

# iwis

wir bewegen die welt

**JWIS**<sup>®</sup>



**P**  **C**Chain

## Pin Oven Chains: reliable, long-lasting and wear-resistant

**NEW**  
from iwis

**Your challenge:** safe, reliable conveying of cans and other thin-walled hollow containers at high speed and high temperatures.

**Our solution:** iwis high-performance Pin Oven Chains are **extremely wear-resistant**. Additional advantage: **specially adapted pins** and **high-quality protective heads** guarantee the right solution for every can application!

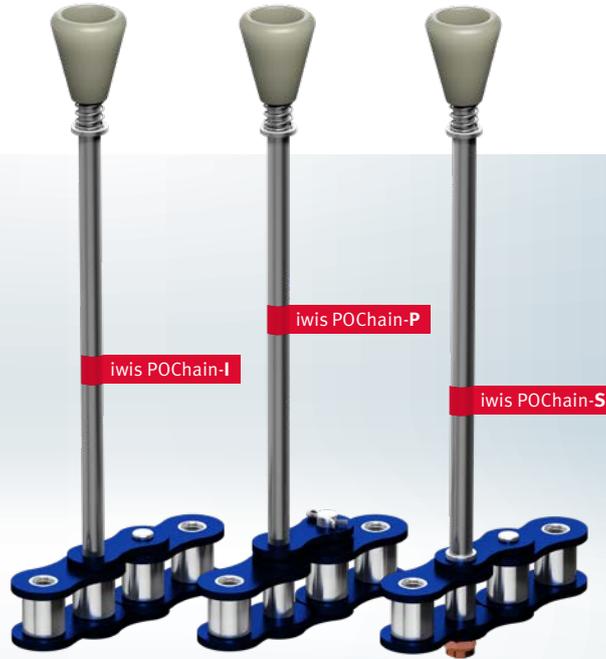
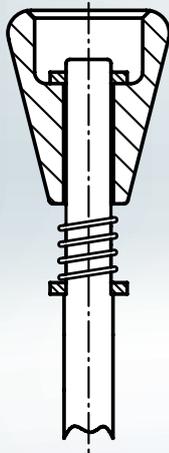
**Application areas:** iwis Pin Oven Chains can be used wherever drinks cans, aerosol cans or other thin-walled containers need to be conveyed, painted, dried etc.



Quality products from Germany's  
leading chain supplier

[www.iwis.com](http://www.iwis.com)

Standard protective head



## Highlights

- iwis precision roller chains are long-lasting, reliable and particularly wear resistant.
- iwis Pin Oven Chains for can manufacturing applications are initially treated with our special lubricant IPP. IPP is PWIS-free, drip-proof, has a very low evaporation rate, is suitable for high-temperature operation and approved for use in the food industry.
- Standard protective head: high-performance material (PEEK), outstandingly heat-resistant (up to at least 260 °C, depending on application). PEEK is also highly resistant to chemicals. Protective heads are also optionally available with sliding washers, if necessary (only recommended for applications where contamination is uncritical).
- Length of transport pins can be adapted to your specifications.
- Transport pins: easy to change on the production line without breaking the chain or removing it from the machine (POChain P/-S)
- Transport pins can be installed at defined intervals (e.g. every 7th pin).
- iwis offers three fixture options for transport pins:
  - POChain-I: pins are integrated in the outer chain plates
  - POChain-P: split-pin fixture
  - POChain-S: pins are secured with special nuts
- Temperature range: 0 °C to +260 °C

## Two pin versions to cover all requirements

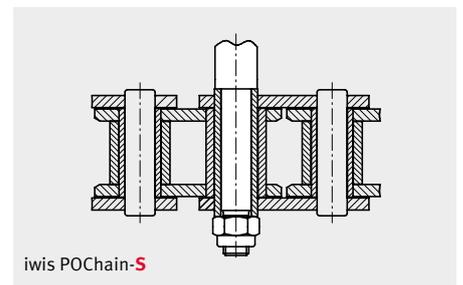
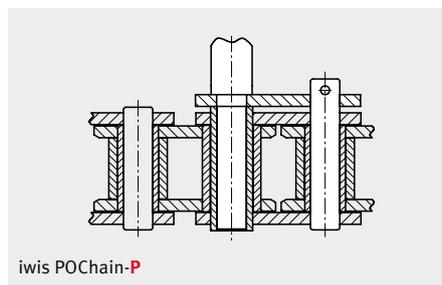
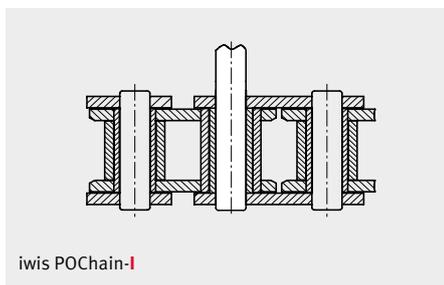
### Bendable pin

These pins are manufactured to be tough yet bendable enough to withstand inadvertent impact during conveyor jams or accidental contact with the machine frame. These pins are easy to bend back into their original position by hand.

### SnapOff pin

The material specification of these pins cause them to break off in the event of any accidental contact or impact during operation. The advantage for you: the hardness of the transport pin material is similar to that of the pins of the base chain, so the wear rate of both sets of pins is the same.

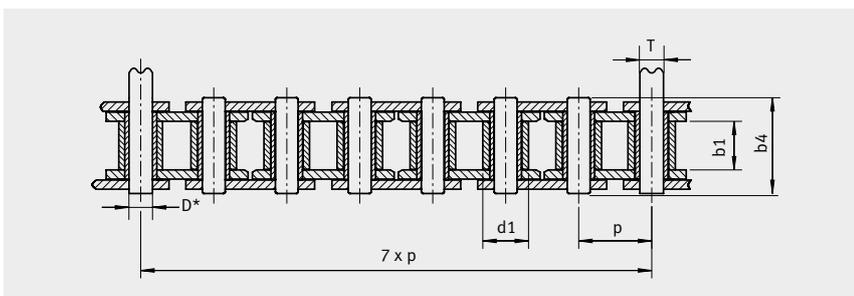
## Our fixture solutions





## Technical dimensions

Chain type	ISO	iwis designation	Pitch × inner width	Breaking load min.	Roller diameter max.	Hollow pin inner diameter min.	Inner width min.	Pin length	Transport pin diameter	Weight (dependent on transport pin lengths)
			$p \times b_1$ mm	$F_b$ N	$d_1$ mm	$D$ mm	$b_1$ mm	$b_4$ mm	$T$ mm	kg/m
POChain-I	12 A-1/ANSI 60	M 128A SL	3/4 × 1/2"	31,300	11.91	–	12.7	26.3	5.97	approx. 1.9 kg/m
POChain-P	12 A-1/ANSI 60	M 128A SL	3/4 × 1/2"	31,300	11.91	6.0	12.7	26.7	5.97	approx. 1.9 kg/m
POChain-S	12 A-1/ANSI 60	M 128A SL	3/4 × 1/2"	31,300	11.91	6.0	12.7	26.7	8.00	approx. 2.3 kg/m

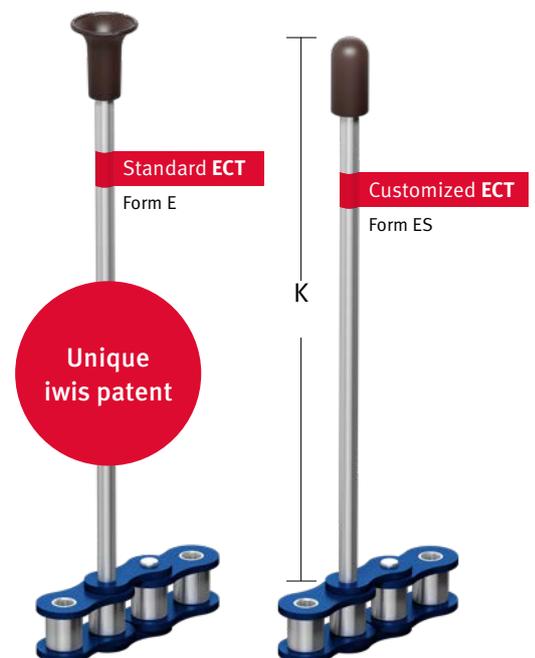


\*Notice: Dimensions only apply to POChain-P/S.  
K defines the dimension from outer plate to the end of the protective head.

## iwis Elastic Can Tip (ECT) NEW

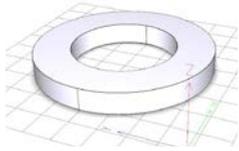
### Highlights

- Less complex design: one high-temperature elastomeric head replaces one PEEK protective head, three washers and a spring!
- The design and material properties of the elastomeric head take over the damping properties of a spring.
- Defective heads can be replaced easily and without tools.
- Even defective heads still have emergency running capabilities.
- ECT material is PWIS-free and FDA approved!
- Will not damage thin-walled drinks cans.
- Suitable for temperatures up to 215 °C. Available now!



New iwis head solutions  
for your special requirements:  
**innovative and patented**

## **iwis** Spare parts for Pin Oven Chains



**Press-fit washer**

Art.-Nr. 40010214



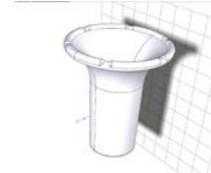
**Spring**

Art.-Nr. 40010218



**Standard protective head**

Art.-Nr. 40010217



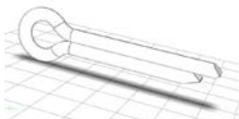
**Protective head ECT**

Art.-Nr. 40010169



**Customized ECT**

Art.-Nr. 40010119



**Split pin**

Art.-Nr. 40010219



**Insertion links**

\*



**3-link sections**

\*



**Outer link**

Art.-Nr. 40010216



**Connecting link**

Art.-Nr. 40009882



**Installation parts  
Version P**

\*



**Installation parts  
Version S**

\*

\* Article no. to be determined when ordering

## Sidelight: why lubrication is important

Choosing the right lubricant for your chain is the most decisive factor in ensuring long service life for a chain consists of individual links which behave like swivelling friction bearings.

It is essential to ensure that an adequate film of lubricant always covers the bearings to prevent dry running, which can result in excessive wear.

Inadequate lubrication, in combination with dirt on the chain, can lead to a reduction of transmissible power to as little as 20% of the normal value. In other words, this impairs chain performance more than the sum of all other negative influences.

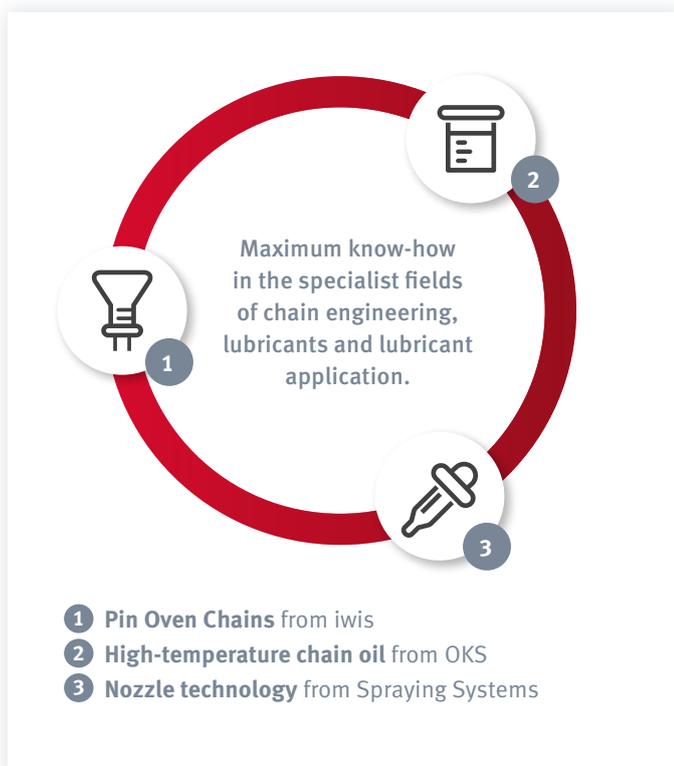
PWIS, or paint-wetting impairment substances, have a negative impact on paint applied to the outer surface of the beverage can. **Our special test set means that testing for PWIS properties is simplicity itself! Please contact us for more details.**

	Chain velocity $v$ in $\frac{m}{s}$	< 4	4-7	> 7
Lubrication	Excellent	1.0	1.0	1.0
	Poor without contamination	1.4	2.5	10.0
	Poor with contamination	2.5	4.0	
	Nil	5.0	10.0	

1.0 to 1.5 = good / 1.5 to 5.0 = not recommended / from 5.0 = not permitted

Critical points	Test result
Lubricant IPP*	✓ PWIS-free
PEEK head	✓ PWIS-free
ECT head	✓ PWIS-free
MEGAlife bushes*	✓ PWIS-free
Gloves in production process	✓ PWIS-free
Chain guides in production process	✓ PWIS-free
Rubber mat in production process	✓ PWIS-free

\* Supplier certificate available



## Competence Team Can Making CLA

### Functions and benefits

The open cooperation of three reputable companies offers you the best of everything for your chain solution: the combination of ideal chain, optimum lubricant and made-to-measure application. The benefit for you: a significantly longer service life for your chain.

The high-temperature chain oil from OKS and nozzle technology from Spraying Systems Germany are the perfect complement for iwis engineering. You can rely absolutely on the knowledge and experience of these three companies.

Our customers benefit from this collaboration because they are assured of an answer to all their questions related to these three highly complex sub-systems. The combination and concentration of competence not only contributes to the optimisation of our customer's production machinery, but also ensures a longer service life for their chains.

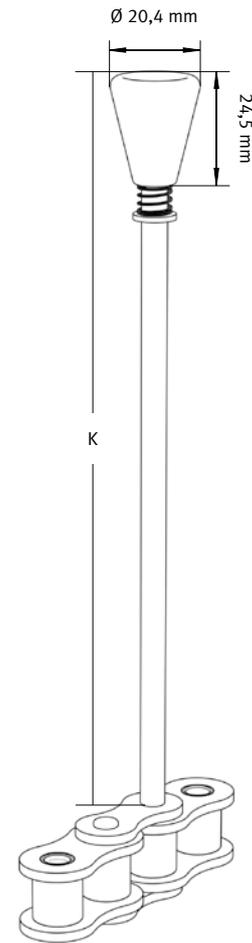
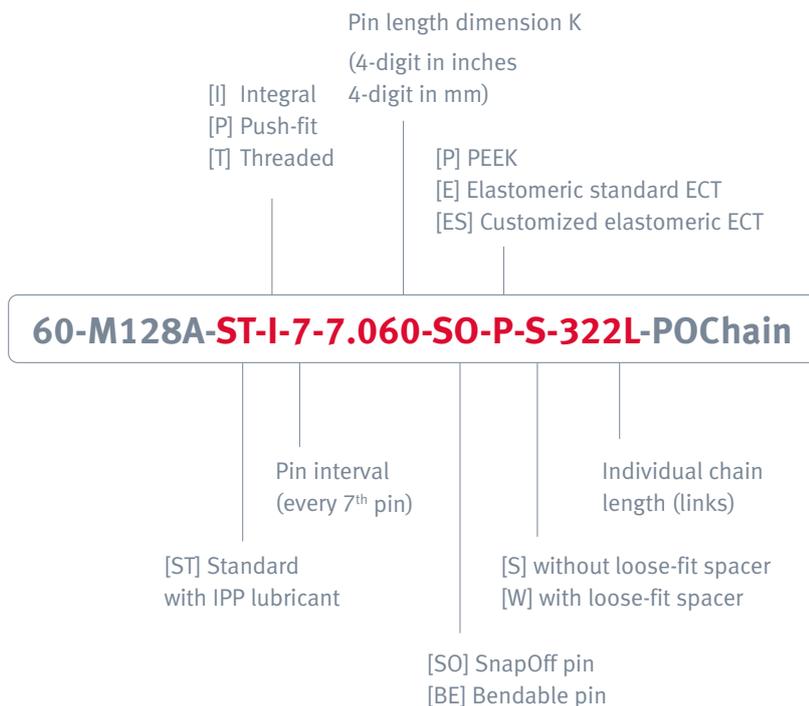
For more information, please see our flyer: **Can Making CLA**



## Nomenclature

Our precise nomenclature makes ordering easier for you. The detailed designation code helps you to find and order exactly the right chain for your application quickly and without any trouble – **in writing, by phone** or via our **online request form**.

[www.iwis.de/POChain-inquiry](http://www.iwis.de/POChain-inquiry)



## iwis Pin Oven Chain packaging

We always have our customers' interests at heart – not only regarding the quality of our chains, but also where their packaging is concerned. Our packaging protects the chains and guarantees that they will be delivered to you in impeccable condition.

- Robust packaging of chains
- Easy chain handling
- No risk of damaging pins during handling
- iwis patent
- Delivery lengths:
  - 322 links (6.1341 m or 20.125 ft)
  - 392 links (7.4676 m or 24.5 ft)
  - 336 links on request





## CCM-S – Chain Condition Monitoring “Smart”

The new iwis chain elongation monitoring system CCM-S measures the wear elongation of chains in operation, giving maintenance staff an early indication that the chain is worn and needs to be replaced.

### Intelligent chain monitoring

- Maintenance staff can (re)act in time!
- No long downtimes of production lines and machines
- Optimized maintenance and service intervals through digital condition monitoring
- Avoidance of financial losses due to unplanned production downtimes
- Monitoring of precise chain applications
- System based on the “plug-and-play” principle – no calibration necessary
- Wear- and impact-resistant ❶ sliding shoe
- Stable, leakproof ❷ plastic housing (Protection class: IP67)

✓ Digitalisation interface

✓ Ready-to-install plug-and-play principle

✓ Optimised design

### CCM-S all-in-one solution

#### Scope of supply consisting of:

- CCM-S module
- Mounting strips
- IODD file [DOWNLOAD](#)
- PC software [DOWNLOAD](#)
- Installation and Operating Instructions [DOWNLOAD](#)

#### Optionally available as accessories:

- IO link cable in various lengths: 5 m (Art. 40012346), 10 m (Art. 40012347), 15 m (Art. 40012348) and 20 m (Art. 40013418)
- USB cable (Art. 40012712)
- 3D data exists and is available on request
- Information on electrical and mechanical connections can be found in the Installation and Operating Instructions [DOWNLOAD](#).



Further information at  
[iwis.com/ccm-s-en](http://iwis.com/ccm-s-en)

# Our subsidiaries

## Germany

iwis antriebssysteme GmbH & Co. KG  
Albert-Roßhaupter-Straße 53  
81369 München  
Tel. +49 89 76909-1600  
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 8566-3020  
Fax +86 512 8566-3009  
sales-cn@iwis.com

## France

iwis antriebssysteme GmbH  
10 rue du Luxembourg  
69330 Meyzieu  
Tel. +33 4374515-70  
Fax +33 4374515-71  
sales-fr@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 drive systems India Pvt. Ltd.  
„Anisha“, Unit No3, SR. No. 84/1  
Regency Cosmos, Baner Mahalunge Road,  
Opposite to Amruta Hotel  
Baner, Pune, Maharashtra-411045  
Tel. +91 20 67110305  
salesin@iwis.com

## Italy

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

## Scandinavia

iwis Scandinavia  
Tel. +45 31 390819  
sales-scandic@iwis.com

## 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.  
Přísecká 893  
38601 Strakonice  
Tel. +420 383 411811  
Fax +420 383 321695  
salescz@iwis.com

## Turkey

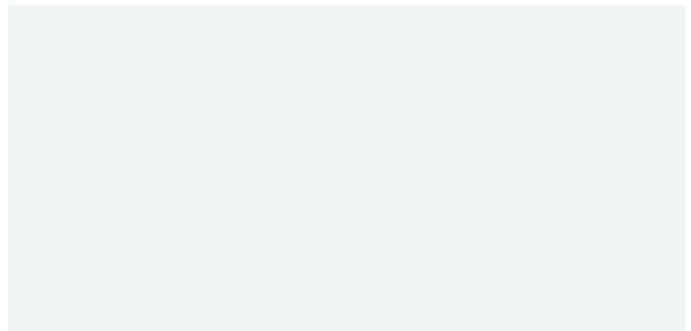
iwis tahrik sistemleri ltd. sti.  
Aydınlı - BİRLİK Org. San. Bol.  
5. Sokak No. 18/Z1  
34953 Tuzla-Istanbul  
Tel. +90 216 912 4947  
salestr@iwis.com

## USA

iwis drive systems, LLC  
3581 South 450 East  
Whitestown, IN 46075  
Tel. +1 317 821-3539  
Fax +1 317 821-3569  
sales-us@iwis.com

[www.iwis.com](http://www.iwis.com)

Your sales representative



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