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SMART Conveyor Chain™ Advanced Models

Advanced successes in the field



THE SMART CHOICE FOR CUSTOMERS



+A

Now It's Easy to Make the Smart Selection

Advanced Models

BASIC MODEL
DT Series
General-use conveyor chain
Our most versatile chain

➔

ADVANCED MODEL

DTA Series

Available sizes: RF03–RF36 (with F or R rollers only)

Has 3x the bush-roller wear resistance of the DT Series

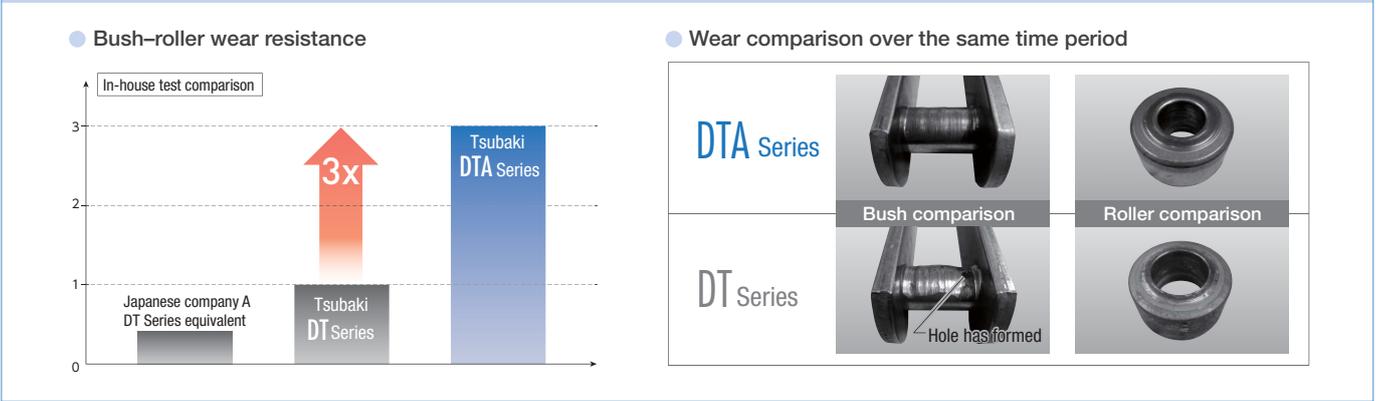
1

A roller normally rolls atop a rail, and the bush slides against the roller.

2

This promotes wear and leads to a shorter chain life.

➔ The new DTA Series provides a better solution.



BASIC MODEL
AT Series
Heavy-duty conveyor chain
Twice the maximum allowable load of DT Series

➔

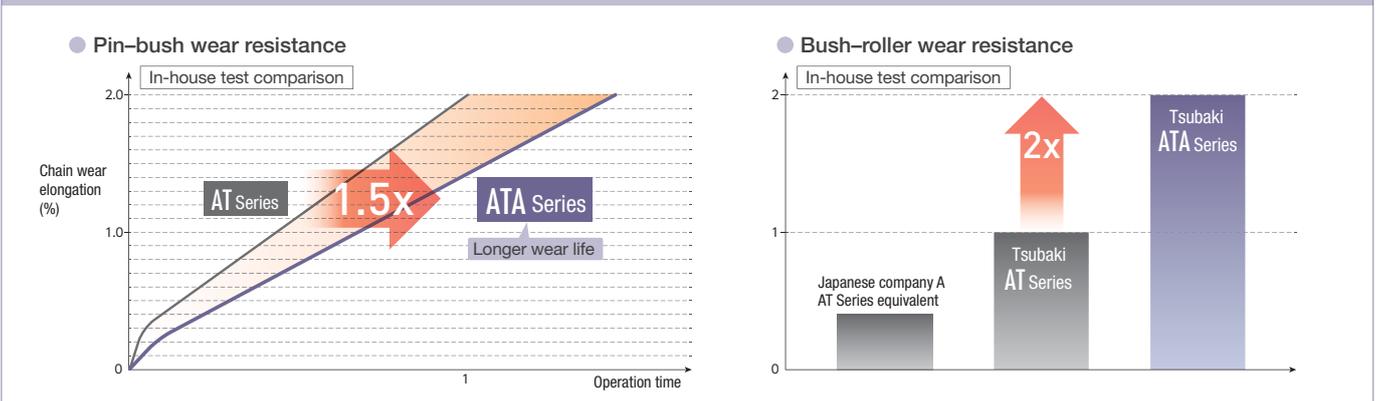
ADVANCED MODEL

ATA Series

Available sizes: RF08–RF36 (with F or R rollers only)

Better wear resistance and higher maximum allowable load than the AT Series

Pin-bush wear resistance	Bush-roller wear resistance	Max. allowable load
1.5x better	2x better	1.2x better



Note: Wear resistance comparisons are based on in-house testing. Actual chain life may vary depending on usage conditions.

Tsubaki's Advanced Models are a new series of large size conveyor chains. Compared to our basic models, they offer improved wear resistance and support greater maximum loads. Choose our Advanced Models to further boost productivity and reduce running costs.

BASIC MODEL
GS Series
Corrosion-resistant conveyor chain
Stainless steel chain with better corrosion resistance than DT Series

ADVANCED MODEL

GSA Series

Available sizes: RF03-RF26

Higher strength, longer life

Better wear resistance and higher maximum allowable load than the GS Series

Pin-bush wear resistance

1.5x better

Bush-roller wear resistance

2x better

Max. allowable load / roller allowable load*

1.3x better

*F or R rollers only

Pin-bush wear resistance

Bush-roller wear resistance

Max. allowable load

BASIC MODEL
SS Series
Corrosion-resistant conveyor chain
Stainless steel chain with superb corrosion, chemical, heat, and cold resistance

ADVANCED MODEL

SSA Series

Available sizes: RF03-RF26

Longer life

Better wear resistance than the SS Series

Bush-roller wear resistance

1.5x better

Roller allowable load*

1.3x better

*F or R rollers only

Bush-roller wear resistance

Wear comparison over the same time period

Basic Models

For available chain sizes, dimensions, and strengths, refer to the Tsubaki Large Size Conveyor Chains & Sprockets catalog.

Note: Wear resistance comparisons are based on in-house testing. Actual chain life may vary depending on usage conditions.

DTA Series

Available sizes: RF03–RF36 (with F or R rollers only)



The DTA Series can achieve major cost savings.

	DT Series	DTA Series
Chain life	 Needs to be replaced 3 times	 Lasts 3 times longer than DT Series
Chain price	100	130
Total costs	300	130

Note: Figures above assume a baseline of 100 for the DT Series.

Cuts total chain costs by 60%.

Plus...

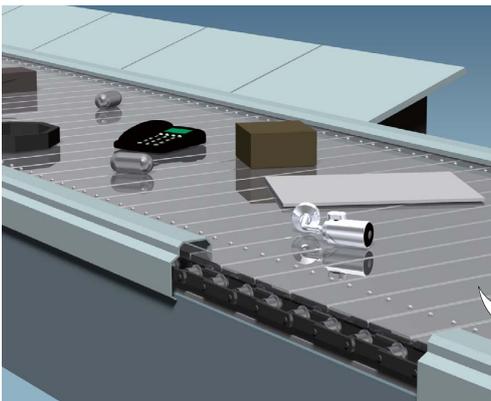
Chain replacement costs down to 30%.

Note: Cost estimates are based on customer information and include certain assumptions. Actual results may vary, depending on usage conditions and environment.

Recycling Center

Want to reduce maintenance man-hours

Conveyor for loading plastic shredder



Before

We previously used the DT Series for a long time, repairing it as needed. Repairs had to be done outside of working hours, either on days off or late at night. It was hard for our workers to get time off.

After

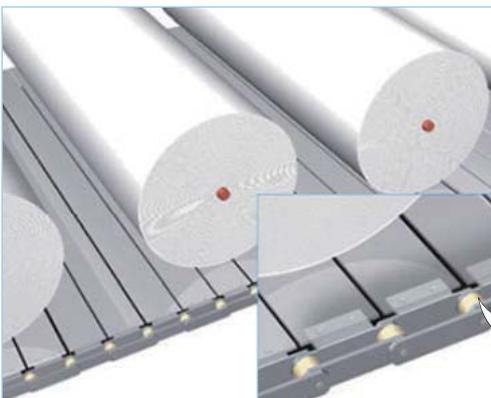
When replacing our conveyor chain, we switched to the long-life DTA Series.

It's been a year since we switched to the DTA Series, and I've already noticed the advantages of a longer chain life. We don't need to spend so many man-hours on maintenance and repairs, which means we have more time to do other work.

Paper Mill

Want to reduce the work of replacing chains

Slat conveyor for finished rolls



Before

We used to use the DT Series to convey finished paper rolls weighing about 500 kg each. The rollers had to handle huge loads. We couldn't lubricate the chain, because you have to avoid getting any grease at all on the paper rolls. This caused premature wear on the bushes and rollers, meaning we had to replace the chain quite often.

After

We switched to the DTA Series, which can handle higher loads and has better wear resistance.

Because the chain has a longer wear life, the amount of work needed to replace it is less than half what it used to be. Not only has the DTA Series allowed us to reduce our total chain costs, it's also allowed us to reduce the cost of replacement work.

ATA Series

Available sizes: RF08–RF36 (with F or R rollers only)



The ATA Series can achieve major cost savings.

(Simulating a 2-strand 20-meter conveyor)

		RF12200R-AT AT Series	Longer life RF12200R-ATA ATA Series	Smaller size RF10200R-ATA ATA Series
Max. allowable load		39.9kN	47.8kN	38.7kN
Roller allowable load		4.17kN/roller	5.00kN/roller	3.53kN/roller
Initial costs	Chain	100	150	100
	Sprockets	100	100	65
	Total	100	135	95 +extra
Running costs	Chain life (between bush-roller)	Needs to be replaced 2 times	Lasts 2 times longer than AT Series	
	Total costs	100	80	

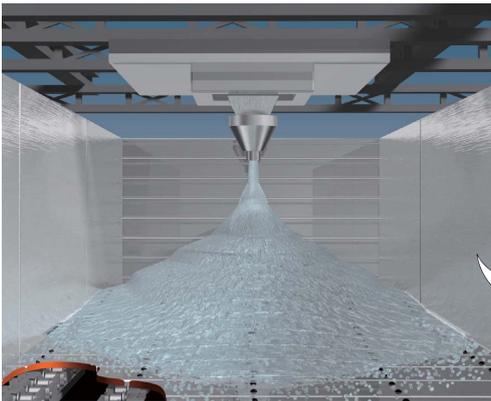
Further cost savings from using smaller rails and other ancillary equipment

Note: Figures above assume a baseline of 100 for the AT Series. Note: Cost estimates are based on customer information and include certain assumptions. Actual results may vary, depending on usage conditions and environment.

Ice Storage Facility

Want to make the facility more compact

Slat conveyor



Before

When we were designing a new facility, we thought about installing the AT Series, which has a proven track record. But because we needed to differentiate ourselves from the competition, cost reductions became an issue for us.

After

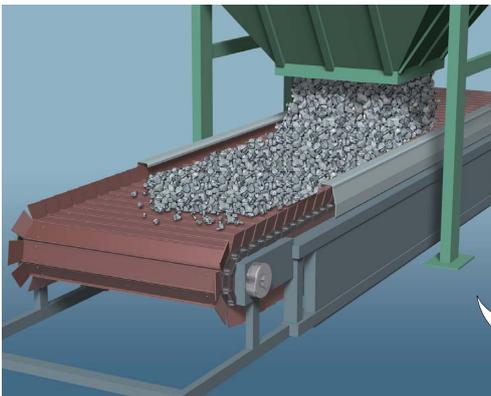
We chose the ATA Series, which is one size smaller than the AT Series.

After testing chains under actual conveyance conditions, we changed our initial choice. We found we could greatly reduce initial costs by going with the ATA Series and its ancillary equipment (such as sprockets and rails). Although the ATA Series has a smaller chain size, it has more than enough wear resistance. That's why we chose the ATA Series.

Non-Ferrous Metal Factory

Want to use the chain for a longer time

Apron conveyor for raw materials



Before

Previously, we used the DT Series for our apron conveyor. This conveyor received bulk raw material from a chute and transported it to the next processing stage. The short length of the conveyor and its high speed caused the rollers to wear and the chain to elongate from wear. This shortened the usage life of the chain. Another concern we had was having the chain break due to overloading. We needed a strong, highly wear-resistant chain.

After

We chose the ATA Series, which has significantly improved wear resistance.

After comparing the cost-effectiveness of several chains, we found the ATA Series to be the best choice for us. Its high wear resistance and strength has minimized problems at our factory.

GSA Series

Available sizes: RF03–RF26



Special heat treatment applied to the chain's bearings to improve wear resistance and strength

The GSA Series can achieve major cost savings.

(Simulating a 2-strand 20-meter conveyor)

		RF17200R-GS GS Series	Longer life RF17200R-GSA GSA Series	Smaller size RF12200R-GSA GSA Series
Max. allowable load		35.8kN	46.5kN	34.5kN
Roller allowable load		4.02 kN/roller	5.23 kN/roller	3.25 kN/roller
Initial costs	Chain	100	140	85
	Sprockets	100	100	70
	Total	100	135	85+extra
Running costs	Chain life (between bush-roller)	Needs to be replaced 2 times	Lasts 2 times longer than GS Series	
	Total costs	100	70	

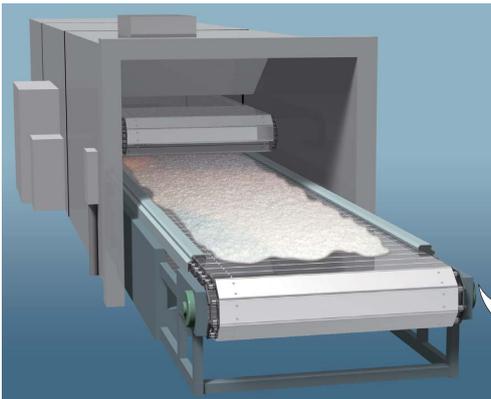
Note: Figures above assume a baseline of 100 for the GS Series. Note: Cost estimates are based on customer information and include certain assumptions. Actual results may vary, depending on usage conditions and environment.

Further cost savings from using smaller rails and other ancillary equipment

Chemical Plant

Want to minimize wear dust generated by the chain

Product conveyor



Before

We previously used the GS Series in our product conveyor. If any foreign matter got into a single product during conveyance, we had to dispose of the entire lot. Minimizing wear dust from the chain had become an issue for us.

After

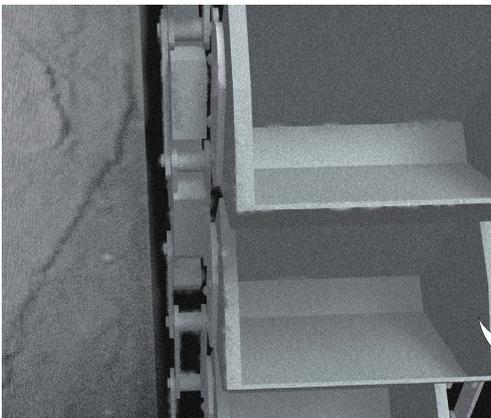
We chose the GSA Series, which has minimal chain wear.

We've been able to significantly reduce the intrusion of chain wear dust into our products, thereby reducing the occurrence of product defects. This translates to reduced manufacturing losses and much higher production efficiency. We're pleased to see such great improvements.

Chemical Plant

Want to protect the high-load conveyor from corrosion

Bucket elevator for pigment raw material



Before

Vertical conveyors for hauling ore powder (a raw material for pigments) have to be really efficient. So, for this application, we used to use the AT Series. But because the conveyed material is highly corrosive, it caused the chain to corrode and break frequently. We needed to find a chain with high corrosion resistance and the same conveyance efficiency as the AT Series.

After

We chose the GSA Series, after calculating the required strength of the conveyor chain under a number of conveyance conditions.

We've been able to maintain conveyance efficiency while protecting against corrosion. This has solved the problem of frequent chain breakages due to corrosion. Our bucket elevator is now working stably. Choosing the GSA Series was a great success.

SSA Series

Available sizes: RF03–RF26



Optimal materials used in the chain's bearings to improve wear resistance

The SSA Series can achieve major cost savings.

	SS Series	SSA Series
Chain life	 Needs to be replaced 1.5 times	 Lasts 1.5 times longer than SS Series
Chain price	100	120
Total costs	150	120

Note: Figures above assume a baseline of 100 for the SS Series.

Cuts total chain running costs by 20%.

Plus...

Chain replacement costs down to 70%.

Note: Cost estimates are based on customer information and include certain assumptions. Actual results may vary, depending on usage conditions and environment.

Food Factory

Want to spend less time and effort on maintenance

Conveyor for discharging dewatered sludge cake



Before

Dewatered sludge cake is what's left after raw food waste is passed through a filter press. We used to use another company's chain for our conveyor to discharge the dewatered sludge cake. Because that conveyor was encased, it was hard to perform maintenance on it. And due to the usage environment, we were only able to do a minimum of maintenance.

After

We chose the SSA Series as we believed it would be more reliable in our facility.

Generally, a discharge conveyor shouldn't need much maintenance. We thought that a longer-life chain would give us more stable production. This chain can be used for a long time with a minimum of fuss—and that's a great help, especially in a less-than-pleasant usage environment.



Dedicated website for Advanced Large Size Conveyor Chains

Content includes a promotional video, product features, and downloadable catalogs.

The aim of Tsubaki's Smart Conveyor Chains is to have our customers select the optimal chain for their operating environment.

Wear resistance comparisons are based on in-house tests. Chain life may vary, depending on usage conditions. For available chain sizes, dimensions, and strengths, refer to the Tsubaki Large Size Conveyor Chains & Sprockets catalog.



The Tsubaki Eco Link logo is used only on products that satisfy the standards for environmental friendliness set by the Tsubaki Group.