

# RS Roller Chain

Long Life, Lower Costs



**GT4-WINNER**



## Tsubaki's Next Generation RS Roller Chain - GT4 WINNER

Tsubaki, the world's largest and most advanced roller chain manufacturer, has released a new 4th generation BS/DIN standard roller chain called GT4 WINNER.

GT4 WINNER was crafted with ultimate wear life in mind, a proven benefit for customers looking for real savings in chain maintenance & product replacement.

# GT4 WINNER



### 1 Lube Groove (LG) Solid Bush

Thanks to Tsubaki's own innovative fabrication technology, we have developed a new seamless solid bush. This high precision solid bush with special lube grooves (LG) improves lubrication retention, greatly extending the original wear life of the chain.

※ LG solid bush (PAT.) are available for 16B to 24B



Lube Groove (LG)  
Solid Bush

### 2 Ring Coin (RC) Processing

Residual stress generated from a groove around the plate hole eliminates strength reduction caused by the gap between the pin and the plate necessary for connecting and disconnecting. With this groove, the connecting link achieves the same strength as the chain itself.

※ RC processing are available for 08B to 40B



Ring Coin (RC)  
Processing

### 3 Center Sink Rivet

Tsubaki's chains can easily be disassembled thanks to our unique center sink rivet head, reducing the time needed for chain maintenance.

An additional benefit is that should the chain be inadvertently overloaded, the markings on the rivet head will identify where pin rotation has occurred, giving a clear indication of chain overload.

※ Center sink rivet are available for 08B to 16B



Center Sink Rivet



## At the Vanguard of Chain Manufacturing

At Tsubaki, we know customers want the best. Indeed, we take pride in our ability to deliver an extensive product line up that satisfies these high expectations. Since 1917, Tsubaki's dedication to being the best has culminated in our position as the No.1 chain manufacturer in the world. That's why Tsubaki has been setting new roller chain standards every decade for the past several decades. In response to increased awareness of environmental preservation and customer needs for further speed and cost savings, we are applying our advanced roller chain manufacturing capabilities to provide your company with the best solution. You can count on Tsubaki.



1. Tsubakimoto Chain, 1930's 2. Roller Chain Catalog, 1929

## No.1 Chain Maker in the World

Located in Kansai Science City, Japan, Tsubaki's Kyotanabe Plant epitomizes our wide spectrum of cutting-edge technological solutions. Our goal is to develop this environmentally friendly facility into the world's No. 1 chain plant. Furthermore, Kyotanabe Plant's Technical Center plays a vital role within the Tsubaki Group through its R&D activities and dissemination of information.

In fact, the Kyotanabe facility itself is the concrete realization of our concept of amalgamating the company's R&D and production functions. By coordinating leading edge manufacturing equipment and distribution logistics, the plant's new concurrent production line aims to improve productivity and realize high product quality.

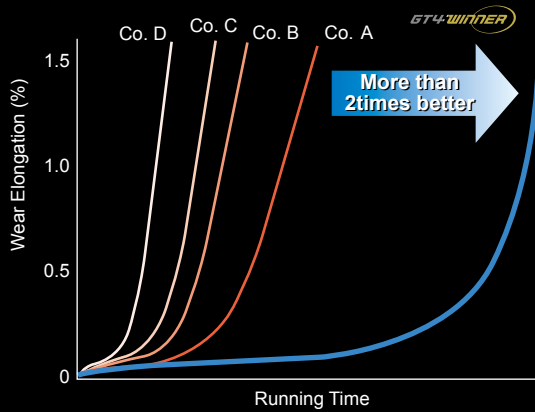
The resulting manufacturing system allows us to deliver new products to market quickly and at low cost. The Kyotanabe Plant is a facility built on the foundation of Tsubaki's technological expertise.



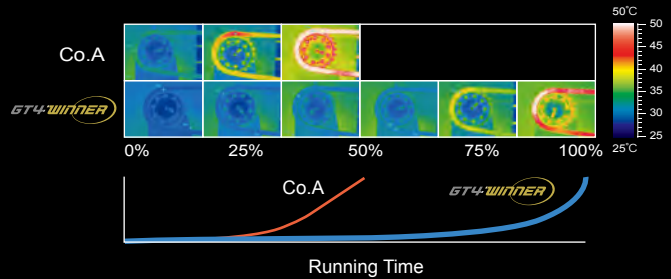


## Extremely Long Wear Life

### Wear Elongation Comparison

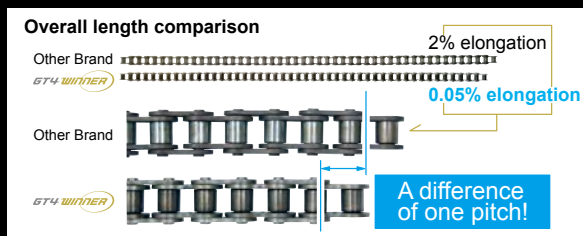


Thanks to our newly developed solid bush, GT4 WINNER has an extremely long wear life. Looking at the wear testing with thermographs, you can easily see that other chain brands have run out lubrication, which heats up the chain.



## Elongation Comparison Tests

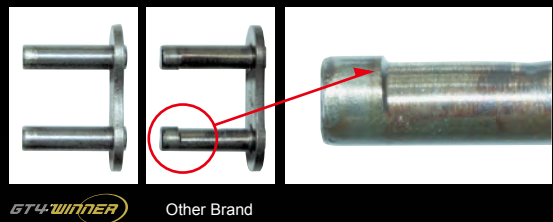
### Comparison of elongation in 1.2 meter chains (46 links) with other #16B brands



The pins of other brands slide against the bushes, with no lubrication left, causing wear and leading to defects. Discoloration from seizing can also be observed. On the other hand, GT4 WINNER shows no change, even under the same conditions.

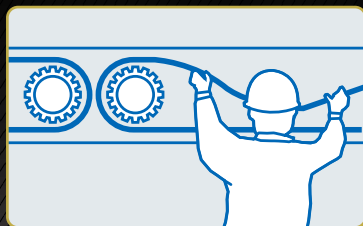
Our new GT4 WINNER Roller Chain only had 0.05% elongation compared to 2% for the competition.

Note: Generally the limit of allowable wear is 1.5% for normal drive applications



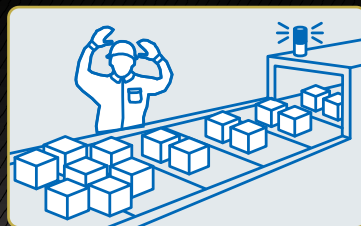
## Long Wear Life = Fewer Chain Replacements

Fewer chain replacements allow for a reduction in various costs involved.



Maintenance Time and Effort

REDUCE



Line Stoppage Production Loss

REDUCE



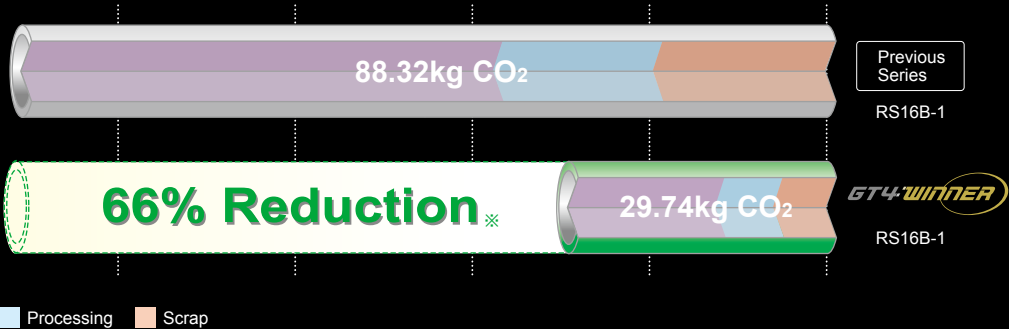
Chain Replacement Costs

REDUCE

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## CO<sub>2</sub> Reduction



With its focus on manufacturing chain with a substantially longer wear life, Tsubaki is helping to create an environment in harmony with our planet. Less frequent chain replacement results in less consumption of resources and contributes to significantly lower CO<sub>2</sub> emissions. ※ Results of RS Roller chain (16B-1) LCA inventory analysis.

## Feedback

**Through our “Experience the Difference!” campaign, users got to see first-hand the superiority of GT4 Winner. Here's how:**

### The Test

#### Test Case

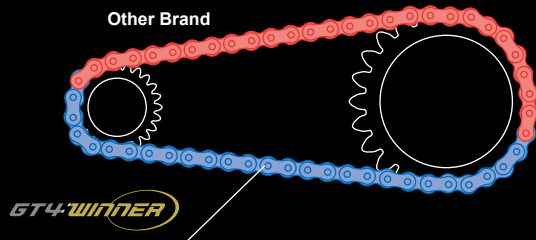
We installed a chain that uses 1/2 GT4 WINNER and 1/2 other brand chain onto the customer's equipment to show them which is the clear “Winner” in wear life.

#### Test Conditions

Industry	Asphalt manufacture
Application	Asphalt conveyor drive
Chain Size	#16 B

#### Background

One of the biggest asphalt manufacturers in Europe uses chain to transport raw asphalt material. These chains are often used under the worst of conditions, resulting in frequent chain elongation, necessitating frequent replacement. This costs them both time and money.



### Test Results

After 5 months of testing, our investigations showed that the other chain brand suffered wear elongation and had reached its life, while the GT4 WINNER was still usable.



The GT4 WINNER chain still had lube. The other chain brand had no lube and was suffering red rusting.



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## TSUBAKIMOTO CHAIN CO.

Japan	Tsubakimoto Chain Co.	<a href="https://tsubakimoto.com/">https://tsubakimoto.com/</a>
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### Global Group Companies

#### AMERICAS

United States	U.S. Tsubaki Power Transmission, LLC	<a href="https://www.ustsubaki.com/">https://www.ustsubaki.com/</a>
Brazil	Tsubaki Brasil Equipamentos Industriais Ltda.	<a href="https://tsubaki.ind.br/">https://tsubaki.ind.br/</a>
Canada	Tsubaki of Canada Limited	<a href="https://tsubaki.ca/">https://tsubaki.ca/</a>

#### EUROPE

Netherlands	Tsubakimoto Europe B.V.	<a href="https://tsubaki.eu/">https://tsubaki.eu/</a>
France	Kabelschlepp France S.A.R.L.	<a href="https://tsubaki-kabelschlepp.com/fr-fr/">https://tsubaki-kabelschlepp.com/fr-fr/</a>
Germany	Tsubaki Deutschland GmbH	<a href="https://tsubaki.de/">https://tsubaki.de/</a>
	Tsubaki Kabelschlepp GmbH	<a href="https://tsubaki-kabelschlepp.com/de-de/">https://tsubaki-kabelschlepp.com/de-de/</a>
Italy	Kabelschlepp Italia S.R.L.	<a href="https://tsubaki-kabelschlepp.com/it-it/">https://tsubaki-kabelschlepp.com/it-it/</a>
Spain	Tsubaki Ibérica Power Transmission S.L.	<a href="https://tsubaki.es/">https://tsubaki.es/</a>
United Kingdom	Tsubakimoto UK Ltd.	<a href="https://tsubaki.eu/">https://tsubaki.eu/</a>
Slovakia	Kabelschlepp-Systemtechnik, spol. s.r.o.	<a href="https://tsubaki-kabelschlepp.com/sk-sk/">https://tsubaki-kabelschlepp.com/sk-sk/</a>
Poland	Kabelschlepp Sp. z o.o.	<a href="https://kabelschlepp.pl/">https://kabelschlepp.pl/</a>

#### INDIAN OCEAN RIM

Singapore	Tsubakimoto Singapore Pte. Ltd.	<a href="https://tsubaki.sg/">https://tsubaki.sg/</a>
Australia	Tsubaki Australia Pty. Limited	<a href="https://tsubaki.com.au/">https://tsubaki.com.au/</a>
India	Tsubaki India Power Transmission Private Limited	<a href="https://en.tsubaki.in/">https://en.tsubaki.in/</a>
Indonesia	PT. Tsubaki Indonesia Trading	<a href="https://tsubaki.id/">https://tsubaki.id/</a>
Malaysia	Tsubaki Power Transmission (Malaysia) Sdn. Bhd.	<a href="https://en.tsubaki.my/">https://en.tsubaki.my/</a>
New Zealand	Tsubaki Australia Pty. Limited - New Zealand Branch	<a href="https://tsubaki.com.au/">https://tsubaki.com.au/</a>
Philippines	Tsubakimoto Philippines Corporation	<a href="https://en.tsubaki.ph/">https://en.tsubaki.ph/</a>
Thailand	Tsubakimoto (Thailand) Co., Ltd.	<a href="https://tsubaki.co.th/">https://tsubaki.co.th/</a>
Vietnam	Tsubakimoto Vietnam Co., Ltd.	<a href="https://tsubaki.net.vn/">https://tsubaki.net.vn/</a>

#### EAST ASIA

Republic of Korea	Tsubakimoto Korea Co., Ltd.	<a href="https://tsubakimoto-tck.co.kr/">https://tsubakimoto-tck.co.kr/</a>
Taiwan	Taiwan Tsubakimoto Trading Co., Ltd.	<a href="https://tsubakimoto.tw/">https://tsubakimoto.tw/</a>

#### CHINA

China	Tsubakimoto Chain (Shanghai) Co., Ltd.	<a href="https://www.tsubaki-sh.cn/">https://www.tsubaki-sh.cn/</a>
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