

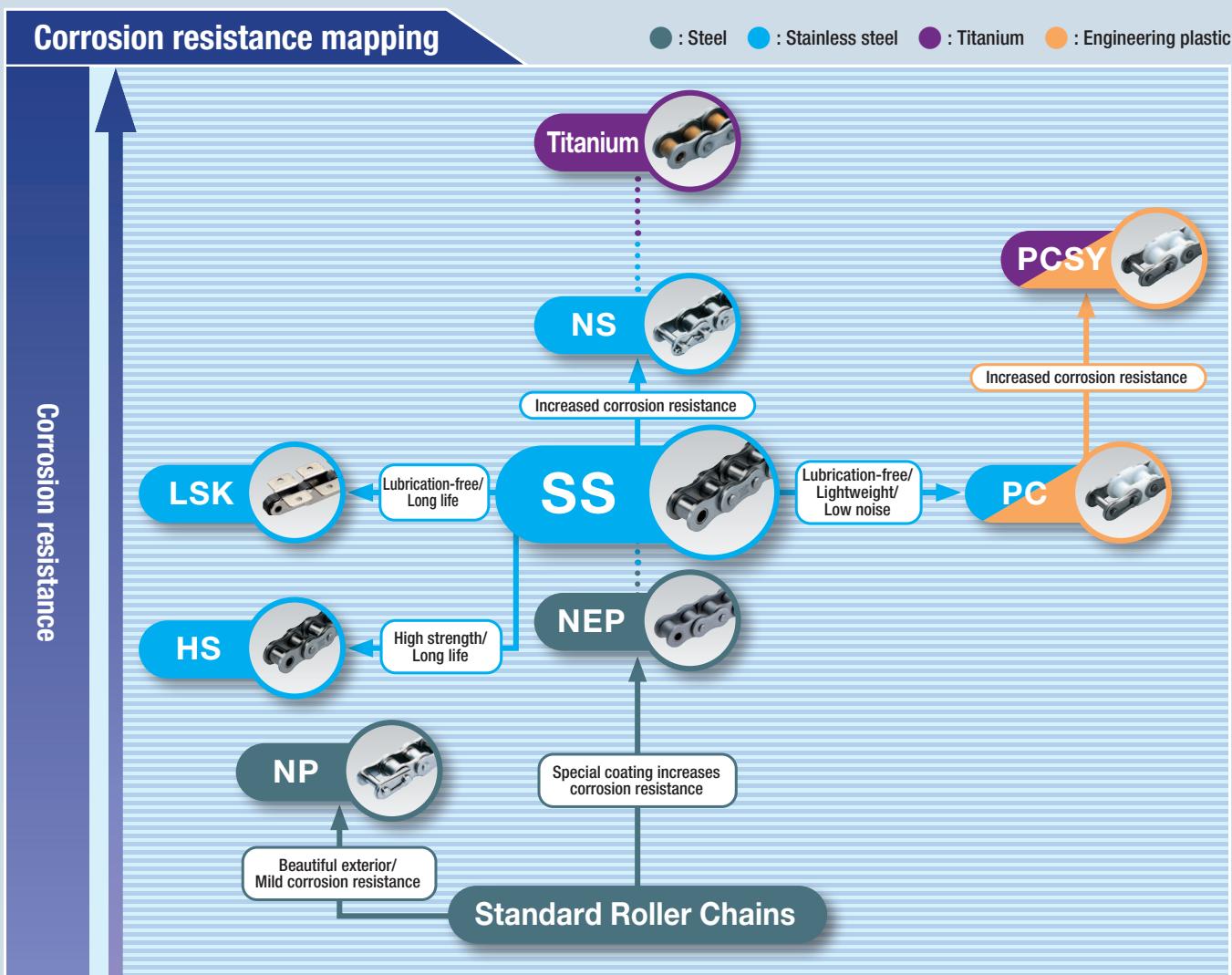


TSUBAKI Corrosion Resistant Chains

No rusting / Clean / Long life / Washable



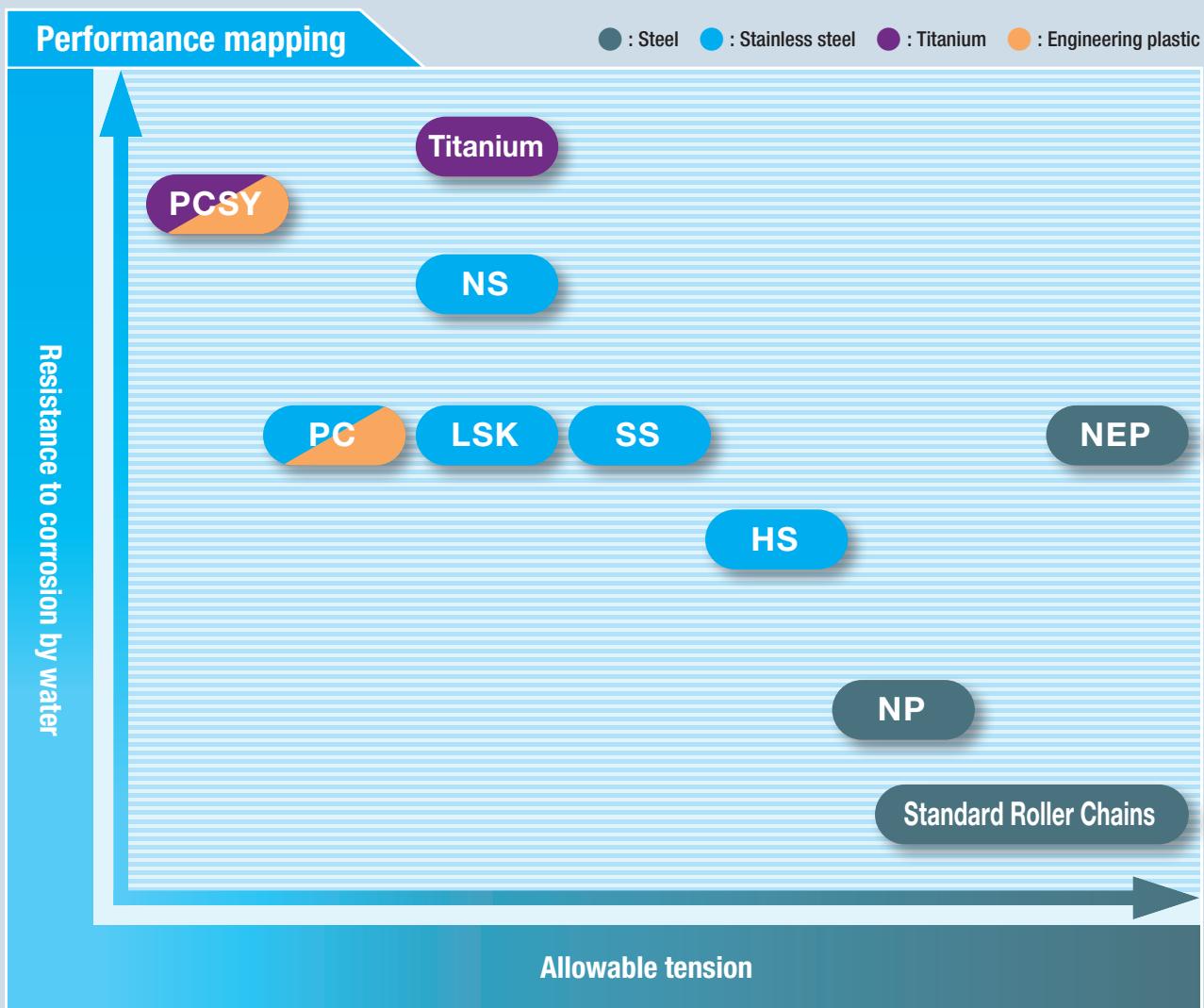
From our wide variety of Corrosion Resistant Chains,



■ Details on various specifications

Type	Material	Characteristics	
SS	18-8 stainless steel	Excellent corrosion resistance is made possible through the use of 18-8 stainless steel. Used immersed in water, in corrosive atmospheres produced by acids, alkalis, and other chemicals, and in high- and low-temperature environments.	Upgraded October 2022
HS	Pins, bushes, and rollers are 13Cr stainless steel Plates are 18-8 stainless steel	Longer life than SS specs, with 1.8 times the maximum allowable tension. Corrosion resistance is slightly lower than that of SS specs.	Launched October 2021
NEP	Special coating and topcoat on RS roller chain	The strength of Standard Roller Chains along with environmental corrosion resistance such as salt water resistance, climate resistance, chemical resistance, etc. Compliant with RoHS directives, using no harmful chromium.	Upgraded January 2023
NS	18-12 stainless steel	Better corrosion resistance than SS specs.	
LSK	18-8 stainless steel Bushes are 18-8 stainless steel + special engineering plastic	Special engineering plastic is used for the bushes, realizing lubrication-free long life.	
PC (Standard Series)	18-8 stainless steel used in outer plates and pins Engineering plastic (white) used in inner links	Usable without lubrication, realizing lower noise and lighter weight.	
PCSY	Titanium alloy used in outer plates, pins, and fasteners Engineering plastic (matte white) used in inner links	Better corrosion resistance than PC (Standard Series).	
Titanium	Titanium alloy	Non-magnetic, with superb corrosion resistance beyond the reach of stainless steel chains.	
NP	RS roller chain with nickel plating	In addition to the beautiful plated exterior, mild corrosion resistance enables use in environments exposed to water drops.	
Standard Roller Chains	Alloy steel	Although this chain is not corrosion-resistant, it is high-strength steel.	

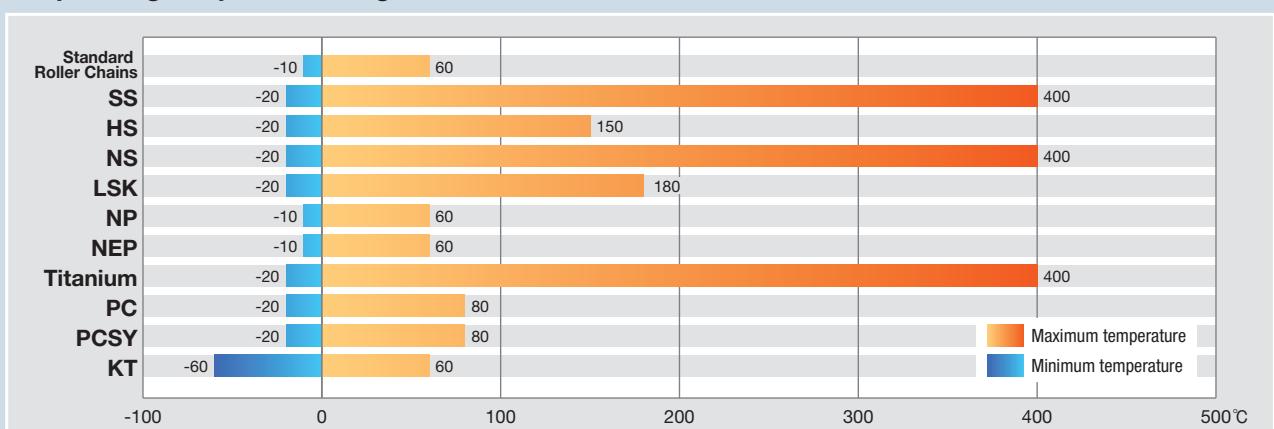
Selecting the most ideal chain for you!



Chemical name	Corrosion Resistant Chains						
	SS	NS	Titanium	PC	PCSY	LSK	HS
Water	○	○	○	○	○	○	○
Seawater	△	○	○	△	○	△	×
Sodium hypochlorite 10% 20°C	×	○	○	×	○	×	×

*For details, see our catalogs

Operating temperature range

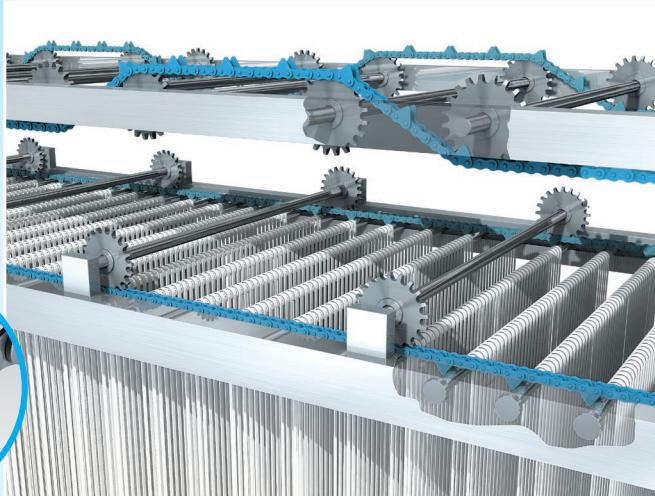


Proposing the best -suited chains

Examples of various specs in use

Upgraded
October 2022

SS



Noodle production line

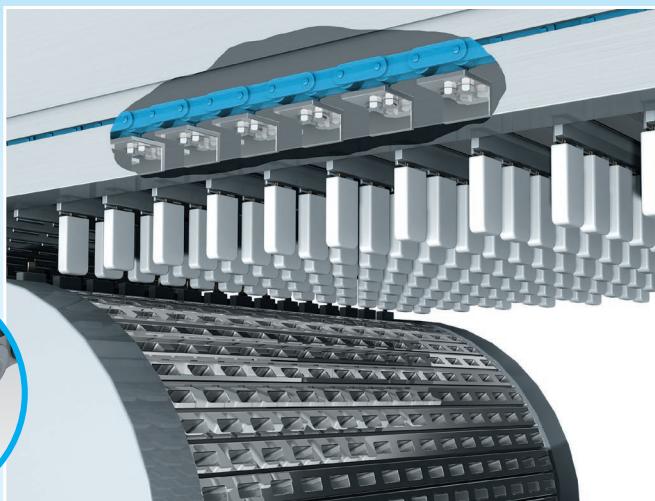
Reducing replacement frequency

Compared to conventional products

- Wear life 2x
- Maximum allowable tension 1.5x

Used on production lines where hygiene management is generally required, such as food machinery.

HS



Ice cream bar production line

Launched
October 2021

Reducing position adjustment frequency

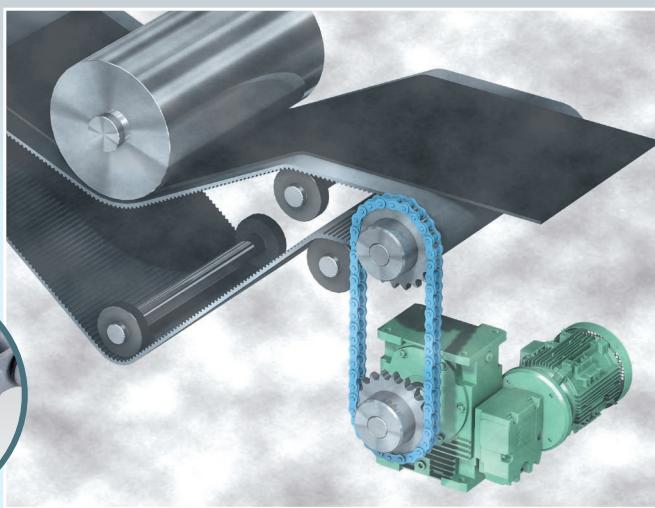
Compared to SS specs

- Wear life improved (up to 3x)
- Maximum allowable tension 1.8x

Chain wear elongation led to position deviation in the ice cream production process, requiring painstaking adjustment.

The use of HS specs with excellent wear resistance reduced the adjustment frequency.

NEP



Rubber sheet production line

Upgraded
January 2023

Reducing replacement frequency even in atmospheres exposed to water

Compared to Standard Roller Chains

- Same strength and wear resistance
- Improved corrosion resistance

Combines strength and corrosion resistance in high-humidity environments and corrosive environments such as those exposed to water drops.

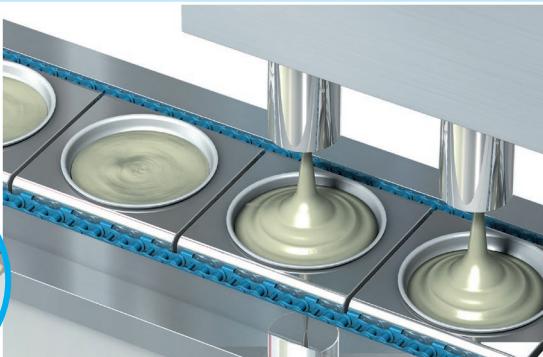
For your needs and applications.

NS



Heat treatment furnace

LSK



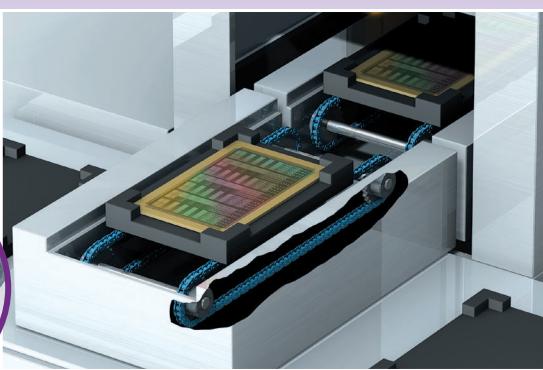
Yogurt filler

PC



Can direct conveyor

Titanium



Etching equipment

Reducing replacement frequency even in highly corrosive usage atmospheres

Corrosion resistance improved compared to SS specs

When the door of the heat treatment furnace is opened, the chain is exposed to the high-temperature corrosive gases within the furnace. The use of NS specs, with higher corrosion resistance than SS specs, realizes longer life.

Reducing position adjustment frequency

Compared to SS specs

- Wear life improved
- Usable lubrication-free

Ideal for applications where positioning accuracy is required in intermittent feeding, as with fillers. Initial elongation is low, with lubrication-free long life, reducing maintenance processes as well.

Does not damage conveyed objects

- Inner links are engineering plastic
- Usable lubrication-free
- Low noise

The use of engineering plastic PC for the inner links enables low-noise conveyance which does not damage the objects conveyed.

Reducing replacement frequency in strong-acid atmospheres

- Extremely high corrosion resistance

For the etching process, which uses acidic solvents, etc., extremely high corrosion resistance is required. The use of titanium chains sharply reduces the replacement frequency.

Sprockets Supporting Corrosion Resistant Chains

Sprockets used in special atmospheres are treated as special orders, including their technical feasibility, depending on client requirements.

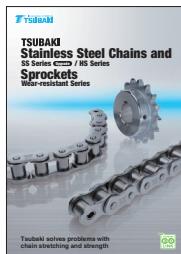
Chain specifications	Sprocket specifications				
	Stainless steel type	Stainless steel type, wear-resistant specifications	Engineering plastic type	Surface treatment specifications	Special materials
SS	◎	○	△	—	—
HS	○	○	—	—	—
NEP	—	—	—	○	—
NS	○	—	△	—	○
LSK	○	—	—	—	—
PC	○	—	○	—	—
PCSY	△	—	—	—	○
Titanium	△	—	—	—	○
NP	—	—	—	○	—



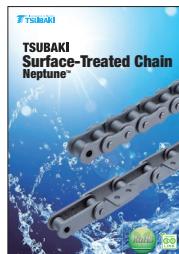
- Recommended
- Possible
- △ Possible depending on conditions
- Impossible

Sprocket specifications	Applicable sprocket specifications	Material
Stainless steel type	Standard stainless steel type.	18-8 SUS
Stainless steel type, wear-resistant specifications	Special surface treatment on the standard stainless steel type base improves wear life.	18-8 SUS
Engineering plastic type	Lubrication-free operation is possible with nylon-based resin products (blue).	Engineering plastic
Surface treatment specifications	We propose surface treatment suited to the chain specifications.	Carbon steel
Special materials	We propose materials suited to the chain specifications.	—

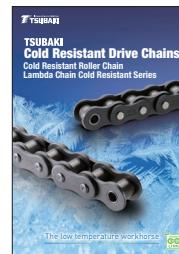
Tsubaki Corrosion Resistant Products



Tsubaki
Stainless Steel Chains and
Sprockets



Tsubaki
Surface-Treated Chain
Neptune™



Tsubaki
Cold Resistant Drive Chains



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