SMART Conveyor Chain™
Advanced Models
Advanced successes in the field

THE SMART CHOICE FOR CUSTOMERS
Now It’s Easy to Make the Smart Selection

**Advanced Models**

**DTA Series**

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

- **Longer life**
- Has 3x the bush–roller wear resistance of the DT Series

![Image of wear resistance comparison]

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**

**DT Series**

General-use conveyor chain
Our most versatile chain

**ATA Series**

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

- **Higher strength, longer life**
- Better wear resistance and higher maximum allowable load than the AT Series

<table>
<thead>
<tr>
<th>Pin-bush wear resistance</th>
<th>Bush-roller wear resistance</th>
<th>Max. allowable load</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5x better</td>
<td>2x better</td>
<td>1.2x better</td>
</tr>
</tbody>
</table>

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

![Image of wear resistance comparison]

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.
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.

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

<table>
<thead>
<tr>
<th></th>
<th>DT Series</th>
<th>DTA Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chain life</td>
<td>Needs to be replaced 3 times</td>
<td>Lasts 3 times longer than DT Series</td>
</tr>
<tr>
<td>Chain price</td>
<td>100</td>
<td>130</td>
</tr>
<tr>
<td>Total costs</td>
<td>300</td>
<td>130</td>
</tr>
</tbody>
</table>

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

Cuts total chain costs by 60%.

Chain replacement costs down to 30%.

Want to reduce maintenance man-hours

**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.

Want to reduce the work of replacing chains

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

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 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.

Want to make the facility more compact

<table>
<thead>
<tr>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>We chose the ATA Series, which is one size smaller than the AT Series.</td>
<td>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.</td>
</tr>
</tbody>
</table>

Want to use the chain for a longer time

<table>
<thead>
<tr>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>We chose the ATA Series, which has significantly improved wear resistance.</td>
<td>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.</td>
</tr>
</tbody>
</table>
We chose the GSA Series, after calculating the required strength of the conveyor chain under a number of conveyance conditions.

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.
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.

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

**Want to spend less time and effort on maintenance**

**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.

### SSA Series

**Available sizes:** RF03–RF26

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

---

**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.