



**P**  **C**Chain

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



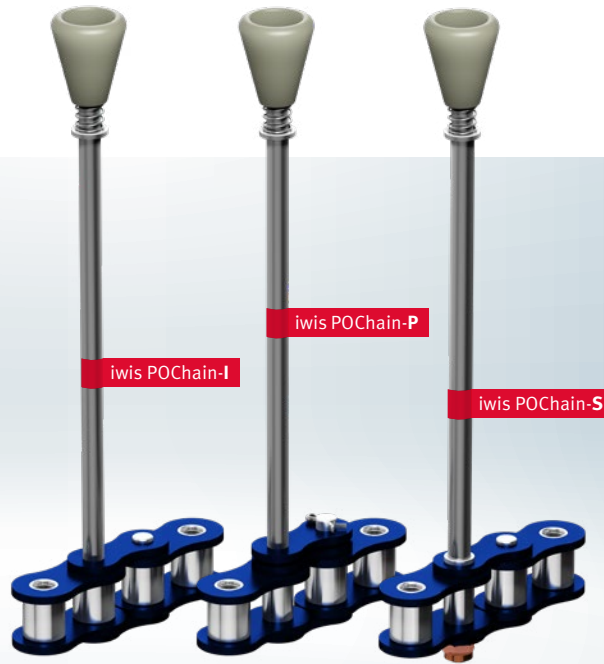
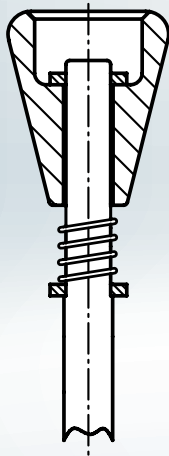
**Your challenge:** safe, reliable conveying of cans and other thin-walled hollow containers at high speed and high temperatures.

**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.



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

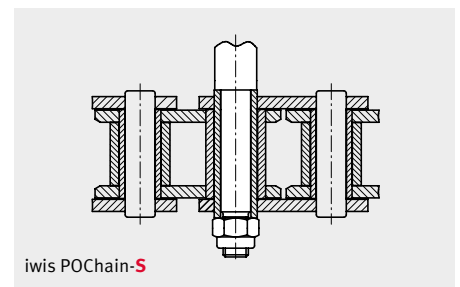
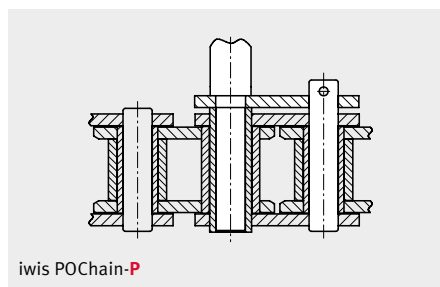
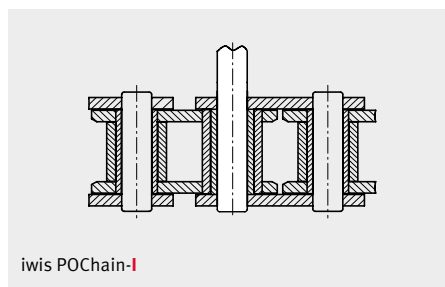
### Bendable pin

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.

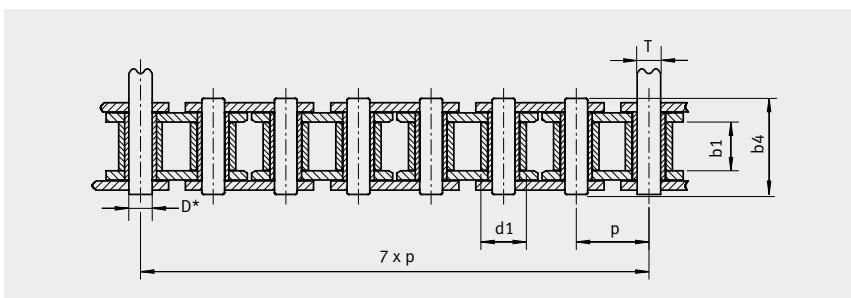
## Our fixture solutions





## 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

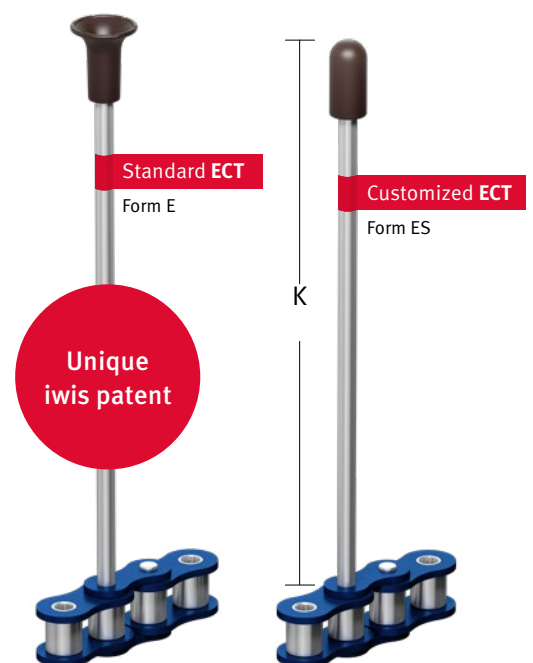


\*Notice: Dimensions only apply to POChain-P/S.  
K defines the dimension from outer plate to the end of the protective head.

## iwis Elastic Can Tip (ECT) NEW

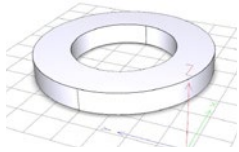
### Highlights

- 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!



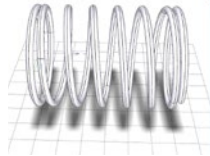
New iwis head solutions  
for your special requirements:  
**innovative and patented**

**iwis** Spare parts for Pin Oven Chains



Press-fit washer

Art.-Nr. 40010214



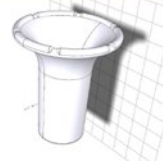
Spring

Art.-Nr. 40010218



Standard protective head

Art.-Nr. 40010217



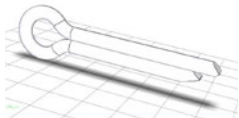
Protective head ECT

Art.-Nr. 40010169



Customized ECT

Art.-Nr. 40010119



Split pin

Art.-Nr. 40010219



Insertion links

\*



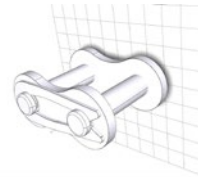
3-link sections

\*



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

**iwis** Tools for Pin Oven Chains

make Pin Oven Chain breaking and riveting easier



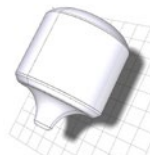
Tool for removal of  
standard protective  
heads

Art.-Nr. 40009075



Tool for fitting  
standard protective  
heads

Art.-Nr. 40009903



Tool for fitting ECT  
protective head

Art.-Nr. 40009315

**Fully equipped:** we also offer a wide range of spare parts and user-friendly tools for fitting and dismantling as a supplement to our iwis Pin Oven Chains.

**Our aim:** to offer innovative Pin Oven Chain solutions that provide effective support for your production and maintenance processes, thereby saving you time and money.

## 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.

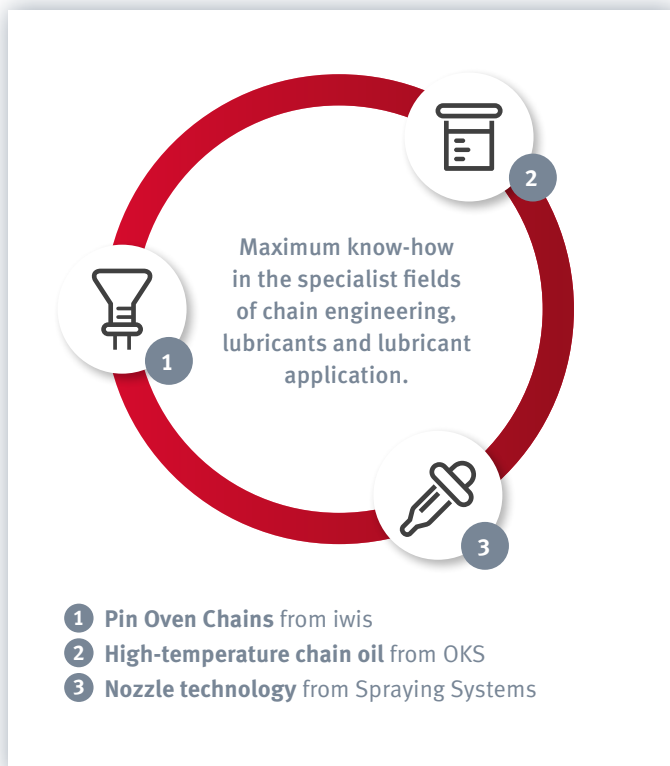
PWIS, or paint-wetting impairment substances, have a negative impact on paint applied to the outer surface of the beverage can. **Our special test set means that testing for PWIS properties is simplicity itself! Please contact us for more details.**

	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.

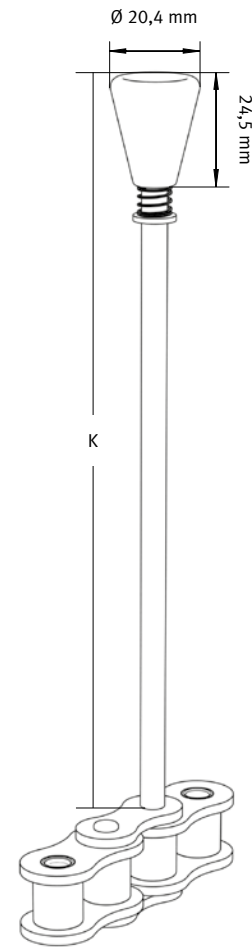
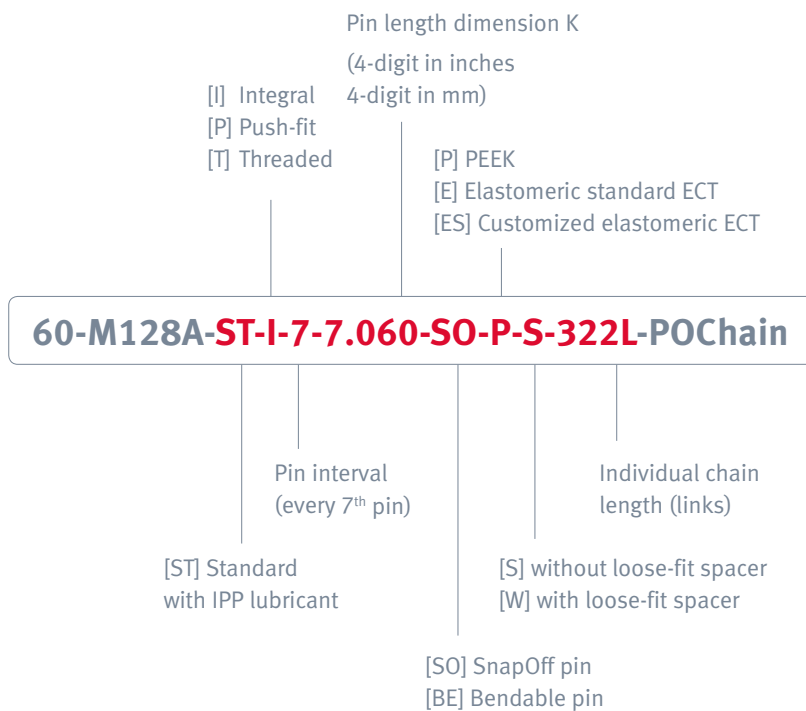
For more information, please see our flyer: **Can Making CLA**



## 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





## Chain Condition Monitoring

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

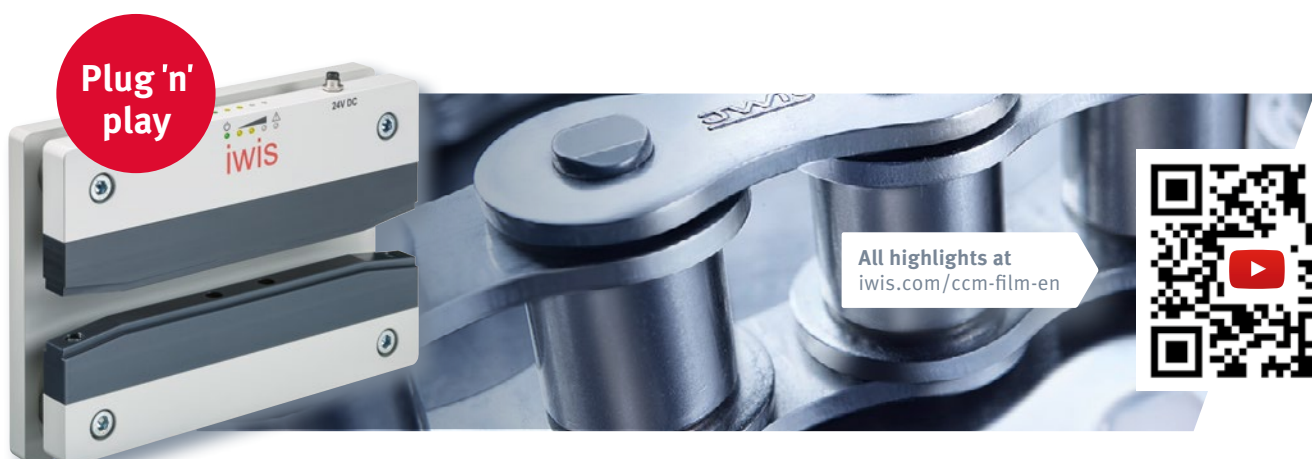
### Intelligent chain monitoring

- Enables maintenance staff to (re)act in good time!
- No long downtimes for plant or machinery
- No risk to promised delivery dates – no interruption of the logistics chain
- Prevents financial losses caused by missed production
- Monitoring of precision chain applications
- “Plug ’n’ play” principle applies – no calibration etc. required

- ✓ Simple modular construction
- ✓ Revised design

### CCM: a comprehensive solution

- Included in delivery:
  - CCM system including mounting plate
  - Power supply cable
  - USB cable
  - PC software
  - Installation and operating instructions
- 3D data available and can be supplied on request
- Installation kit with standard default setting Depth D = 50 mm (Depth D\* depends on chain version and can be varied individually)
- See operating instructions for information on electrical and mechanical connections.



**Plug 'n' play**

All highlights at  
[iwis.com/ccm-film-en](https://iwis.com/ccm-film-en)



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antriebssysteme  
wir bewegen die welt

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