

# TSUBAKI LAMBDA CHAIN KF SERIES LUBE FREE CHAIN

Due to the special NSF-H1 certified lubrication impregnated bushes, Lambda Chain® KF Series is usable in a wide temperature range (from room temperature to 230°C), and for food product applications while at the same time being kind to the environment.

- “KF” is stamped onto the chain’s inner or outer plates.  
\*Offset links are specially handled.



■ Bushes are impregnated with a special NSF-H1 certified lubrication

■ Plates are coated black (JL are also black)

## Lineup

(Made to order product)

Application	RS35	RS40	RS50	RS60	RS80	RS100	RS120	RS140
Drive Chain (LMD)	—	●	●	●	●	○	○	○
Conveyor Chain (LMC)	○	● (RF2040)	● (RF2050)	● (RF2060)	● (RF2080)	○	—	—

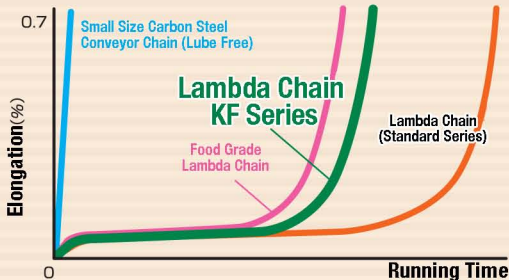
● : KF Series Line Up    ○ : Standard Lambda Line Up

※ Please consult your local Tsubaki representative regarding other available sizes for KF Series chain.

## Characteristics

Thanks to the environmentally friendly NSF-H1 grade certified lubrication, KF Series chain can be used in food production machinery where lubrication is difficult and wear is a problem!

### Wear Elongation Life at Room Temperature

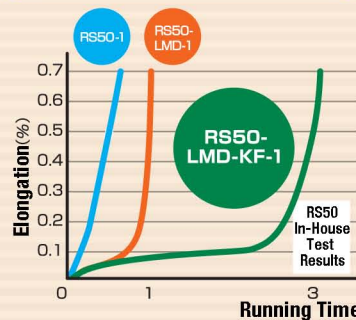


KF Series has a wear life equal to or greater than Food Grade Lambda Chain and is over ten times that of Small Size Carbon Steel Conveyor Chain. (0.5% wear elongation comparison, in-house test results)

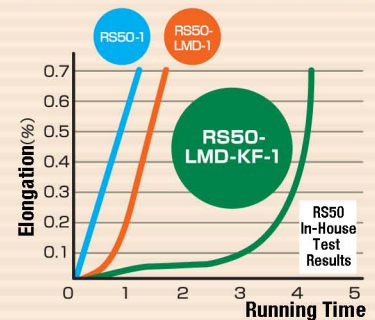
With lubrication that does not degrade or vaporize at high temperatures (150°C~230°C), KF Series enjoys the highest anti-wear performance in high temperature applications.

⚠ Never use KF Series chain in conditions over 280°C as toxic gasses may be emitted.

### Wear Elongation Life at 150°C



### Wear Elongation Life at 230°C

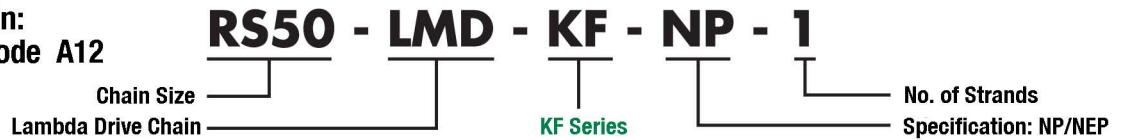


※ Standard Lambda maximum operating temperature range is 150°C

## Chain Numbering

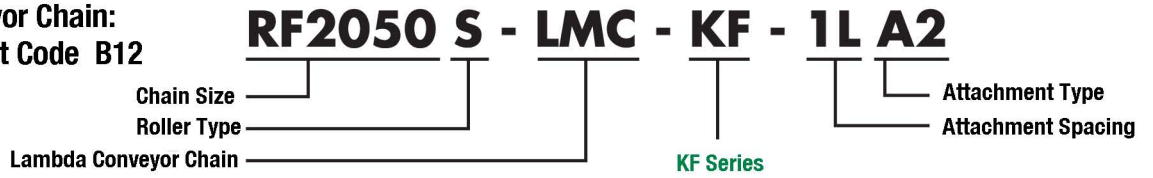
Drive Chain:

Product Code A12



Conveyor Chain:

Product Code B12



※ Line up consists of sizes 40~80, and 2040~2080.

※ Offset links are specially handled (Offset links with attachments are not available).

## Application Examples for KF Series Lambda Chain

CASE 1

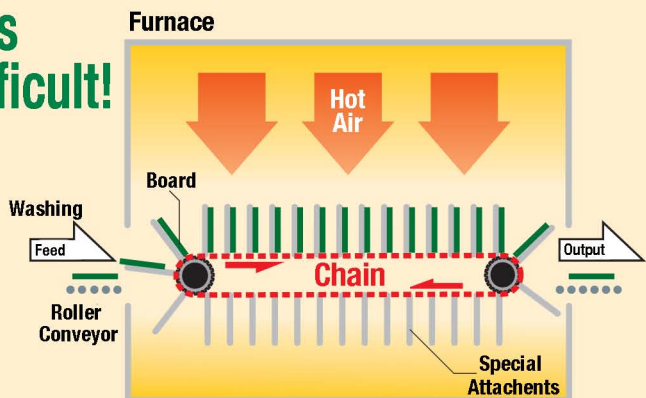
**Perfect for inside furnaces  
where maintenance is difficult!**

Ambient Temperature: ~170°C

### Semiconductor Board Conveyance Through Furnace

Semiconductor boards are washed in a previous process and then dried in the furnace. (Hot air is blown down from above to dry the boards). Normally lubrication quickly vaporizes and wear life is met, but Lambda Chain KF Series chain enjoys a long wear life even when conveying through high temperature furnaces.

Semiconductor Industry



CASE 2

**Usable inside and outside of ovens!  
Great results for food conveyance!**

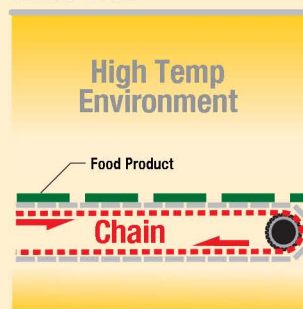
Ambient Temperature: ~170°C

### Continuous Oven Conveyor

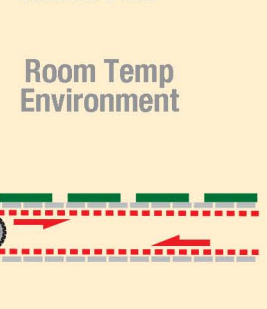
Great results in high temperature ovens! Lambda bushes impregnated with NSF-H1 grade lubrication can be used in continuous conveyance from room temperature to high temperature environments (230°C). Especially for layouts where lubrication is impossible, KF Series chain provides by far the best results for your application.

Food Production Industry

Inside Oven



Outside Oven



\*The H1-registration is based on the US guidelines of Sec.21 CFR178, 860 of the FDA regulations. The Food and Drug Administration (FDA) of the USA has determined qualitative and quantitative ingredients to be used in the lubricants for the food industry. The assessment and approval process is carried out by NSF International.

**TSUBAKI**

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