



# Power and Performance for the Cement Industry





# Global Manufacturing, **TSUBAKI Quality**

TSUBAKI has sales and manufacturing locations around the world to provide our customers with the solutions they need.

These global manufacturing bases all provide consistent, dependable quality: TSUBAKI Quality.

TSUBAKI started in Japan a century ago, where we set the standards of carefully cultivated, fundamental technology, and quality control for all our manufacturing facilities worldwide.

Customers can rest assured that no matter where our product was made, TSUBAKI Quality was infused in the manufacturing process from beginning to end.

We will continue to listen to customers' needs and provide the products and solutions that have made TSUBAKI the global leader in power transmission.

One Name,  
One Quality

**TSUBAKI**






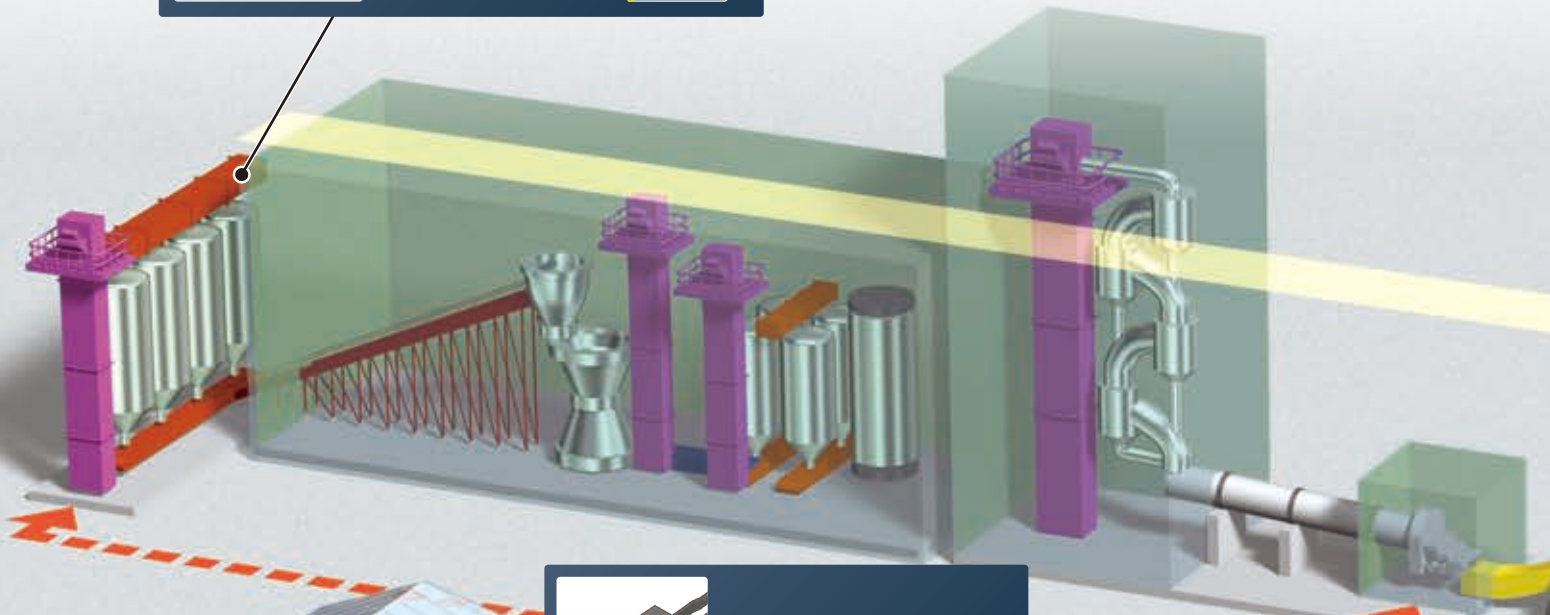


# TSUBAKI Products for Cem



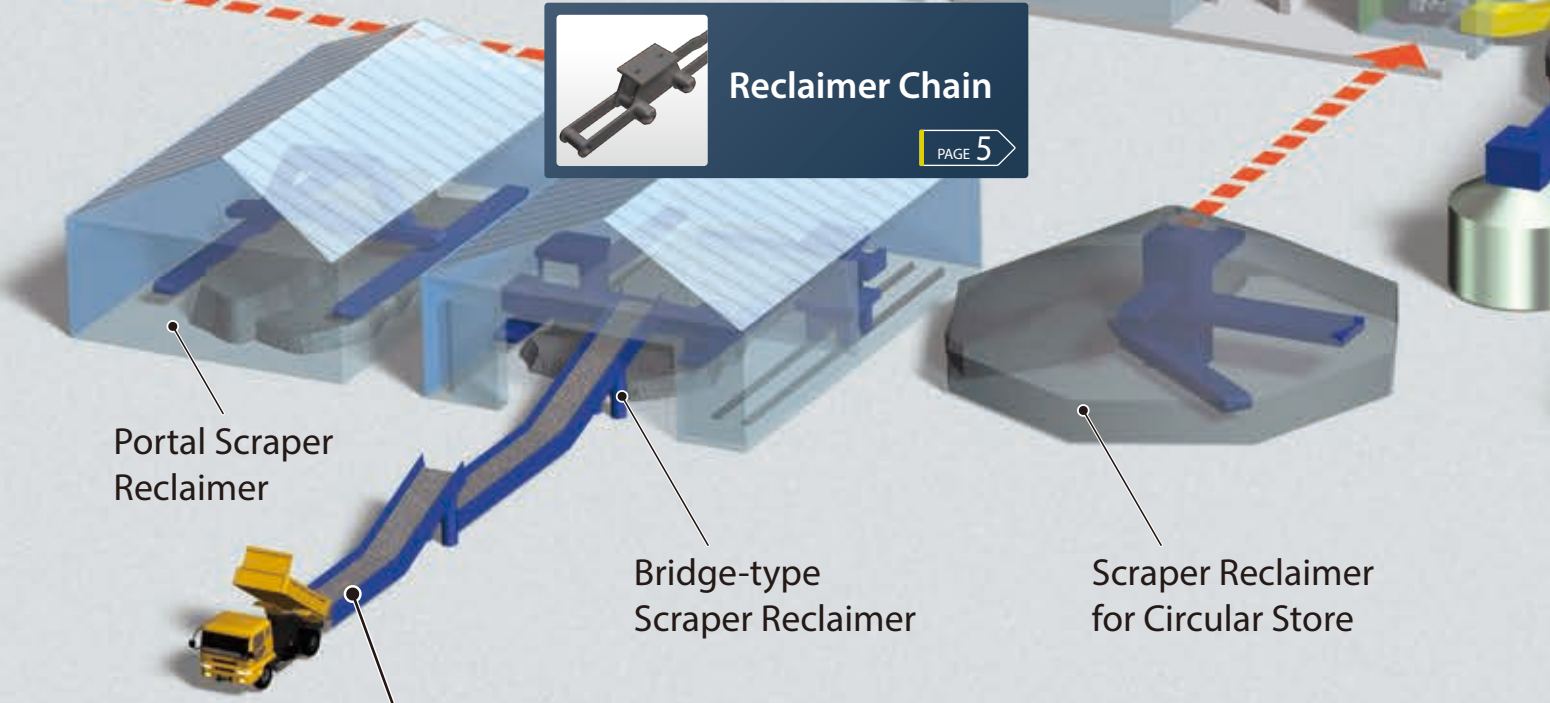
**Drag Conveyor**

PAGE 6



**Reclaimer Chain**

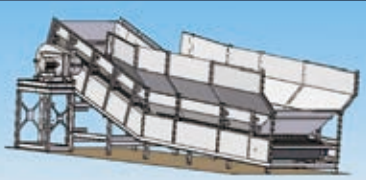
PAGE 5



Portal Scraper Reclaimer

Bridge-type Scraper Reclaimer

Scraper Reclaimer for Circular Store



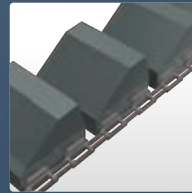
**Feeder**

PAGE 5

# ent Industry

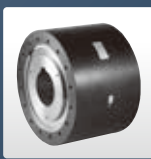


**Pan Conveyor**

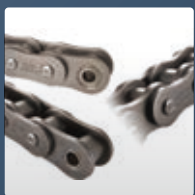
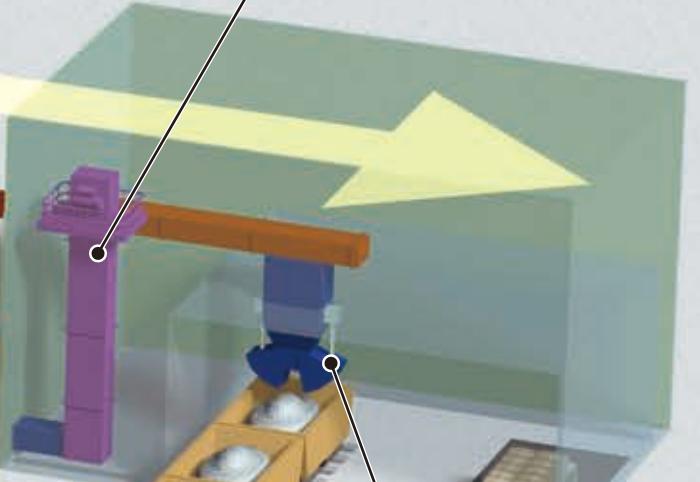
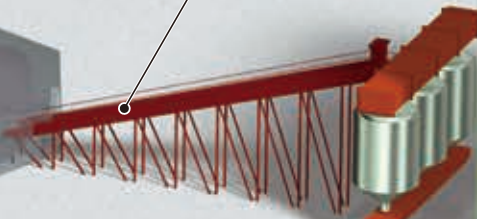
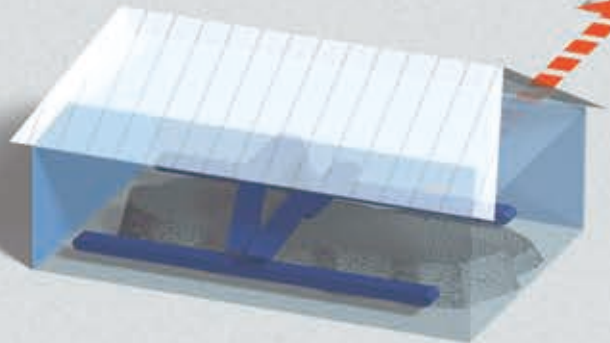


**Bucket Elevator**

PAGE 7-8



**Belt Conveyor**



**General Applications**

PAGE 9-10



**Hopper Gate**

PAGE 10

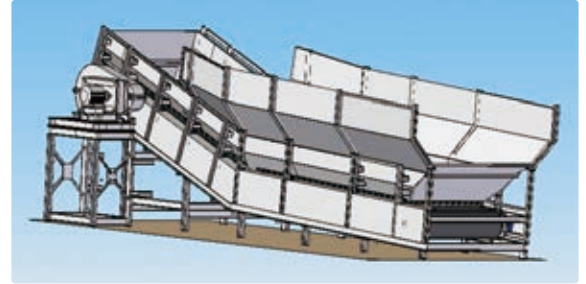
# Feeder and Reclaimer

## BSF Feeder (Belt Slat Feeder)

TSUBAKI BSF FEEDER is a tough and simply-structured feeder that directly receives and feeds materials, utilising functions of both belt and conveyor chain.



Possible to receive from both sides



### Main Features

1. Underground Pit is not required
2. Spillage conveyor is not necessary
3. Receive materials directly and convey incline in one unit
4. Easy maintenance and high strength
5. No slip occurrence

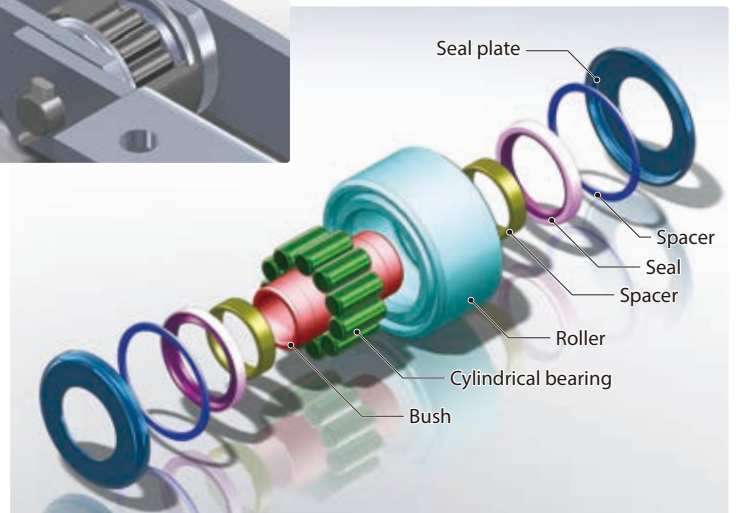
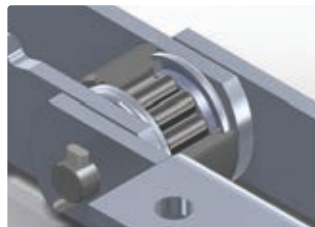
### Capacity

95m<sup>3</sup>-690m<sup>3</sup>

## Reclaimer Chain



When abrasive material infiltrates between bushes and rollers, and infiltrates outboard rollers, the rollers lock and wear accelerates between bush and roller, causing your chain to reach its wear life. Using TSUBAKI's dust resistant bearing rollers extends the life of your reclaimer chain.



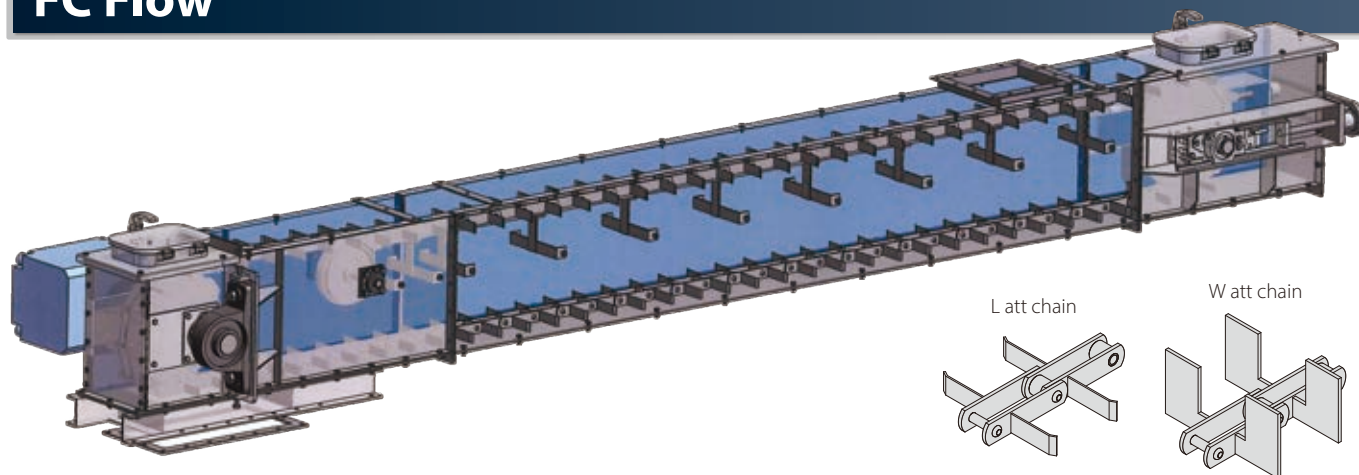
### Main Features

1. Solves the problem of dust causing early wear between bushes and rollers
2. Increases efficiency which lowers cost
3. Suppresses stick-slip phenomenon
4. Extends roller and rail life



# Drag Conveyor

## FC Flow



TSUBAKI FC FLOW is a continuous drag conveyor, which is appropriate for powdery or granular materials of cement, chemical and fertilizer. Materials are conveyed smoothly like water flow, along with chain running motion within a casing on a horizontal or moderate inclination layout.

### Main Features

1. Compact and economical
2. Possible to install multiple inlets and outlets
3. Easy maintenance
4. Dust and waterproof

### Standard Models

FC150 (inner width of the casing : 150 mm) - FC580, 7 sizes

### Capacity

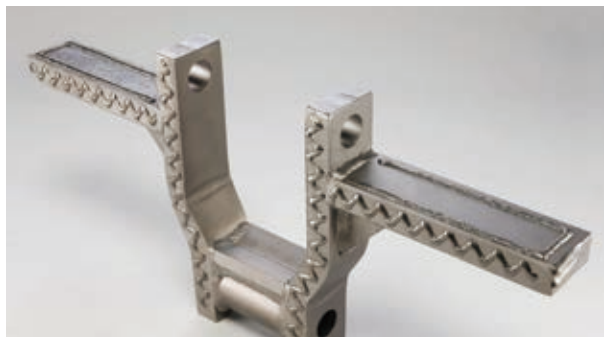
8m<sup>3</sup>/h(FC150 S=10m/min.) ~ 450m<sup>3</sup>/h(FC580 S=30m/min.)

## WHX Series Heavy Duty Drag Chain

TSUBAKI Welded steel chain is designed and manufactured to offer strength, precision, impact resistance and wear resistance. Our drag chain features include press fit construction and induction hardened pins.

Induction hardened pins combine the benefit of a thru-hardened part for maximum strength with a high surface hardness to resist abrasive wear. This also allows for a ductile pin which will flex under shock load.

All of our heavy duty drag chains are heat treated for maximum wear life. All of our WHX drag chains include hard face welding on all sliding surfaces for wear resistance.



# Bucket Elevator

## ONE-TOUCH INSPECTION DOOR®

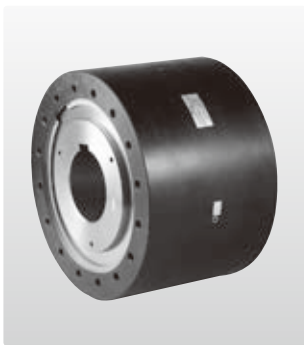


ONE-TOUCH INSPECTION DOOR® is a dust and rain tight inspection and service door for conveyors, as well as processing and handling equipment. These pre-fabricated units are ready to-go for ease of use on the jobsite. Once in place, ONE-TOUCH INSPECTION DOOR® allows for quick and simple inspection without the need for special tools: just lift the lever! No bolts to loosen and no covers to misplace. One touch is all it takes...it's that simple.

### Main Features

1. Durable and trouble-free
2. Dust and rain tight
3. Easy to open Easy to install
4. Patented Design

## Cam Clutch BS Series

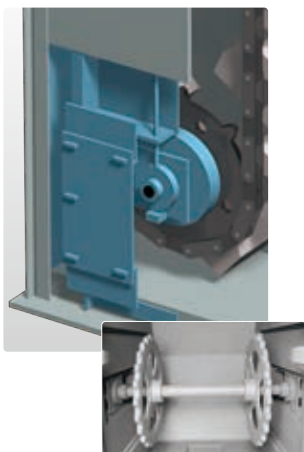


TSUBAKI BS-F and BS-HS Series Exclusively used in backstop applications for conveyors. They offer significantly increased maximum overrunning speed (low speed) and allowable torque. The BS-F series could also be interchanged with your current Cam Clutch because it's dimensions are compatible.



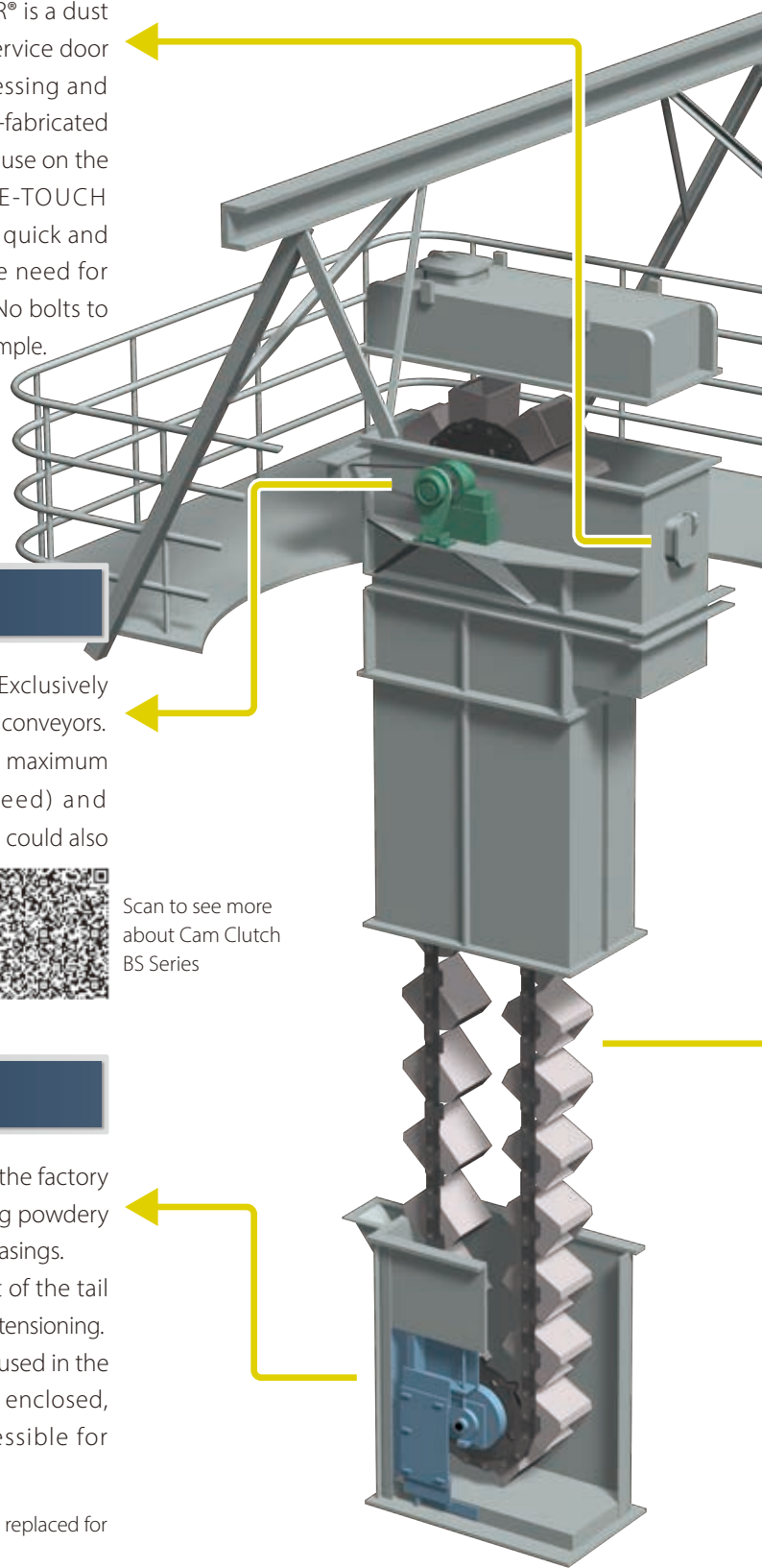
Scan to see more about Cam Clutch BS Series

## Internal Take-up



TSUBAKI Internal Take-up keeps the factory environment clean by preventing powdery materials from spilling from the casings. This take-up utilizes the weight of the tail mechanism to provide automatic tensioning. The take-up components are housed in the tail casing and are completely enclosed, however they are easily accessible for inspection and maintenance.

Note: TSUBAKI Internal Take-up can be replaced for TSUBAKI Bucket Elevator only.

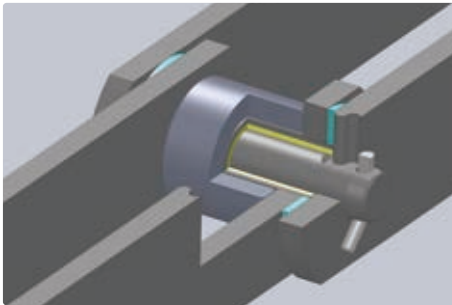




\*Tsubaki also can provide various types of bucket elevator systems. Scan to see more.



## FB Series Conveyor Chain

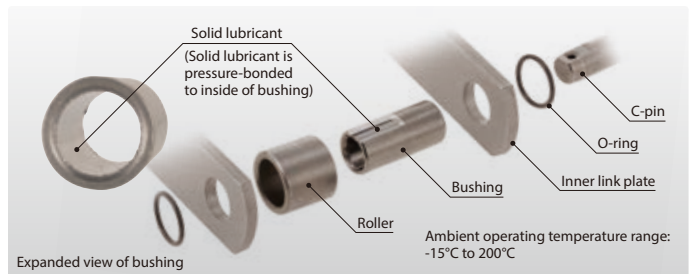


A solid lubricant is bonded between pin and bush, and an O ring is attached between the links to prevent the conveyed material from entering the link mechanism. At the same time, it retains the solid lubricant in place. This design suppresses wear between the pin and bushing (which contributes to pitch elongation), thus doubling the service life.

Thanks to the solid lubricant, bucket elevators can now feature low-noise operation with an average noise reduction of about 2dB.

### Main Features

1. Superior service life compared to conventional components
2. Low-noise operation (average 2dB reduction)



## workhorse® Series Conveyor Chain

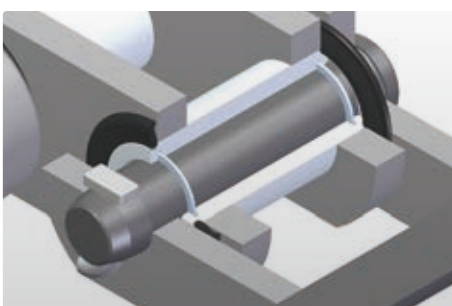


TSUBAKI workhorse® elevator chains are specifically designed for use within aggressive bulk material handling environments with harsh fine particulates such as cement or lime.

### Main Features

1. Ultimate Strength
2. Unparalleled Toughness & Wear resistance

## sj3® Series Sealed Joint Conveyor Chain



Utilizes a unique combination of three distinct seals to create an innovative labyrinth structure that effectively hinders the infiltration of foreign matter, without compromising any strength or dynamic performance.

### TSUBAKI's patented 3 seal structure

1. Extended Bushing Barrier Seal
2. Polymer Wide Face Seal
3. Stainless Steel Internal Ring Seal



# General Applications

## Drive Chain G8 Series

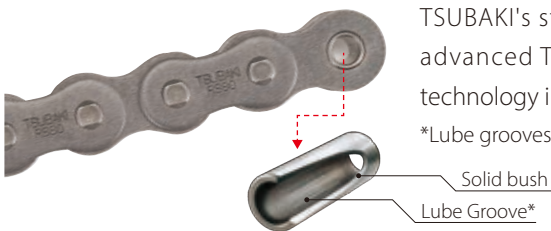


The G8 Series is a superior drive chain developed utilizing TSUBAKI's 100 years of manufacturing expertise.



Scan to see more about Drive Chain G8 Series

### RS Roller Chain G8 (Standard Drive Chain)



TSUBAKI's standard RS G8 Roller Chain uses a seamless solid bushing developed by advanced TSUBAKI engineering and processing. TSUBAKI's patented lube groove technology in our precision solid bushings retain lubrication and provide superior wear life.

\*Lube grooves available for RS80-RS140 only. (RS16B-RS28B for BS/DIN standard)

### Super (Heavy Duty) Drive Chains



TSUBAKI offers a variety of heavy duty and super chains to provide users with a higher maximum allowable load, shock absorption, fatigue strength and tensile strength than standard RS roller chains.

#### Super Chain Performance comparison with RS Roller Chain



\*With RS Roller Chain as benchmark (100)

Available sizes : RS80 – RS240, up to sextuple strand

### Surface Treated NEPTUNE CHAIN®



TSUBAKI's NEPTUNE CHAIN® combines uniquely developed base and resin coatings for superior corrosion and chemical resistance against water and alkalis.

#### In-house Salt Spray Test results



TSUBAKI: 700H NO RUST



Company A: 100H



Company B: 300H



Company C: 400H

## Drive Chain titan™ Series



The titan™ Chain integrates the latest advancements from TSUBAKI's research and development to increase the wear life of roller chains in high speed and harsh environments. Our titan™ chain incorporates 4 best features of our standard ANSI chain coupled with new and unique features to outperform other extended life chains.



1. Special Coated Pins



2. Zinc Coated Pin Link Plates and Black Oxide Roller Link Plates



3. Solid Lube Groove Bushes



4. Ring-Coined Connecting Links



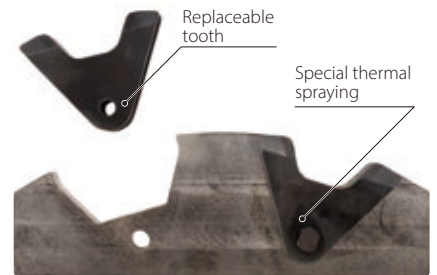
# Sprockets for Large Size Conveyor Chain

## Replaceable Sprocket Blades



TSUBAKI also offers a line-up of sprockets where just the teeth can be replaced, which can reduce the massive replacement costs and labor when sprockets need replacing.

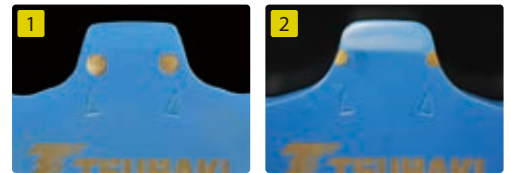
We can also deliver sprockets already assembled onto their shafts.



## smart tooth® Sprockets



TSUBAKI's smart tooth® sprockets with patented Wear Indicator technology offer users the ability to identify and schedule drive system maintenance before critical component failure occurs. The result is extended chain life and reduced downtime for increased productivity. TSUBAKI's long history of designing innovative chain and sprocket products assures you will receive the best system solution.



Comparison – New (1) vs. Worn Sprocket (2)

# Power Cylinder

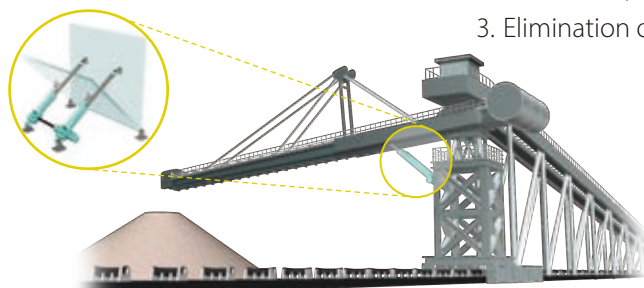


TSUBAKI Power Cylinders are a completely self-contained, motorized linear actuator unit available in a variety of types and speeds.

Their compact size and ease of installation make them ideally suited to a variety of cement applications.

### Main Features

1. Lower costs since no pumps or compressors are required
2. Low maintenance with the elimination of hydraulic hoses and pneumatic hose
3. Elimination oil leaks and environmental impact



Scan to see more about Power Cylinder



## TSUBAKIMOTO CHAIN CO.

Japan

Tsubakimoto Chain Co.

<https://tsubakimoto.com/>

### Global Group Companies

#### AMERICAS

United States

U.S. Tsubaki Power Transmission, LLC

<https://www.ustsubaki.com/>

Brazil

Tsubaki Brasil Equipamentos Industriais Ltda.

<https://tsubaki.ind.br/>

Canada

Tsubaki of Canada Limited

<https://tsubaki.ca/>

#### EUROPE

Netherlands

Tsubakimoto Europe B.V.

<https://tsubaki.eu/>

France

Kabelschlepp France S.A.R.L.

<https://tsubaki-kabelschlepp.com/fr-fr/>

Germany

Tsubaki Deutschland GmbH

<https://tsubaki.de/>

Italy

Tsubaki Kabelschlepp GmbH

<https://tsubaki-kabelschlepp.com/de-de/>

Spain

Kabelschlepp Italia S.R.L.

<https://tsubaki-kabelschlepp.com/it-it/>

United Kingdom

Tsubaki Ibérica Power Transmission S.L.

<https://tsubaki.es/>

Slovakia

Tsubakimoto UK Ltd.

<https://tsubaki.eu/>

Poland

Kabelschlepp-Systemtechnik, spol. s.r.o.

<https://tsubaki-kabelschlepp.com/sk-sk/>

Kabelschlepp Sp. z o.o.

<https://kabelschlepp.pl/>

#### INDIAN OCEAN RIM

Singapore

Tsubakimoto Singapore Pte. Ltd.

<https://tsubaki.sg/>

Australia

Tsubaki Australia Pty. Limited

<https://tsubaki.com.au/>

India

Tsubaki India Power Transmission Private Limited

<https://en.tsubaki.in/>

Indonesia

PT. Tsubaki Indonesia Trading

<https://tsubaki.id/>

Malaysia

Tsubaki Power Transmission (Malaysia) Sdn. Bhd.

<https://en.tsubaki.my/>

New Zealand

Tsubaki Australia Pty. Limited - New Zealand Branch

<https://tsubaki.com.au/>

Philippines

Tsubakimoto Philippines Corporation

<https://en.tsubaki.ph/>

Thailand

Tsubakimoto (Thailand) Co., Ltd.

<https://tsubaki.co.th/>

Vietnam

Tsubakimoto Vietnam Co., Ltd.

<https://tsubaki.net.vn/>

#### EAST ASIA

Republic of Korea

Tsubakimoto Korea Co., Ltd.

<https://tsubakimoto-tck.co.kr/>

Taiwan

Taiwan Tsubakimoto Trading Co., Ltd.

<https://tsubakimoto.tw/>

#### CHINA

China

Tsubakimoto Chain (Shanghai) Co., Ltd.

<https://www.tsubaki-sh.cn/>



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