

# LAMBDA CHAIN

For the chocolate and confectionary industries

## Tsubaki LAMBDA Chain—The Smart Choice of Chain

Low maintenance requirements, long wear life, and minimal downtime make Tsubaki LAMBDA Chain, first introduced in 1988, well suited for a wide range of industrial applications.

LAMBDA Chain delivers long-term operation without additional lubrication. It is therefore ideal for the chocolate and confectionary industries where products must be free from oil contamination. This durable lube-free roller chain provides that protection along with long-lasting, cost-effective performance—making it the smart choice.

### Clean Operation

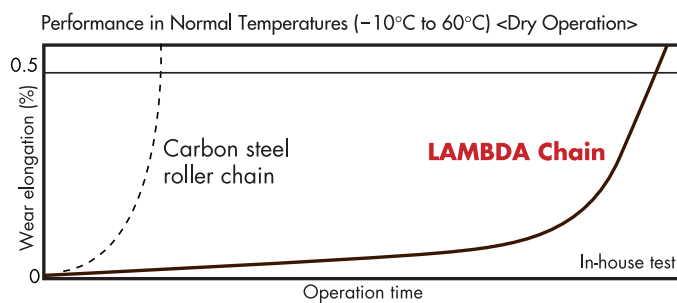
- Special lube oil-impregnated bushings give LAMBDA Chain a self-lubricating function.
- Since no lubrication is required on the chain, contamination is eliminated and your equipment and working environment stay clean.

### Reduce Maintenance and Improve Productivity

- There is no chance of a hardened shell forming on LAMBDA Chain since external lubrication is not required.
- Downtime due to maintenance is minimized, meaning your equipment can improve productivity.

### Longer Wear Life

- LAMBDA Chain technology provides longer wear life without the need for additional lubrication on the chain.



## Engineered for Superior Performance



The Smart Choice—Solutions

Prevents Contamination on the Chain

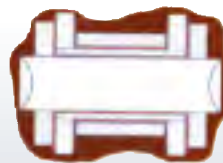
LAMBDA Chain requires no external lubrication, so the chain remains clean. Products are not at risk of becoming contaminated with oil and other grime.

Company A's contaminated chain



Prevents Accumulation of a Hardened Shell

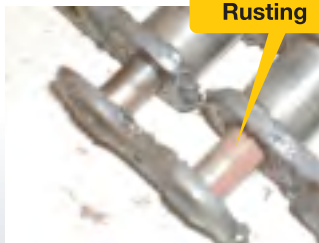
Oil and chocolate products on conventional externally lubricated chain combine to form a hardened shell, an impenetrable coating that prevents the free passage of lubricant to the chain's bearing areas. Without replenishment, the effectiveness of the lubricant in those areas diminishes. Eventually, when the lubricant can no longer separate the pins and bushings, metal-to-metal contact occurs. This leads to fretting corrosion.



Hardened shell inhibits the passage of lubricant to the bearing area.

Prevents Fretting Corrosion in the Bearing Areas

On externally lubricated chain, fretting corrosion causes abrasive deposits (rust) to form around the pins. This leads to wear and elongation of the chain as well as to stiffness (poor articulation).



## The Smart Choice—Tsubaki Technology

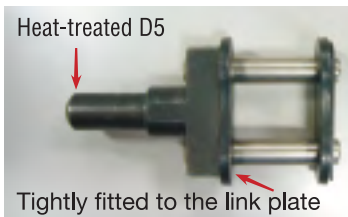
### Perfect Pairing

Controlling chain length is very important for ensuring the smooth operation of applications involving two strands of chain. Chain length is measured so precisely that the difference in total chain length between a set of chains is kept to within 0.5 mm (0.02"). LAMBDA Chain is also pre-stretched, so the need for post-installation adjustments, which normally take a few weeks, is eliminated.



### Specially Designed D5 Attachment

The use of specially designed D5 Attachments enhances the durability of LAMBDA Chain.



- Protection from fatigue fracture and wear marks due to vibration during operation

Company A



- Fatigue breakage at the pin neck
- Less chain rigidity



*Lube-Free LAMBDA Chain—The Smart Choice of Chain*

■ RS16B LAMBDA Special D5



■ RS100 LAMBDA Special Extended Pin (W = 15.88 mm)



■ RS100 LAMBDA Special Extended Pin & Guide Roller



■ RS Pitch=20 mm Special Attachment



■ RS20B LAMBDA Special WA Attachment & Extended Pin



■ ANSI/BS LAMBDA  
■ ANSI/BS X-LAMBDA





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