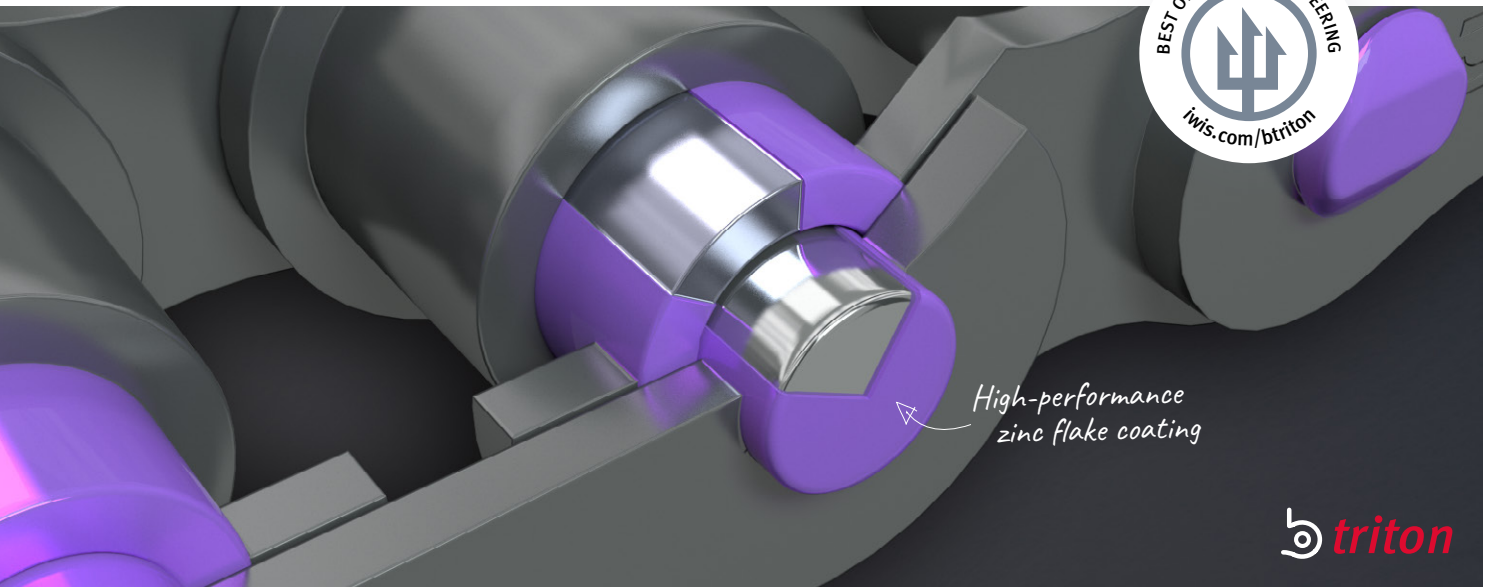
Anywhere that relubrication is either undesirable or impossible, b.dry chains come into their own: Clean and without the use of any lubricant, they stand up to any comparison in terms of performance. CF b.dry chains are not only ideally suited for use in corrosive environments. You can also use them in sensitive applications and applications with stringent hygiene requirements. Special certification of the high-performance polymer means that it can be used without difficulty in fields such as the food processing industry. The materials used make the chains particularly resistant to aggressive substances and allow them to be used in temperatures ranging between -100 °C and +200 °C. External factors, such as the temperature range or contact with chemical substances, etc., have a direct impact on the performance of mechanical elements. Get in touch with us for specific advice on chain solutions for demanding applications.

Further highlights

- Optimized wear behaviour
- Corrosion-free and durable thanks to high-quality materials
- Reduced downtimes and maintenance costs on machines and systems
- Reduced contamination and less soiling during production

For further information,
see our product flyer or visit
www.iwis.com/bdry





Low-maintenance b.triton roller chains

b.triton roller chains are the ideal choice when the strength of stainless steel chains is no longer sufficient and traditional coatings no longer provide corrosion resistance when exposed to harsh operating environments and ambient conditions. We have been able to boost the performance of each component of the b.triton chains by coating them individually. The benefit for you: The high-performance zinc flake coating actively protects your chain against corrosion, and additional coatings in the chain link deliver extraordinary wear performance. A long service life and a lower relubrication frequency mean that choosing b.triton is at the same time a decision to adopt a particularly sustainable, environmentally friendly solution.

Highlights

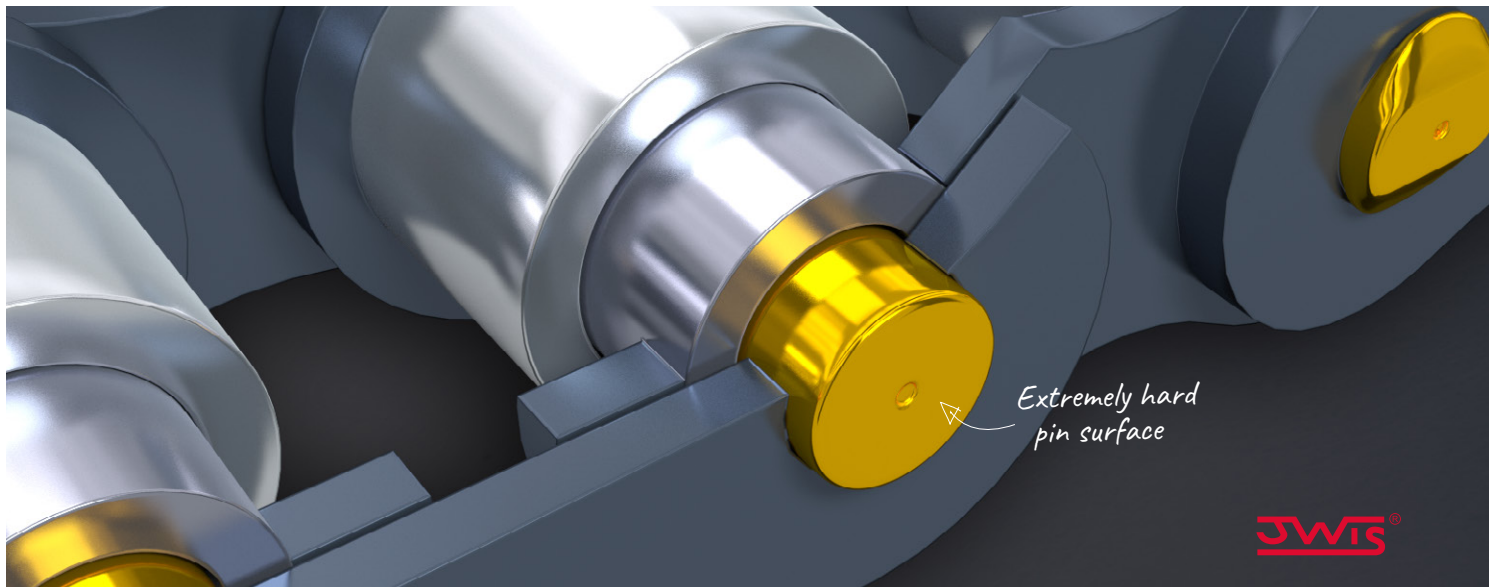
- Best corrosion protection: Up to 1000 hours of salt spray testing as per ISO 9227
- Low-maintenance and wear-resistant thanks to specially coated chain link
- Carefully selected high-quality carbon steel offers outstanding strength
- Suitable for temperatures from -10 °C to +130 °C thanks to new initial lubricant iwiDUR-G
- Extended operating range up to 150 °C with high-temperature lubricant
- Extruded bushes and rollers for even better corrosion resistance, reduced initial elongation and quieter running
- RoHS-compliant materials, free of hexavalent chromium (CrVI)

Application

b.triton chains are particularly suited for use in environments involving water or water vapour applications, even when these are combined with stringent demands on the strength of the roller chains used. The special coatings are particularly resistant to aggressive substances, meaning that the chains are also ideal for use outdoors or in areas in the food processing industry that are subject to cleaning regulations. The combination of the special link with the new iwiDUR-G wax lubricant minimizes maintenance frequency, which makes the chain ideal for applications in which maintenance is difficult.

For further information,
see our product flyer or visit
www.iwis.com





Low-maintenance Super-Longlife roller chains (SL)

Low-maintenance JWIS chains in the SL range feature an extremely wear-resistant chain link. We developed the Super-Longlife technology specially for heavy-duty timing drives and have implemented this technology for industrial applications.

SL chains are treated with a highly effective initial lubricant, and so you also benefit from an above-average service life.

Highlights

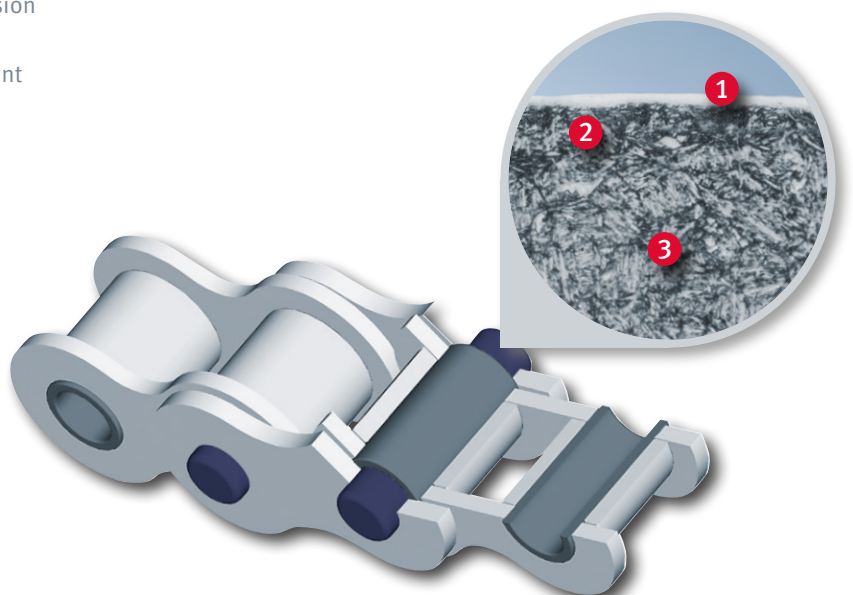
- Extremely high wear resistance and high tensile and fatigue strength
- Extremely hard pin surface, making it particularly wear-resistant
- Less susceptible to corrosion and fretting corrosion in the chain links
- Prestretching matched to the chain and compliant with DIN/ISO specifications
- Available with all JWIS brand initial lubricants

Application

The iwis SL technology is suitable for heavy-duty drives. The particularly wear-resistant link means that you can bridge the gap with minimal lubrication if planned relubrication is missed. Top wear performance means that SL chains have a particularly long service life. As a result, they require far less regular maintenance, even in the most demanding of applications.

Structure of the link

- 1 Outer layer with a very hard surface
- 2 The diffusion zone is a load-bearing, high-strength, hard layer. Together with the outer layer, this provides the wear protection.
- 3 The base material is the ductile core of the pin.



Our subsidiaries

Germany

iwis antriebssysteme GmbH & Co. KG
Albert-Roßhaupter-Straße 53
81369 München
Tel. +49 89 76909-1500
Fax +49 89 76909-1198
sales-muenchen@iwis.com

Germany

iwis antriebssysteme GmbH
Essener Straße 23
57234 Wilnsdorf
Tel. +49 2739 86-0
Fax +49 2739 86-22
sales-wilnsdorf@iwis.com

Germany

iwis agrisystems
Schützenweg 5
36205 Sontra
Tel. +49 5653 9778-0
Fax +49 5653 9778-26
agrisystems@iwis.com

Brazil

iwis Sistemas de Transmissão
de Energia Mecânica Ltda.
Rua Bento Rosa, nº 1816
Bairro Hidráulica
95.900-000 Lajeado, RS
Tel. +55 51 3748-7402
salesbrazil@iwis.com

China

iwis drive systems (Suzhou) Co., Ltd.
No. 266 LvliangShan Road
215153 Suzhou SND
Tel. +86 512 8566-3010
Fax +86 512 8566-3009
salescn@iwis.com

France

iwis systèmes de transmission
10, rue du Luxembourg
69330 Meyzieu
Tel. +33 4374515-70
Fax +33 4374515-71
salesfr@iwis.com

Great Britain

iwis drive systems Ltd.
Unit 8c Bloomfield Park
Bloomfield Road, Tipton
West Midlands, DY4 9AP
Tel. +44 12 15213600
Fax +44 12 15200822
salesuk@iwis.com

India

iwis engine systems India Pvt. Ltd.
Teerth Technospace
Unit No. C 409, Survey No. 103
Adjoining Mercedes Benz showroom
Baner Pune 411045 India
Tel. +91 7030922297
salesin@iwis.com

Italy

iwis drive systems Srl
Via Carlo Rota, 10
20090 Monza (MB)
Tel. +39 340 9296142
Fax +49 89 7690949-1726
salesit@iwis.com

Canada

iwis drive systems, Inc.
101-19097, 26th Avenue,
Surrey BC V3Z 3V7
Tel. +1 604 560-6395
Fax +1 604 560-6397
salesca@iwisusa.com

South Korea

iwis engine systems Korea Co., Ltd.
Office No. 403-2, 322 Yanghyeon-ro
(Yatap-dong, Korea Design Center)
Bundang-Gu, Seongnam Si,
Gyeonggi-Do, Korea (ZIP) 13496
Tel. +82 31 788-7545
saleskor@iwis.com

Switzerland

iwis AG Kettentechnik
Bahnweg 4 (Postfach)
5504 Othmarsingen
Tel. +41 62 8898999
Fax +41 62 8898990
info@iwis-ketten.ch

South Africa

iwis drive systems, (Pty) Ltd.
Unit 3, 127 Koornhof Road
Meadowdale, 1613
Tel. +27 11 392-2306
Fax +27 11 392-3295
salessa@iwis.com

Czechia

iwis antriebssysteme spol. s r.o.
Písecká 893
38601 Strakonice
Tel. +420 383 411811
Fax +420 383 321695
salescz@iwis.com

Turkey

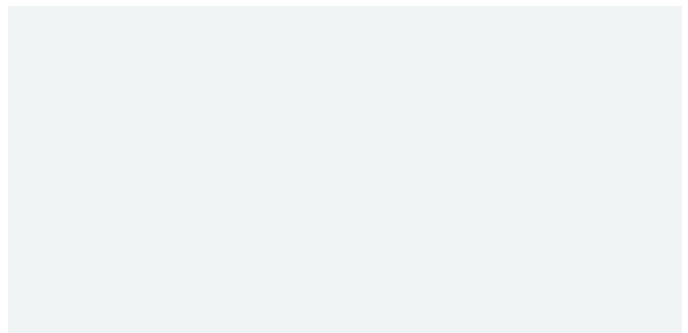
iwis tahrik sistemleri ltd. şti.
Kağıthane Ofis Park 4C-Blok
Bağlar Cad. No: 14
34406 Kağıthane-Istanbul
Tel. +90 212 939-3843
Fax +90 212 939-3701
salestr@iwis.com

USA

iwis drive systems, LLC
Building 100, 8266 Zionsville Road
Indianapolis, IN 46268
Tel. +1 317 821-3539
Fax +1 317 821-3569
sales-us@iwis.com

www.iwis.com

Your sales representative



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wir bewegen die welt