



LEADING THE MOVEMENT



The food-processing industry keeps our world fed.

Tsubaki understands this tough job. It involves a multitude of processes, orchestrated in extreme environments, under highly time-sensitive deadlines. Obstacles like these don't make it easy to succeed. But choosing the right tools can give you the edge.

When you demand Tsubaki conveyor and drive components, you command superior instruments that deliver premium performance. Durable. Reliable. Long-lasting. Tsubaki products are always your best value. Without fail.

Tsubaki chains, sprockets and other power transmission products embrace every aspect of food processing. Whatever the application, whatever the scope, we promise 100 percent compatibility.

Tsubaki is the overall market leader in chain across all industries. But, we think you should consider us for more than our stellar reputation. Choose commitment to better manufacturing processes. Choose dedication to improved engineering.

As of this catalog's print date, overall, the Tsubaki Advantage has saved these customers a total of \$4,559,659.377 (Cdn).



Common Chains for the Food Industry

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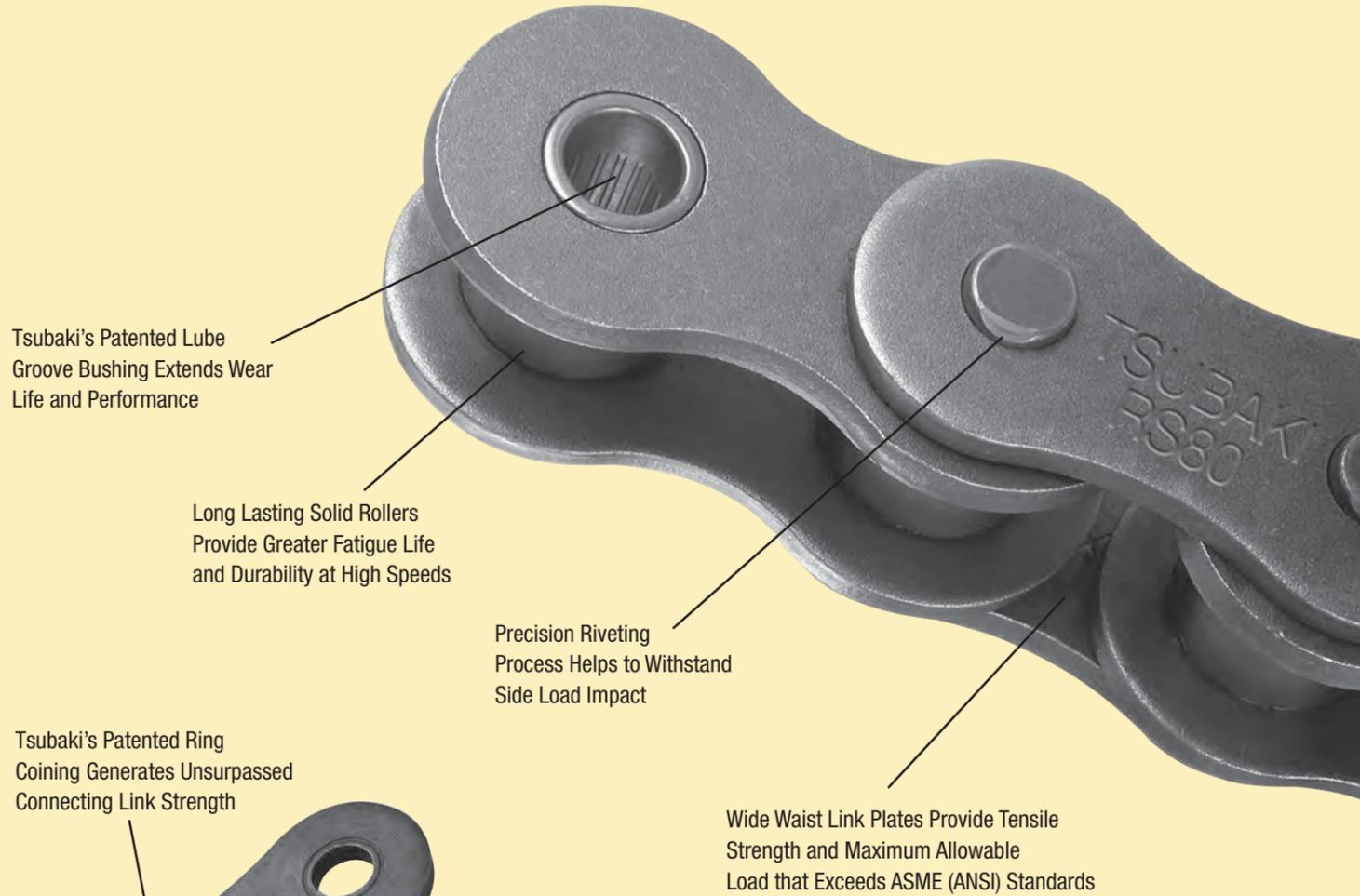
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Introduction to Tsubaki Roller Chain

After more than a century of chain design, engineering and manufacturing experience, you can count on Tsubaki standard roller chain to deliver consistent superior performance and longer life. All minimizing your downtime and maximizing your output and all for a price a lot less than you might think. From the best heat-treated steel for the job to groundbreaking patents, you can trust Tsubaki to deliver the quality difference you can see.



Tsubaki's Patented Lube Groove Bushing Extends Wear Life and Performance

Long Lasting Solid Rollers Provide Greater Fatigue Life and Durability at High Speeds

Precision Riveting Process Helps to Withstand Side Load Impact

Wide Waist Link Plates Provide Tensile Strength and Maximum Allowable Load that Exceeds ASME (ANSI) Standards

Tsubaki's Patented Ring Coining Generates Unsurpassed Connecting Link Strength

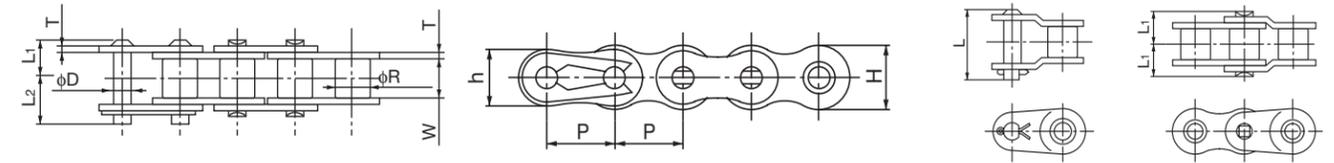


ANSI Roller Chain

Tsubaki brings more than a century of chain design, engineering and manufacturing experience to every job. You can count on our experience and our standard roller chain to deliver consistent, superior performance and longer life.

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Single Pitch



All dimensions in inches unless otherwise stated.

Chain Number	Pitch P	Roller Dia. R	Width Between Inner Link Plates W	Link Plate			Pin			Average Tensile Strength (lbs.)	Maximum Allowable Load (lbs.)	Approx. Weight (lbs./ft.)	
				Thickness T	Height H	Height h	Dia. D	Length L ₁ + L ₂	Length L ₁				Length L ₂
25RB	0.250	*0.130	0.125	0.030	0.230	0.199	0.091	0.327	0.150	0.177	1,059	144	0.09
35RB	0.375	*0.200	0.188	0.045	0.354	0.307	0.141	0.500	0.230	0.270	2,540	486	0.22
40RB	0.500	0.312	0.313	0.059	0.472	0.409	0.156	0.717	0.325	0.392	4,294	816	0.43
50RB	0.625	0.400	0.375	0.079	0.591	0.512	0.200	0.874	0.406	0.469	7,059	1,432	0.70
60RB	0.750	0.469	0.500	0.094	0.713	0.614	0.235	1.087	0.506	0.581	9,915	1,985	1.03
80RB	1.000	0.625	0.625	0.126	0.949	0.819	0.313	1.398	0.640	0.758	17,648	3,305	1.79
100RB	1.250	0.750	0.750	0.157	1.185	1.024	0.376	1.677	0.778	0.900	26,529	5,081	2.68
120RB	1.500	0.875	1.000	0.189	1.425	1.228	0.437	2.118	0.980	1.138	37,545	6,835	3.98
140RB	1.750	0.961	1.000	0.220	1.661	1.433	0.500	2.307	1.059	1.248	48,561	9,038	5.03
160RB	2.000	1.125	1.250	0.252	1.898	1.638	0.563	2.705	1.254	1.451	62,725	11,915	6.79

* Denotes that sizes 25RB and 35RB are rollerless. The value shown is for the bushing diameter.
Note: Spring clip type connecting links will be provided for 25RB to 60RB unless otherwise specified.

British Standard Drive Chain

Machines originating from Europe, typically call for British-standard drive chain. Tsubaki manufactures the most complete line of this chain — from sizes RS05B to RS48B — in materials including carbon steel, lube-free Lambda, corrosion-resistant nickel-plated, Neptune and stainless steel.

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All dimensions in inches unless otherwise stated.

Chain Number	Pitch P	Roller Dia. R	Width Between Inner Link Plates W	Link Plate				Pin					Nominal Bearing Area (in ²)	Average Tensile Strength (lbs.)	Approx. Weight (lbs./ft.)
				Roller Link Thickness T1	Pin Link Thickness T2	Roller Link Height H	Pin Link Height h	Dia. D	Length L ₁ + L ₂	Length L ₁	Length L ₂	Offset Pin Length L			
RS08B	0.500	0.335	0.305	0.063	0.063	0.465	0.409	0.175	0.724	0.331	0.394	0.7320	0.078	4,400	0.47
RS10B	0.625	0.400	0.38	0.059	0.059	0.579	0.539	0.200	0.819	0.376	0.443	0.8190	0.104	5,830	0.64
RS12B	0.750	0.475	0.46	0.071	0.071	0.634	0.634	0.225	0.949	0.437	0.512	0.9490	0.138	7,480	0.84
RS16B	1.000	0.625	0.67	0.126	0.157	0.827	0.827	0.325	1.484	0.699	0.785	1.6180	0.326	16,500	1.81
RS20B	1.250	0.750	0.770	0.173	0.134	1.024	1.024	0.401	1.693	0.783	0.909	1.8484	0.457	24,200	2.59
RS24B	1.500	1.000	1.000	0.236	0.220	1.315	1.228	0.576	2.303	1.049	1.254	2.4409	0.859	41,800	5.01
RS28B	1.750	1.100	1.220	0.295	0.248	1.433	1.433	0.626	2.752	1.278	1.474	2.9331	1.147	48,400	6.35

Corrosion Resistant Chain

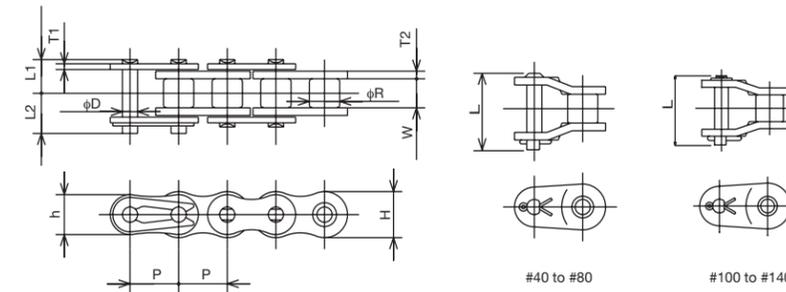
No matter how complex your corrosion problems are, Tsubaki has the solutions. We can recommend the best options to address your conditions — from nickel-plated chains to the more robust Neptune to different types of stainless and poly steel. With Tsubaki, you always make the right choice.

Lambda & Lambda Corrosion Resistant (Lube Free) Chain

Lambda chain is your alternative to costly lubrication maintenance. The self-lubricating feature of Lambda can directly replace existing standard chain with practically no loss of strength. As an added bonus, eliminating lubrication in your system means no product contamination.

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All dimensions in inches unless otherwise stated.

Chain Numbers				Pitch	Roller Dia.	Inner Width	Link Plate			Pin			
304 SS Stainless Steel	600 AS Stainless Steel	NEP Coated	Nickel Plated NP				Link Plate Thickness	Roller Link Plate Height	Pin Link Plate Height	Pin Diameter	Length	Length	Length
				P	R	W	T	H	h	D	L ₁ + L ₂	L ₁	L ₂
40SS	40AS	40NEP	40NP	0.500	0.312	0.313	0.059	0.472	0.409	0.156	0.705	0.325	0.380
50SS	50AS	50NEP	50NP	0.625	0.400	0.375	0.079	0.591	0.512	0.200	0.878	0.406	0.472
60SS	60AS	60NEP	60NP	0.750	0.469	0.500	0.094	0.713	0.614	0.235	1.087	0.506	0.581
80SS	80AS	80NEP	80NP	1.000	0.625	0.625	0.126	0.949	0.819	0.313	1.406	0.640	0.766
100SS		100NEP	100NP	1.250	0.750	0.750	0.157	1.185	1.024	0.376	1.677	0.778	0.900
120SS		120NEP	120NP	1.500	0.875	1.000	0.189 (0.197)	1.425	1.228	0.437	2.118 (2.187)	0.980 (1.014)	1.138 (1.173)
140SS		140NEP	140NP	1.750	1.000	1.000	.220 (236)	1.661	1.433	0.500	2.307 (2.406)	1.059 (1.108)	1.249 (1.297)

Dimensions in () denotes SS or AS Stainless Steel Chain.

All dimensions in inches unless otherwise stated.

Lambda Chain No.	Lambda Nickel Plated Chain No.	Lambda NEP Chain No.	Pitch	Roller Dia.	Inner Width	Link Plate				Pin				
						Roller Link Plate Thickness	Pin Link Plate Thickness	Roller Link Plate Height	Pin Link Plate Height	Pin Diameter	Length	Length	Length	Offset Pin Length
			P	R	W	T	t	H	h	D	L ₁ + L ₂	L ₁	L ₂	L
40LAM	40LAMNP	40LAMNEP	0.500	0.312	0.297	0.079	0.059	0.472	0.409	0.156	0.756	0.344	0.411	0.787
50LAM	50LAMNP	50LAMNEP	0.625	0.400	0.365	0.094	0.079	0.591	0.512	0.200	0.913	0.423	0.490	0.945
60LAM	60LAMNP	60LAMNEP	0.750	0.469	0.483	0.126	0.094	0.713	0.614	0.235	1.157	0.539	0.618	1.260
80LAM	80LAMNP	80LAMNEP	1.000	0.625	0.609	0.157	0.126	0.949	0.819	0.313	1.472	0.675	0.797	1.571
100LAM	100LAMNP	100LAMNEP	1.250	0.750	0.736	0.189	0.157	1.185	1.024	0.376	1.752	0.813	0.939	1.870
120LAM	120LAMNP	102LAMNEP	1.500	0.875	0.974	0.220	0.189	1.425	1.228	0.437	2.193	1.014	1.179	2.323
140LAM	140LAMNP	140LAMNEP	1.750	1.000	0.974	0.252	0.220	1.661	1.433	0.500	2.358	1.091	1.268	2.508

All dimensions in inches unless otherwise stated.

Chain No.	Average Tensile Strength* lbs		Maximum Allowable Load Lbs				Chain Weight lbs/Ft	Links per Unit	Temperature Range °C*			
	NEP	NP	SS	AS	NEP	NP			SS	AS	NEP	NP
40	4,294	4,294	99	155	816	683	0.43	240	-20 to 400	-20 to 400	-10 to 150	-10 to 60
50	7,059	7,059	155	232	1,432	1,212	0.70					
60	9,915	9,915	232	353	1,985	1,632	1.03					
80	17,648	17,648	398	596	3,305	2,855	1.79					
100	26,529	26,529	573	-	5,980	4,294	2.68					
120	37,545	37,545	859	-	6,835	5,733	3.98 (4.12)					
140	48,556	48,556	1,036	-	9,038	-	5.03 (7.32)					

Dimensions in () denotes SS or AS Stainless Steel Chain.

* SS and AS Stainless Steel Chain are not rated using a traditional tensile strength test. Please refer to their maximum allowable loads.

All dimensions in inches unless otherwise stated.

Chain No.	Average Tensile		Maximum Allowable Load		Chain Weight lbs/ft	Links per 10 Feet	Max Allowable Speed ft/min
	Standard & NEP lbs	Nickel Plated lbs	Standard & NEP lbs	Nickel Plated lbs			
40LAM	4,294	4,293	816	683	5.06	240	492
50LAM	7,059	7,058	1,432	1,212	8.02	192	443
60LAM	9,915	9,913	1,985	1,632	12.44	160	394
80LAM	17,648	17,646	3,305	2,855	20.03	120	295
100LAM	26,529	26,526	5,081	4,294	31.10	96	262
120LAM	37,545	37,512	6,835	5,733	46.29	80	164
140LAM	48,561	48,556	9,038	7,710	56.59	68	164

Super Stainless™ Chain

A REVOLUTIONARY BREAKTHROUGH IN STAINLESS STEEL

The toughest applications require the toughest chain possible. That used to mean choosing between the corrosion resistance of stainless steel or the strength of carbon steel. Now Tsubaki offers both — in a single chain.

With its Super Stainless™ chain, Tsubaki has engineered a stainless steel chain solution that combines the corrosion resistance of its existing 600 (AS) series chains with the strength of an ANSI carbon steel chain. It can be paired with Super Stainless attachments and sprockets to create a reliable stainless steel system that withstands extreme operating conditions while providing superior wear life. No longer will a complete system redesign be needed to accommodate multi-strand or larger-pitch chains. Designed to deliver maximum strength in corrosive, high-temperature or food-grade environments, Super Stainless chain can replace carbon steel chain one for one.

This helps reduce cost while operating with the same loads as standard carbon steel chain.

Super Stainless chain offers a higher side-bar waist and greater fatigue strength, as well as hardened pins and bushings. The result is a 100% compliant ASME B29.1 roller chain made entirely of stainless steel. It's just one more way Tsubaki continues to bring greater efficiency, reliability and value to its customers, as it has since 1917.

Designed to Deter Corrosion

Challenging environments are no match for Super Stainless chain. Developed for optimal performance in food-safe and cleanroom environments, Super Stainless is the highest-strength roller chain solution at elevated temperatures and resists a wide range of corrosive conditions:

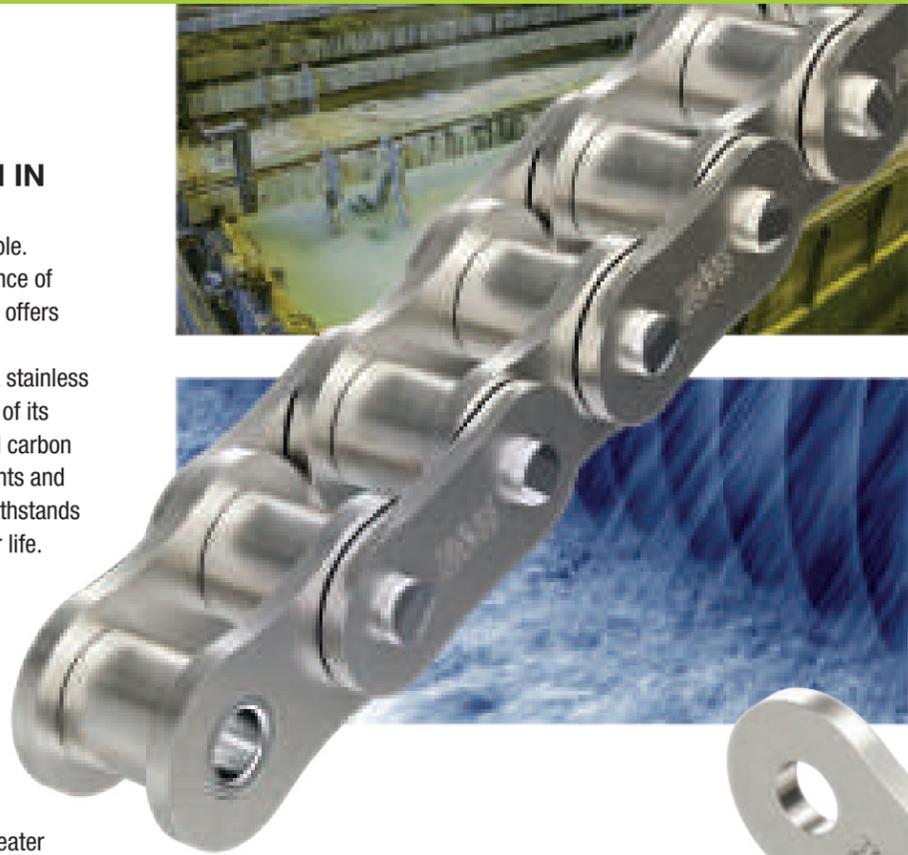
- General acids
- Peracetic acid
- Low-dosage caustics and alkalis
- Tap water
- Salt water
- Temperatures from -40° to 750° F (-40° to 400° C)

Note: For higher temperatures, please consult our factory.

Unparalleled Wear Life

Over time, chain elongation is inevitable. But with Super Stainless chain, wear life is extended to significantly lengthen the time before replacement is necessary. Super Stainless chain combines inherent corrosion resistance with carbon strength to achieve a prolonged wear life that can significantly outperform traditional stainless steel chains.

- Offers twice the wear life of existing stainless steel chain options
- Supports the same maximum allowable load as carbon steel chain
- Decreases downtime by extending time to replacement
- Increases sprocket life in certain applications
- Reduces maintenance and replacement costs
- Improves reliability in environments where harsh chemicals and high temperatures are common



UP TO 6X STRONGER THAN ORDINARY STAINLESS STEEL



THE ADVANTAGES OF STAINLESS STEEL

Our specially designed stainless steel products outlast the competition to promote cost-effective operations and increased profitability. Only stainless steel can withstand the harsh chemicals, extreme temperatures and high moisture levels present in food-safe and cleanroom environments.

Super Stainless chain further augments the inherent benefits of stainless steel by integrating hardened components and specially constructed side plates into its design for improved strength and superior wear life.

Ideal for applications involving:

- Freezers
- Food packaging / processing
- Underwater applications
- Exposure to harsh cleaners
- High-speed conveyors
- High-temperature ovens

High side-bar waist for greater fatigue strength

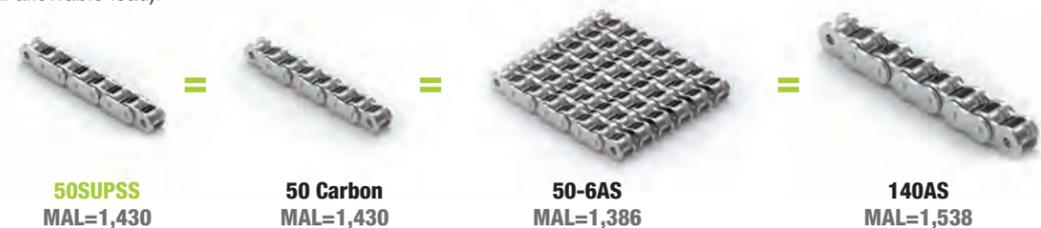
Hardened stainless components for extended wear life and improved performance

Strength Previously Unseen in Stainless Chain

Greater strength in a single stainless steel chain translates to big cost savings for applications that require resistance to corrosion and high temperatures. One Super Stainless chain equals the load capacity of a larger or multi-strand 600 (AS) or 304 (SS) stainless chain.

Delivering Exceptional Value

Super Stainless chain offers a revolutionary alternative to traditional solutions. One number 50 Super Stainless chain has the same maximum allowable load as one equivalent 50 carbon steel chain (1,430 lbs. max. allowable load), and exceeds that of one 50-6 600 (AS) series chain (1,386 lbs. max. allowable load).



Single Pitch Standard Attachment Chain

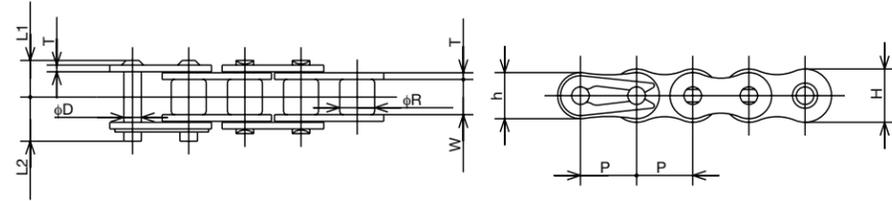
Tsubaki stocks many styles of standard attachments locally for quick assembly as dictated by your spacing needs. These are also available in self-lubricating Lambda and corrosion-resistant options.

COST SAVINGS!

Application: Wash-down conveyor (See page 4)
 Savings: \$1,457.45 in 6.4 months
 Tsubaki solution: Customer saved by using high-strength, corrosion-resistant Tsubaki Neptune drive chain rather than non-coated, carbon-steel chain.

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All dimensions in inches unless otherwise stated.

Chain Size	Pitch	Roller Diameter	Inner Width	Link Plate			Pin				Chain Weight
				Plate Thickness	Roller Link Plate Height	Pin Link Plate Height	Diameter	Overall Length	Length	Length	
	P	R	W	T	H	h	D	L ₁ + L ₂	L ₁	L ₂	lbs/ft
40	0.500	0.312	0.313	0.059	0.472	0.409	0.156	0.717	0.325	0.392	0.430
50	0.625	0.400	0.375	0.079	0.591	0.512	0.200	0.878	0.406	0.472	0.700
60	0.750	0.469	0.500	0.094	0.713	0.614	0.235	1.087	0.506	0.581	1.030
80	1.000	0.625	0.625	0.126	0.949	0.819	0.313	1.398	0.640	0.758	1.790
100	1.250	0.750	0.750	0.157	1.185	1.024	0.376	1.678	0.778	0.900	2.680
120	1.500	0.875	1.000	0.189 (0.197)	1.425	1.228	0.437	2.118 (2.187)	0.980 (1.014)	1.138 (1.173)	3.980
140	1.750	1.000	1.000	0.220 (0.236)	1.661	1.433	0.500	2.307 (2.405)	1.059 (1.108)	1.248 (1.297)	5.030
160	2.000	1.250	1.250	0.252 (0.276)	1.898	1.638	0.563	2.705 (2.839)	1.254 (1.321)	1.451 (1.518)	6.790

Dimensions in () denotes SS or AS Stainless Steel Chain.

All dimensions in inches unless otherwise stated.

Chain Size	Average Tensile Strength* (lbs.)						Maximum Allowable Load (lbs)							
	Std	NP Nickel Plated	NEP	L Lambda	LNP Lambda Nickel Plated	LNEP Lambda NEP	Std	SS 304 Stainless Steel	AS 600 Stainless Steel	NP Nickel Plated	NEP	L Lambda	LNP Lambda Nickel Plated	LNEP Lambda NEP
40	3,754	3,754	3,754	3,529	3,529	3,529	595	98	155.13	595.77	595.77	595.77	595.77	595.77
50	6,183	6,183	6,183	5,732	5,732	5,732	968	155	231.57	968.98	968.98	968.98	968.98	968.98
60	9,038	9,038	9,038	8,385	8,385	8,385	1,411	231	352.97	1,411.87	1,411.87	1,411.87	1,411.87	1,411.87
80	15,423	15,423	15,423	14,319	14,319	14,319	2,405	397	595.77	2,405.58	2,405.58	2,405.58	2,405.58	2,405.58
100	24,281	24,281	24,281	22,480	22,480	22,480	3,844	573	-	3,844.42	3,844.42	3,844.42	3,844.42	3,844.42
120	33,948	33,948	-	-	-	-	5,373	858	-	5,373.20	-	5,373.20	-	-
140	45,863	45,863	-	-	-	-	7,284	1,036	-	7,284.17	-	7,284.17	-	-
160	58,004	58,004	-	-	-	-	9,195	1,432	-	9,195.14	-	-	-	-

*SS and AS Stainless Steel Chain are not rated using a traditional tensile strength test. Please refer to their maximum allowable load.

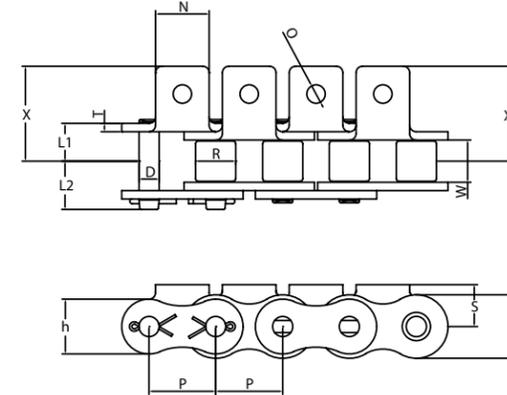
All dimensions in inches unless otherwise stated.

Chain Size	Attachment Dimensions											Additional Weight Per Attachment (lb/pc)		
	C	C ₁	N	O	S	X	X ₂	X _s	L ₃	L ₄	T	A & SA	K & SK	D
40	0.500	0.500	0.374	0.142	0.315	0.701	0.701	0.685	0.374	0.659	0.059	0.004	0.009	0.002
50	0.626	0.626	0.500	0.205	0.406	0.921	0.921	0.907	0.469	0.827	0.079	0.007	0.013	0.004
60	0.750	0.720	0.626	0.205	0.469	1.110	1.057	1.057	0.563	1.014	0.094	0.015	0.031	0.007
80	1.000	0.969	0.752	0.268	0.626	1.441	1.441	1.396	0.752	1.333	0.126	0.029	0.057	0.015
100	1.250	1.252	1.000	0.343	0.780	1.768	1.768	1.732	0.937	1.644	0.157	0.057	0.114	0.026
120	1.500	1.437	1.126	0.406	0.906	2.197 (2.232)	2.000 (2.030)	2.083	1.126	2.024	0.190 (0.200)	0.097 (0.101)	0.194 (0.202)	0.044
140	1.752	1.752	1.374	0.469	1.126	2.484 (2.543)	2.250 (2.280)	2.500	1.311	2.280	0.220 (0.240)	0.156 (0.167)	0.312 (0.334)	0.066
160	2.000	2.000	1.500	0.563	1.252	2.827 (2.902)	2.560 (2.600)	2.760	1.500	2.656	0.250 (0.280)	0.213 (0.233)	0.427 (0.466)	0.099

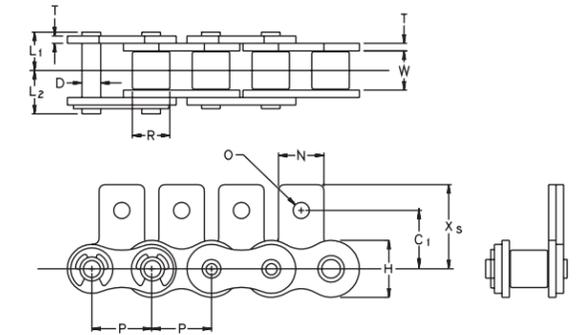
Dimensions in () denotes SS or AS Stainless Steel Chain.

Single Pitch

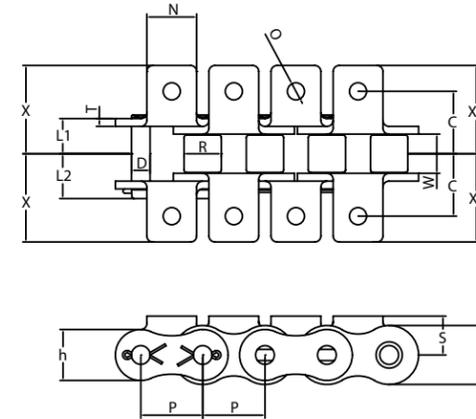
A-1 Attachment



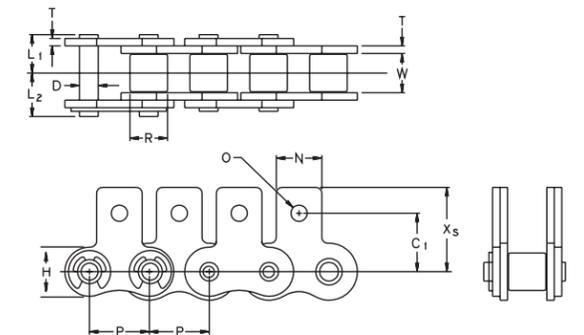
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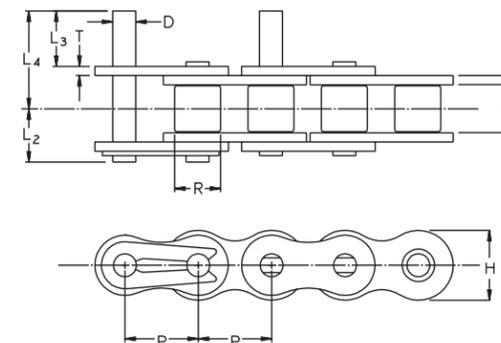
K-1 Attachment



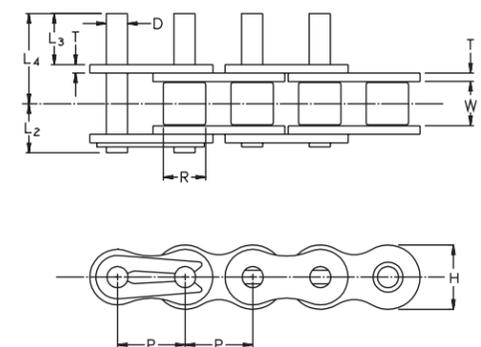
SK-1 Attachment



D-1 Attachment



D-3 Attachment



Double Pitch Standard Attachment Chain

Double-pitch chain is an economical choice for your conveyance needs. Standard attachments are always stocked for quick delivery.

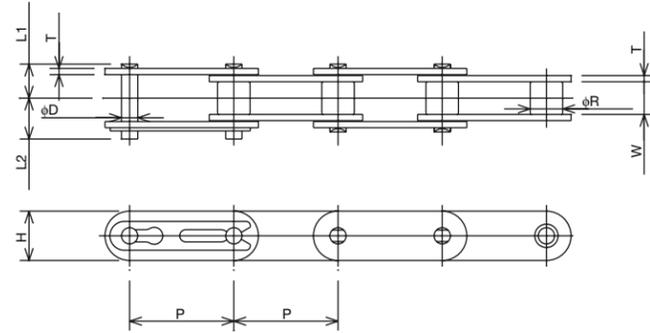
COST SAVINGS!

Application: Cooling tower (See page 5)
 Savings: \$8,439.83 in 15.1 months
 Tsubaki solution: Customer chose Tsubaki Lambda self-lubricating chain over a low-cost drive chain.

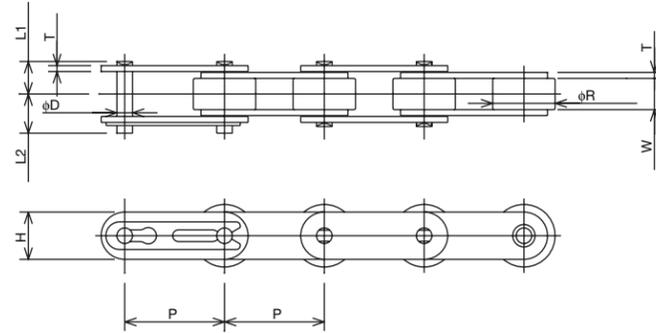
LEADING THE MOVEMENT

LEADING THE MOVEMENT

Standard Roller Type (Type S)



Enlarge Roller Type (Type R)



All dimensions in inches unless otherwise stated.

S Type Chain No.	R Type Chain No.	Link Plate				Pin			S Type Chain Weight lbs / Ft	R Type Chain Weight lbs / Ft			
		Pitch	S Type Roller Diameter	R Type Roller Diameter	Inner Width	Thickness	Height	Diameter			Overall Length	Length	Length
			P	R									
C2040	C2042	1.000	0.312	0.625	0.313	0.059	0.472	0.156	0.717	0.325	0.392	0.34	0.58
C2050	C2052	1.250	0.400	0.750	0.375	0.079	0.591	0.200	0.878	0.406	0.472	0.56	0.87
C2060H	C2062H	1.500	0.469	0.875	0.500	0.126	0.677	0.235	1.224	0.573	0.652	0.77	1.47
C2080H	C2082H	2.000	0.625	1.125	0.625	0.157	0.906	0.313	1.543	0.720	0.823	1.62	2.37
C2100H	C2102H	2.500	0.750	1.563	0.750	0.189 (0.197)	1.126	0.376	1.823 (1.858)	0.858 (0.878)	0.965 (0.980)	2.38 (2.46)	3.9 (3.98)
C2120H	C2122H	3.000	0.875	1.750	1.000	0.220 (0.236)	1.354	0.437	2.264 (2.354)	1.043 (1.104)	1.203 (1.250)	3.41 (3.61)	5.46 (8.66)
C2160H	C2162H	4.000	1.125	2.250	1.250	0.281 (0.315)	1.898	0.563	2.850 (3.024)	1.337 (1.406)	1.514 (1.618)	6.02 (6.61)	9.21 (10.47)

Dimensions in () denotes SS or AS Stainless Steel Chain.

All dimensions in inches unless otherwise stated.

S Type Chain No.	R Type Chain No.	Average Tensile Strength* (lbs.)						Maximum Allowable Load (lbs)							
		Std	NP Nickel Plated	NEP	L Lambda	LNP Lambda Nickel Plated	LNEP Lambda NEP	Std	SS 304 Stainless Steel	AS 600 Stainless Steel	NP Nickel Plated	NEP	L Lambda	LNP Lambda Nickel Plated	LNEP Lambda NEP
C2040	C2042	3,754	3,754	3,754	3,529	3,529	3,529	596	99	155	144	596	596	596	596
C2050	C2052	6,183	6,183	6,183	5,732	5,732	5,732	969	155	232	418	969	969	969	969
C2060H	C2062H	9,038	9,038	9,038	8,385	8,385	8,385	1,412	232	353	683	1,412	1,412	1,412	1,412
C2080H	C2082H	15,423	15,423	15,423	14,319	14,319	14,319	2,406	398	596	1,212	2,406	2,406	2,406	2,406
C2100H	C2102H	24,281	24,281	24,281	22,480	22,480	22,480	3,844	573	-	1,632	3,844	3,844	3,844	-
C2120H	C2122H	33,948	33,948	-	-	-	-	5,373	859	-	2,855	5,373	5,373	-	-
C2160H	C2162H	58,004	58,004	-	-	-	-	9,195	1,432	-	9,195	-	7,284	-	-

*SS and AS Stainless Steel Chain are not rated using a traditional tensile strength test. Please refer to their maximum allowable load.

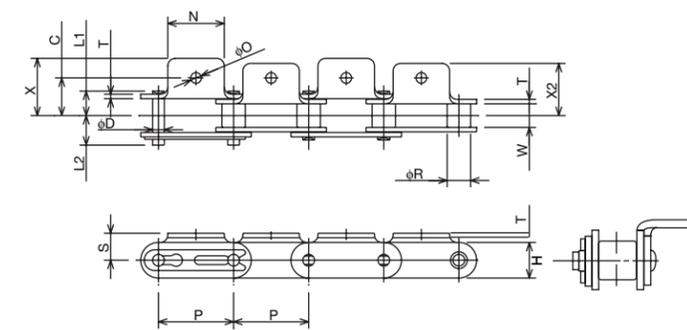
All dimensions in inches unless otherwise stated.

Chain Size	Attachment Dimensions												Additional Weight Per Attachment (lb/pc)		
	X	X ₂	C	S	K	N	O	X _S	C ₁	C ₂	O ₁	T	A & SA	K & SK	D ₁
C2040	0.760	0.693	0.500	0.358	0.374	0.752	0.142	0.780	0.437	0.535	0.205	0.059	0.007	0.013	0.002
C2050	0.953	0.866	0.626	0.437	0.469	0.937	0.205	0.969	0.563	0.626	0.268	0.079	0.013	0.026	0.004
C2060H	1.240	1.110	0.844	0.579	0.563	1.126	0.205	1.205	0.689	0.752	0.343	0.126	0.037	0.075	0.007
C2080H	1.602	1.441	1.094	0.752	0.752	1.500	0.268	1.594	0.874	1.000	0.406	0.157	0.070	0.015	0.015
C2100H	1.768	1.768	1.313	0.921	0.937	1.874	0.343	1.984	1.126	1.252	0.563	0.189	0.132 (0.139)	0.264 (0.277)	0.026
C2120H	2.390 (2.433)	2.142 (2.173)	1.563	1.094	1.126	2.252	0.551	2.358	1.311	1.469	0.630	0.220 (0.235)	0.220 (0.235)	0.441 (0.471)	0.044
C2160H	3.060 (3.163)	2.756 (2.821)	2.063	1.437	1.500	3.000	0.709	3.094	1.752	2.000	0.866	0.281	0.446 (0.499)	0.88 (0.998)	0.099

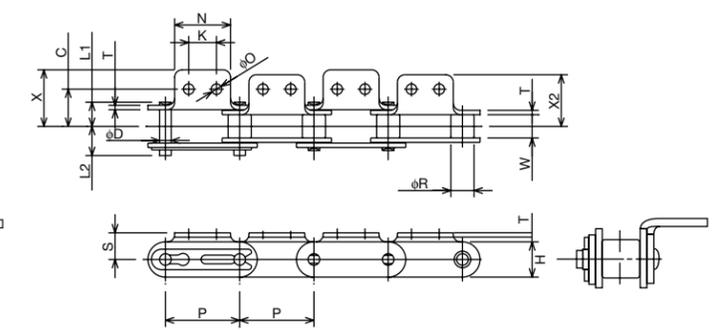
Dimensions in () denotes SS or AS Stainless Steel Chain.

Double Pitch

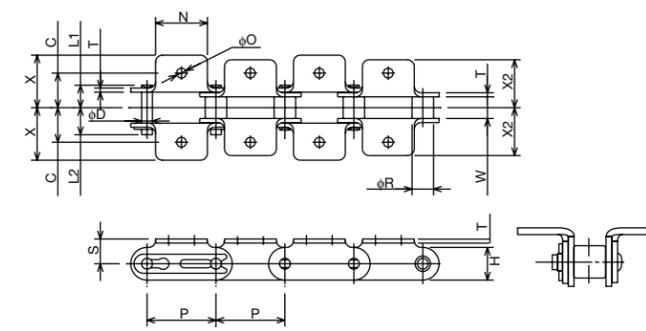
A-1 Attachment



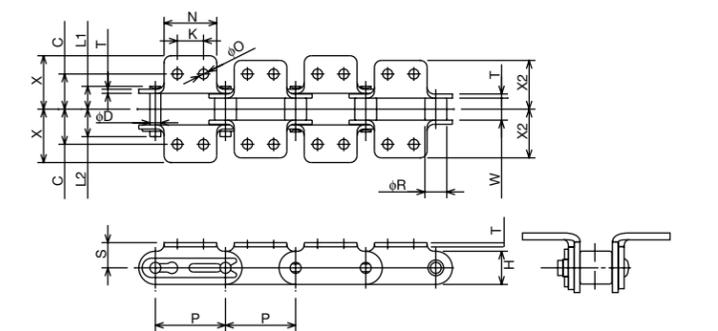
A-2 Attachment



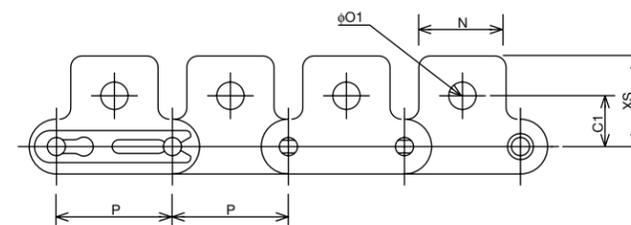
K-1 Attachment



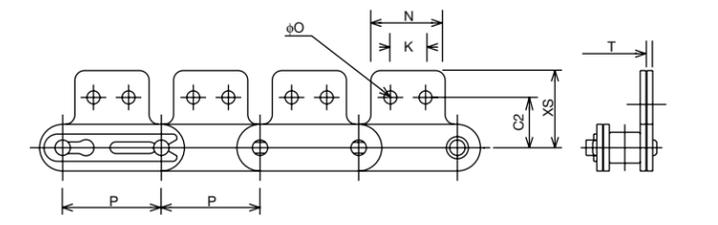
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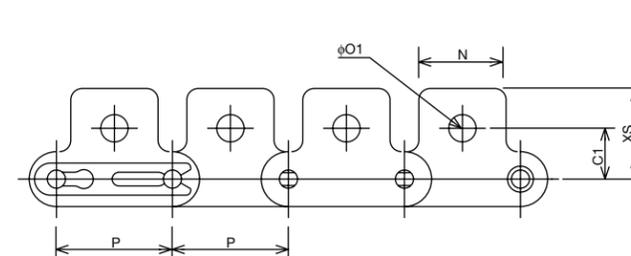
SA-1 Attachment



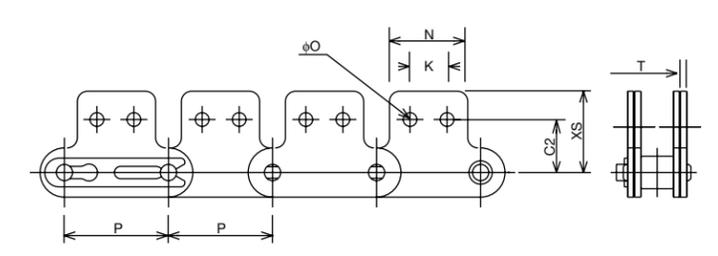
SA-2 Attachment



SK-1 Attachment



SK-2 Attachment



British Standard Attachment Chain

In the food industry, it's common to find British standard attachment chain as many manufacturers originate from Europe. With the industry's most complete range of British-standard chain, Tsubaki has exactly what you need.

Hollow Pin Chain

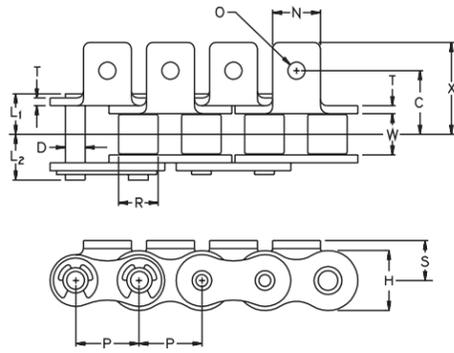
COST SAVINGS!

Application: Fresh food freezer tunnel (See page 5)
 Savings: \$1,770.13 in 17.5 months
 Tsubaki solution: Customer chose Tsubaki's corrosion-resistant and self-lubricating Lambda Neptune chain over standard nickel-plated chain.

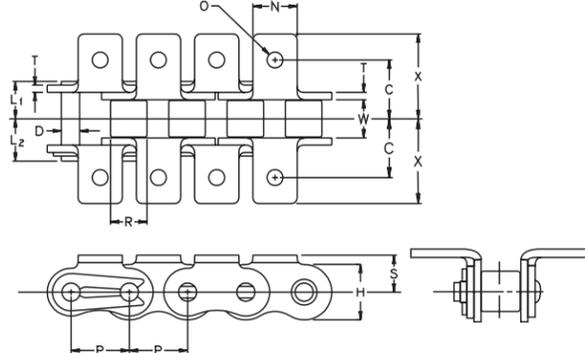
LEADING THE MOVEMENT

LEADING THE MOVEMENT

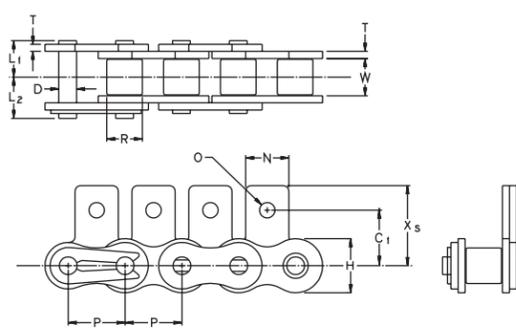
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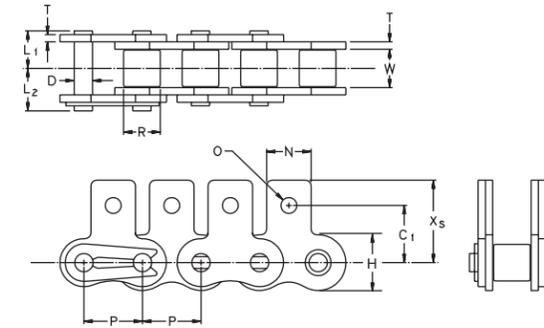
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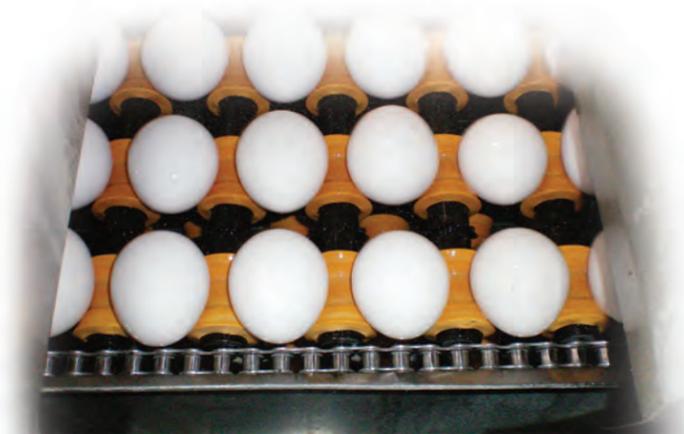
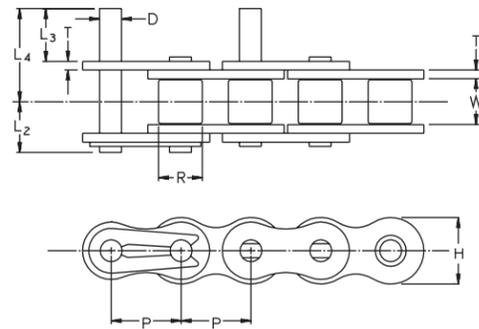
SA-1 Attachment



SK-1 Attachment



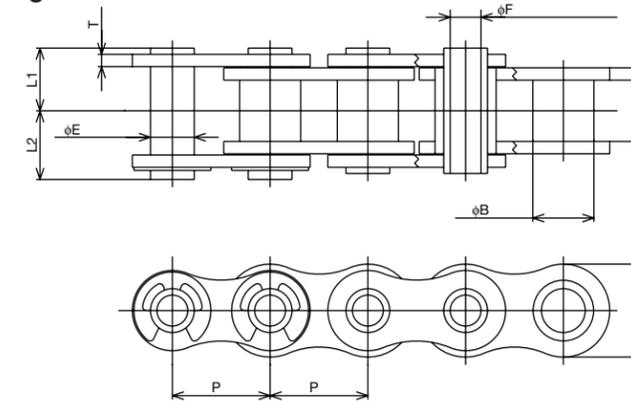
D-1 Attachment



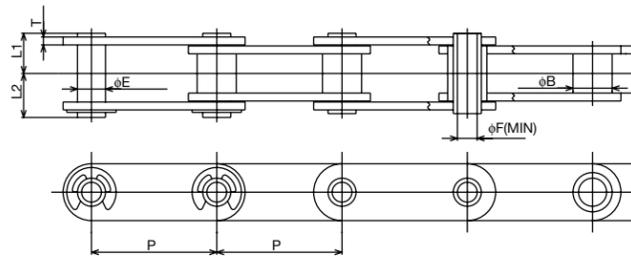
All dimensions in inches unless otherwise stated.

Chain Number	A, SA, K, SK, D1 Attachment Dimensions									Additional Weight per Attachments (lbs)		
	C	C ₁	N	O	S	X	X _s	L ₃	L ₄	A, SA Attach.	K, SK Attach.	D ₁ Attach.
RS08B	0.469	0.500	0.449	0.165	0.350	0.750	0.760	0.374	0.669	0.004	0.009	0.002
RS10B	0.626	0.626	0.500	0.197	0.402	0.876	0.902	0.469	0.797	0.007	0.013	0.004
RS12B	0.750	0.874	0.650	0.280	0.531	1.175	1.262	0.563	0.949	0.013	0.026	0.007
RS16B	0.937	0.941	0.957	0.264	0.598	1.470	1.343	0.752	1.388	0.031	0.062	0.018
RS20B	1.250	1.252	1.000	0.343	0.780	1.766	1.732	0.937	1.654	0.053	0.106	-

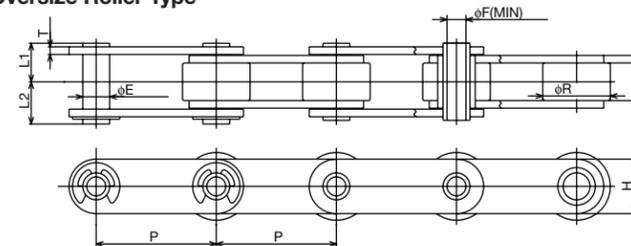
Single Pitch



Double Pitch Standard Bushed Type



OverSize Roller Type



All dimensions in inches unless otherwise stated.

Chain Number	Pitch P	Standard Type Bushing Diameter B	Oversized Type Roller Diameter R	Width Between Inner Link Plates W	Link Plate		Pin			Average Tensile Strength (lbs)	Maximum Allowable Load	Approx. Weight (lbs/ft.)		
					Thickness T	Height H	Outer Dia. E	Inner Dia. F (min.)	Length L ₁ +L ₂				Length L ₁	Length L ₂
40HP	0.500	0.312	-	0.313	0.059	0.472	0.224	0.157	0.689	0.315	0.374	2,400	398	0.36
50HP	0.625	0.400	-	0.375	0.079	0.591	0.284	0.202	0.854	0.396	0.459	4,400	706	0.58
60HP	0.750	0.469	-	0.500	0.094	0.713	0.330	0.236	1.173	0.612	0.561	5,900	949	0.85
80HP	1.000	0.625	-	0.625	0.126	0.949	0.448	0.316	1.341	0.640	0.701	10,000	1,720	1.44
Standard Bushing Type														
C2040HP	1.000	0.312	-	0.313	0.059	0.472	0.224	0.157	0.689	0.315	0.374	2,400	398	0.31
C2050HP	1.250	0.400	-	0.375	0.079	0.591	0.284	0.202	0.872	0.413	0.459	4,400	706	0.50
C2060HP	1.500	0.469	-	0.500	0.094	0.677	0.133	0.236	1.055	0.494	0.561	5,900	949	0.93
C2080HP	2.000	0.625	-	0.625	0.126	0.906	0.448	0.316	1.341	0.640	0.701	10,000	1,720	1.21
OverSize Roller Type														
C2042HP	1.000	-	0.625	0.313	0.059	0.472	0.224	0.157	0.689	0.315	0.374	2,400	398	0.55
C2052HP	1.250	-	0.750	0.375	0.079	0.591	0.284	0.202	0.872	0.396	0.459	4,400	706	0.81
C2062HP	1.500	-	0.875	0.500	0.094	0.677	0.330	0.236	1.055	0.612	0.561	5,900	949	1.38
C2082HP	2.000	-	1.125	0.625	0.126	0.906	0.448	0.316	1.341	0.640	0.701	10,000	1,720	1.89

Hollow Pin Attachment Chain

Hollow-pin attachment styles allow for the insertion of through rods, which ultimately means more versatility in your conveyor design.

Curved Attachment Chain

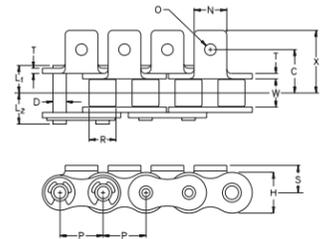
Curved attachment chain can adapt to a range of conveyor applications, as it can move products on a radius.

LEADING THE MOVEMENT

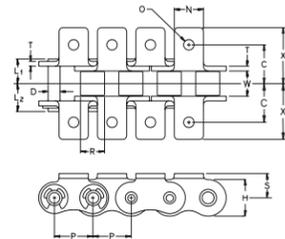
LEADING THE MOVEMENT

Single Pitch

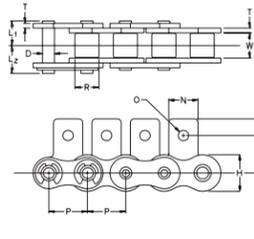
A-1 Attachment



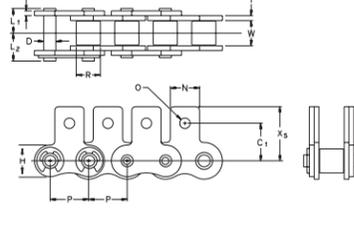
K-1 Attachment



SA-1 Attachment

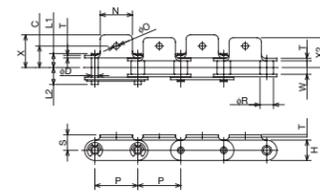


SK-1 Attachment

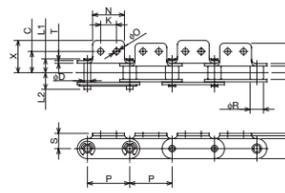


Double Pitch

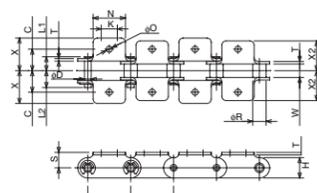
A-1 Attachment



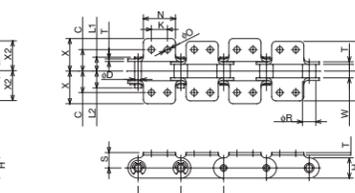
A-2 Attachment



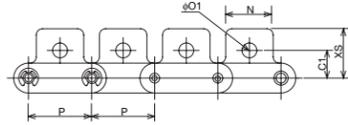
K-1 Attachment



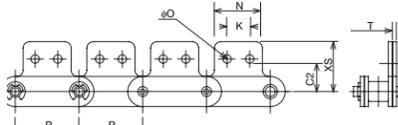
K-2 Attachment



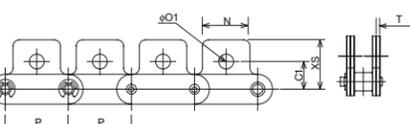
SA-1 Attachment



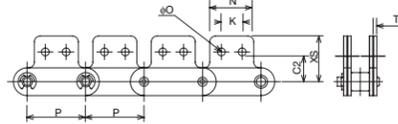
SA-2 Attachment



SK-1 Attachment



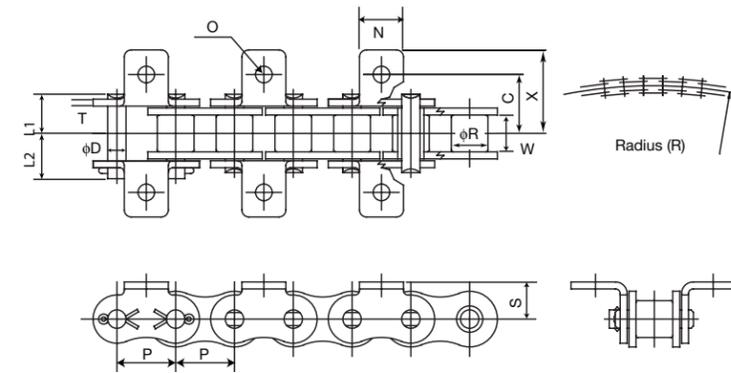
SK-2 Attachment



All dimensions in inches unless otherwise stated.

Chain Number	Chain Number	C	C ₁	C ₂	K	N	O	O ₁	S	T	X	X ₂	X ₅	Weight per Attach. (lbs)	
														A, SA Attachment	K, SK Attachment
40HP		0.500	0.500	-	-	0.374	0.142	-	0.187	-	0.709	-	0.685	0.004	0.009
50HP		0.626	0.626	-	-	0.500	0.205	-	0.406	-	0.921	-	0.907	0.007	0.013
60HP		0.750	0.720	-	-	0.626	0.205	-	0.469	-	1.110	-	1.057	0.015	0.031
80HP		1.000	0.969	-	-	0.752	0.268	-	0.626	-	1.441	-	1.396	0.029	0.057
C2040HP	C2042HP	0.500	0.437	0.535	0.374	0.752	0.142	0.205	0.358	0.059	0.783	0.693	0.780	0.007	0.013
C2050HP	C2052HP	0.626	0.563	0.626	0.469	0.937	0.205	0.268	0.437	0.079	0.953	0.866	0.969	0.013	0.026
C2060HP	C2062HP	0.844	0.689	0.752	0.563	1.126	0.205	0.343	0.579	0.126	1.240	1.110	1.205	0.037	0.075
C2080HP	C2082HP	1.094	0.874	1.000	0.752	1.500	0.268	0.406	0.752	0.157	1.602	1.441	1.594	0.070	0.141

Single Pitch



All dimensions in inches unless otherwise stated.

Chain Number	Pitch P	Roller Diameter R	Width Between Inner Link Plates W	Link Plate			Pin			Radius r	Average Tensile Strength (lbs)	Maximum Allowable Load (lbs)	Approximate Weight (lbs/ft)	
				Thickness T	Height H	Height h	Diameter D	Length L ₁ +L ₂	Length L ₁					Length L ₂
35CU	0.375	*0.200	0.188	0.050	0.354	0.307	0.125	0.539	0.238	0.301	10	1,800	210	0.22
40CU	0.500	0.312	0.313	0.059	0.472	0.409	0.156	0.717	0.333	0.384	13	3,480	418	0.41
50CU	0.626	0.400	0.375	0.079	0.591	0.512	0.200	0.906	0.417	0.488	15	5,420	638	0.68
60CU	0.750	0.469	0.500	0.094	0.713	0.614	0.235	1.114	0.522	0.593	19	7,830	904	0.94
80CU	1.000	0.625	0.625	0.126	0.949	0.819	0.313	1.448	0.659	0.789	23	13,840	1,565	1.66

* Denotes that 35CU is rollerless. The value shown is for the bushing diameter.

All dimensions in inches unless otherwise stated.

Chain Number	C	N	O	S	X	Weight per Attach. (lbs)	
						A Attachment	K Attachment
35CU	0.375	0.311	0.102	0.250	0.571	0.002	0.003
40CU	0.500	0.374	0.142	0.315	0.709	0.004	0.009
50CU	0.626	0.500	0.205	0.406	0.933	0.007	0.013
60CU	0.750	0.626	0.205	0.469	1.122	0.029	0.572
80CU	1.000	0.752	0.268	0.626	1.461	0.029	0.057

Ordering Attachment Chain is Easy!

Attachment chain is available in carbon, nickel plated (NP), SS (304), AS (600), and Neptune (NEP) coated. Refer to page 8 and 10 for NP, SS, AS, and NEP properties.

Delivery Matrix

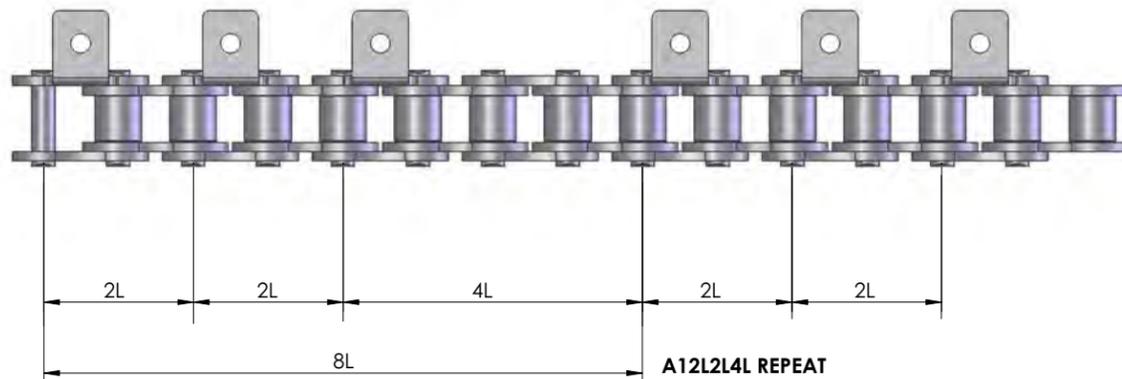
Quantity	Size Range	Delivery
Up to 100ft	35, 40, 50, 60, 80, 100, 120 C2040, C2050, C2060H, C2080H, C20100H, C2120H (includes oversized rollers)	Carbon – 3 Days AS Stainless Steel – 1Week

Contact Tsubaki Inside Sales if your needs are outside the above product/quantity range.

Delivery is Fast!

To order attachment chain, please provide the following:

- 1) Size of chain (40, 50, C2062H)
- 2) Material
- 3) Rivet or Cotter Pin construction
- 4) Type of attachment
- 5) Spacing of attachment
 - Attachment spacing is counted as being the number of links (both inside and outside) up to and including the next attachment.
 - In the non-standard spacing example below, initial spacing is every 2nd (2L) and then every 4th (4L).
 - Each repeating section is 8 pitches (8L).
- 6) Overall length of chain



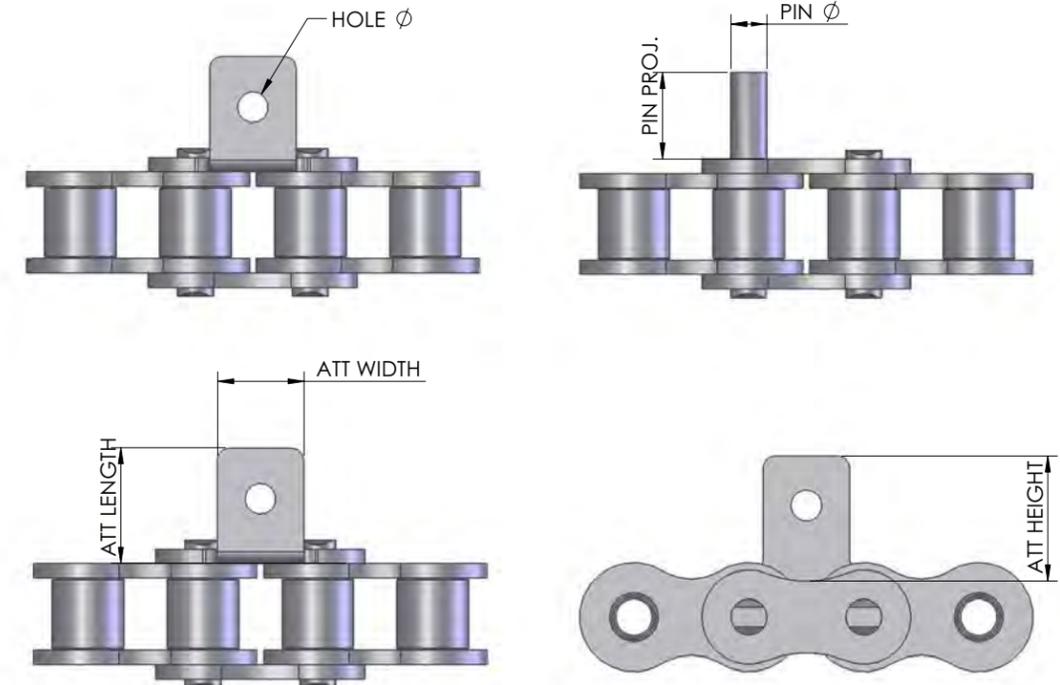
All standard attachment chain orders are to be confirmed with a schematic for the customer's review.

ANSI Special Attachments

In addition to providing standard attachment chain, Tsubaki of Canada can modify existing attachments to match your requirements. An example of this could be a shorter-than-standard pin or a larger hole diameter. If modifying standard attachments, delivery can be 1-2 weeks depending on the quantity.

When specifying non-standard attachments, information required is:

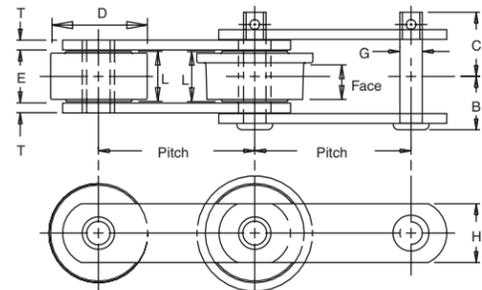
- tab length, width and possibly height
- hole diameter, and type of hole (threaded, countersunk)
- pin diameter, projection (extension) length, type of end (threaded, circlip groove)



All non-standard attachment quotes will be accompanied by a drawing for customer approval.

Engineering Class Roller Conveyor Chain

Roller Conveyor Plain Chain



All dimensions in inches unless otherwise stated.

Chain No.	Pitch	Width			Roller				Pin			Sidebar		Bushing	Bear- ing Area (in ²)	Avg. ult. Stgth. (lbs.)	Max. Work Load (lbs)	Approx. Wgt. (lbs./ft.)	
		Pin Head to CL	Pin Head to CL	In- side	Dia.	Length	Sty.	Matl.1	Dia.	Sty.	Matl.1	Hgt.	Th.	Matl.1					Matl.1
		B	C	E	D	L		G			H	T							
*81X	2.609	0.91	1.16	1.06	0.91	1.00	T	CCH	0.44	K	CCH	1.13	0.16	CHT	CCH	0.61	15,000	2,150	2.5
*53R	3.000	1.03	1.25	1.00	1.50	0.97	T	PMHT	0.44	A	CHT	1.13	0.19	CRS	AVH	0.61	13,000	2,100	3.9
*94R	4.000	1.11	1.30	0.88	1.50	0.81	T	PMHT	0.50	A	CHT	1.25	0.25	CRS	ACH	0.61	19,000	2,400	4.1
*89R	4.000	1.59	1.88	1.31	2.25	1.25	T	CCH	0.63	A	CHT	1.50	0.38	HC	CCH	1.10	28,000	4,500	10.6
*604R	6.000	1.33	1.58	1.31	2.00	1.25	T	CCH	0.56	A	CHT	1.50	0.25	HC	ACH	1.01	21,000	3,500	5.4
*607R	6.000	1.33	1.58	1.31	2.50	1.25	T	CCH	0.56	A	CHT	1.50	0.25	HC	ACH	1.01	21,000	3,500	6.5
*627R	6.000	1.47	1.75	1.31	2.00	1.25	T	CCH	0.63	A	CHT	1.50	0.31	HC	ACH	1.22	26,000	4,250	6.6

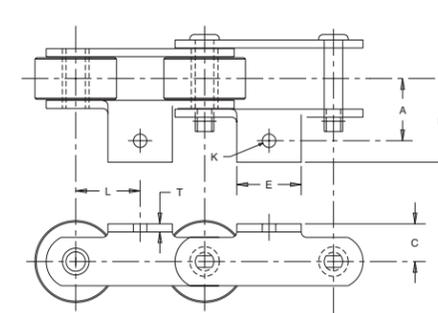
Dimensions shown are nominal. Obtain certified prints for design and construction.

*Indicates this chain is normally stocked. All others are made-to-order.

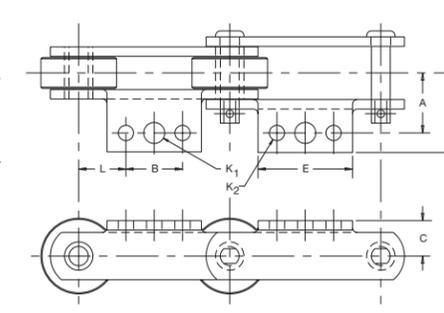
1Material: CHT = Carbon heat-treated; CCH = Carbon case hardened; AHT = Alloy heat-treated; CRS = Cold rolled steel; AHT = Alloy iron heat-treated;

ACH = Alloy case hardened; HC = High carbon; PMHT = Powdered metal heat-treated.

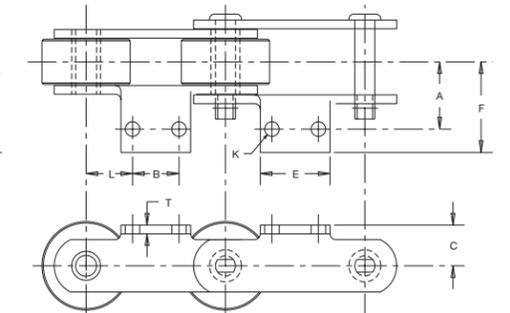
A-1 Attachment



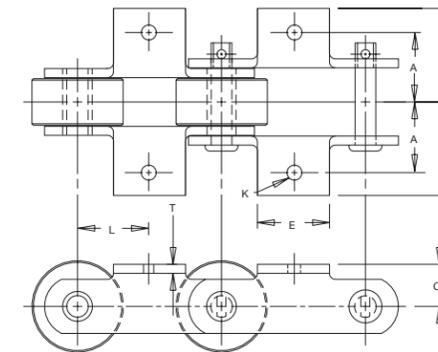
A-1/A-2 Attachment



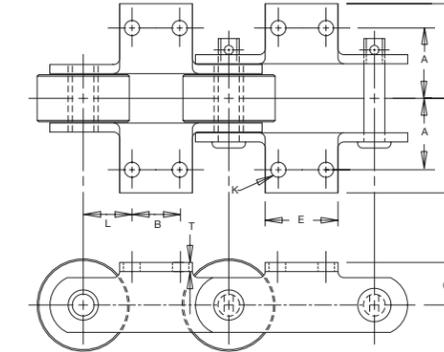
A-2 Attachment



K-1 Attachment



K-2 Attachment



All dimensions in inches unless otherwise stated.

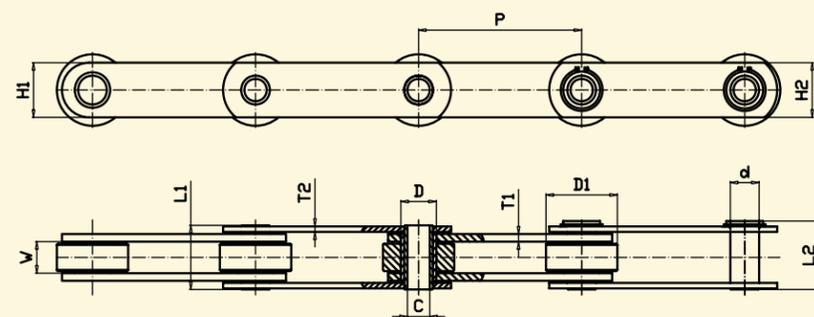
Attachment Number	Chain Number	Bolt Diameter									Approx. Weight (lbs./ft.)
		A	B	C	E	F	K ₁	K ₂	L	T	
A-1	53R	1.47	-	.81	2.00	2.16	.31	-	1.50	.19	4.4
	89R	2.00	-	1.25	2.00	3.17	.38	-	2.00	.38	11.0
	94R	1.38	-	.88	2.50	1.88	.38	-	2.00	.25	4.7
	604R	2.00	-	1.13	3.50	2.72	.38	-	3.00	.25	6.3
	607R	2.00	-	1.13	3.50	2.70	.38	-	3.00	.25	7.4
A-1/A-2	53R	1.47	1.06	.81	2.00	2.16	.31	.25	.97	.19	4.4
	94R	1.38	1.50	.88	2.50	1.88	.38	.38	1.25	.25	4.7
A-2	53R	1.47	1.06	.81	2.00	2.16	.25	-	.97	.19	4.4
	94R	1.38	1.50	.88	2.50	1.88	.38	-	1.25	.25	4.7
	604R	2.00	2.00	1.13	3.50	2.72	.38	-	2.00	.25	6.0
	607R	2.00	2.00	1.13	3.50	2.72	.38	-	2.00	.25	6.9
	627R	2.00	2.00	1.13	3.50	2.80	.38	-	2.00	.31	8.5
K-1	53R	1.47	-	.81	2.00	2.16	.31	-	1.50	.19	4.9
	89R	2.00	-	1.25	2.00	3.17	.38	-	2.00	.38	13.0
	94R	1.38	-	.88	2.50	1.88	.38	-	2.00	.25	5.3
	604R	2.00	-	1.13	3.50	2.72	.38	-	3.00	.25	7.2
	607R	2.00	-	1.13	3.50	2.78	.38	-	3.00	.25	8.3
K-2	53R	1.47	1.06	.81	2.00	2.16	.25	-	.97	.19	4.9
	94R	1.38	1.50	.88	2.50	1.88	.38	-	1.25	.25	5.3
	604R	2.00	2.00	1.13	3.50	2.72	.38	-	2.0	.25	7.0
	607R	2.00	2.00	1.13	3.50	2.72	.38	-	2.0	.25	7.4
	627R	2.00	2.00	1.13	3.50	2.80	.38	-	2.0	.31	10.7

Note: Some A-1 attachments are supplied with three holes. Use the center hole.

Style "A" attachments are furnished on the cottered side as standard. If requested, they can be furnished on the opposite side of the chain.

British Standard Hollow Pin Chain

Contact Tsubaki for your specific needs.



STAINLESS STEEL COMPARISON

SS

Tsubaki's proven and longstanding SS series chains are made completely of 304 stainless steel. They offer excellent resistance to corrosion and extreme temperatures. The 304 series is ideal for environments that require tougher resistance to acids and alkalis, however, there is a significant decrease in strength from standard carbon steel chain.

AS

What has over time become the go-to series for Canadian food facilities, Tsubaki's AS series closely mimics the corrosion resistance of the standard 304 SS series, but provides a 50% increase in strength. The combination of 304 stainless steel sideplates and precipitation-hardened 600 stainless steel round parts provides the perfect mixture of high load capacity and high corrosion resistance.

NS

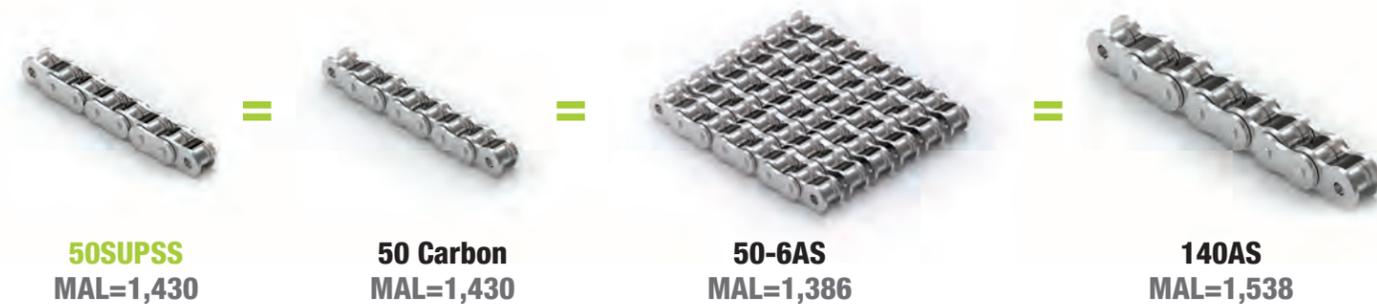
If you want the ultimate in corrosion and temperature resistance, Tsubaki's NS series is the way to go. Providing chains made completely of 316 stainless steel (the same grade of stainless steel used in hospital applications) the NS series is built for the harshest environments. Be mindful, being a softer stainless steel, NS series chains do not have the same strength characteristics of Tsubaki's other stainless steel lines.

SUPER STAINLESS

In an industry game changer, Tsubaki's Super Stainless series is unrivaled, providing the same strength as standard carbon steel chain with the corrosion resistance of Tsubaki's AS series. Whether upgrading from carbon steel to stainless or fitting a new application, no more will it be a question of how many strands or how much of a size jump will be needed to handle the load. As an example, one strand of 50 Super Stainless has the same maximum allowable load as one strand of 50 carbon steel, exceeds that of one 50-6 (six strand) AS series chain, or would require size 140 single strand AS series chain to match its strength.



We're here to help select what stainless best suits your application. Contact us @ info@tsubaki.ca



MATCH AND TAG

Precise processes are a necessity in the food processing industry and even the smallest misalignment can lead to flawed and defective output. When chains must run in parallel for conveying purposes, uniform travel and wear is a necessity to avoid misalignment of the whole system.

Standard Roller Chain Tolerances			
Single Pitch Chain	British Standard (BS) Roller Chain	ISO 606	0% to +0.15%
	British Standard (BS) Attachment Chain	ISO 606	0% to +0.15%
	ANSI Roller Chain	ANSI	0% to +0.15%
	ANSI Attachment Chain	ANSI	0% to +0.30%
Double Pitch Chain	ANSI Roller Chain	ANSI	0% to +0.13%
	ANSI Attachment Chain	ANSI	0% to +0.25%

Tsubaki offers a match and tag service to address this problem. Tsubaki chain length tolerances are very narrow by nature, but generally, if the conveyor chains are made in the same lot, the relative differences in length will vary slightly. When ordered to match and tag, chains are supplied with specific length tolerances, and tagged accordingly for easy identification and installation.

Match & Tag Limits	
Chain Length (m)	Matched Tolerance (mm)
< 14 m	< 3 mm
14 ~ 30 m	< 4 mm
30 ~ 44 m	< 5 mm

PRECISION THAT IS CLEAN AND MAINTENANCE FREE

Tsubaki also offers its self-lubricating Lambda line which bears a sintered metal bushing infused with NSF-H1 food grade lubricant.

Basic Lambda Chain construction

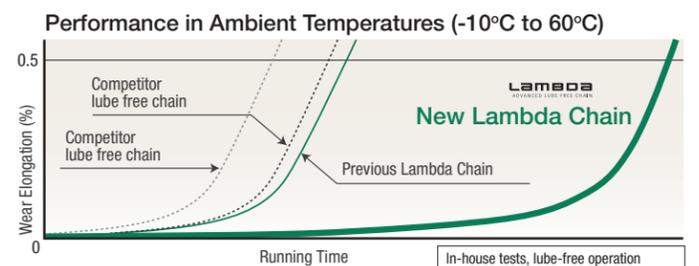
Lubricant (Uses NSF-H1 food grade lubricant)

Sintered bush

NSF International certifies the safety of lubricant for food equipment.

NSF H1 lube is an NSF International standard that states it can be used in areas where it may come into accidental contact with food.

Besides helping maintain a cleaner work environment, the precise and constant lubrication of the essential areas has proven to slow elongation by up to 7-14 times in actual applications. This means more precision for a longer period of time. Tsubaki's Lambda series is also available with select Nickel Plating or Tsubaki's proprietary Neptune coating, specially formulated to handle food grade wash-downs.



TEMPERATURE AND LUBRICATION

Lubrication is essential to the life of any chain.



Metal to metal contact forms the basis of how a roller chain works and the only way to reduce wear is by creating a protective layer. Applying lubrication can provide this, but if the application of lubrication is the most important factor, the type used is a close second. Under normal conditions, Tsubaki usually recommends using heavy oil. Chain size and ambient temperature are the two main factors that determine the ideal weight of oil, because both effect how easily the lubricant will be able to reach the tight, critical areas. In general, the bigger the chain, the larger the spaces between its components, making it easier for oil to flow into the crevices. Similarly, as temperature goes up, penetration increases as the oil gets less viscous. To make it simple, Tsubaki has summarized these correlations in an easy to use chart. Based on size of chain and ambient temperature of your application, you can quickly determine the correct oil to use.

Lubricating System	A,B				C			
	-10° ~ 0°C	0° ~ 40°C	40° ~ 50°C	50° ~ 60°C	-10° ~ 0°C	0° ~ 40°C	40° ~ 50°C	50° ~ 60°C
Chain No.								
RS50 or smaller	SAE 10	SAE 20	SAE 30	SAE 40	SAE 10	SAE 20	SAE 30	SAE 40
RS60 and RS80	SAE 20	SAE 30	SAE 40	SAE 50	SAE 20	SAE 30	SAE 40	SAE 50
RS100					SAE 20	SAE 30	SAE 40	SAE 50
RS120 or larger	SAE 30	SAE 40	SAE 50					

FOR THOSE EXTRA COLD TEMPERATURES

Tsubaki also provides the special KT series for environments up to -40°C. The KT series is made of high tensile alloy steel paired with special cold temperature lubrication.

WHAT ABOUT HOT

Tsubaki's various lines of stainless steel chain are available for all applications and can be used in environments up to 400°C.

OR YOU CAN ALWAYS GO SELF LUBRICATING

Tsubaki now provides a heat resistant **Lambda K** series which provides the same oil impregnated bushings, now effective up to 230°C. The chain self lubricates, using a NSF H-1 food grade lubrication.

NEPTUNE

Tsubaki's latest generation of Neptune chain has been further developed with the food industry in mind. The proprietary RoHS compliant surface treatment uses a special application process that does not affect chain strength and has been bolstered in the G8 edition to better handle alkali wash-downs. Testing has showed up to 2000 hours of resistance to common wash-down solutions, compared to less than 15 hours provided by common competing coatings. These tests have been verified by the hundreds of machines currently using Tsubaki's Neptune chain and by the facilities' maintenance staff and owners who have saved thousands of dollars and hours by switching to a quality product.

Neptune chain combines Tsubaki's uniquely developed special zinc aluminum coating and special resin coating to achieve its resisting properties. Originally designed to improve on the strength loss caused by competing coatings and for better resistance to salt water, the new formula can be used anywhere from spiral freezer to packaging conveyors.



Conversations with CFIA (Canadian Food Inspection Agency)

The following is a summation of information gathered through conversations with CFIA representatives or gathered from Canada's various food facility guidelines.

What is direct and indirect food contact?

According to CFIA, direct food contact items are defined as objects/surfaces that would explicitly be interacting with or manipulating food items. This would include product carrying surfaces, dispensing tools, or any apparatuses that were designed to touch the product. Indirect food contact items are defined as any item that has the possibility for cross contamination. This would include any surfaces product may fall on, any conveying parts attached to product carrying surfaces, or usually anything in the vicinity of the food processing that would need sanitizing.

What materials are allowed for direct and indirect food contact apparatuses?

According to the CFIA, there is no exact rule for the materials allowed to be used for direct or indirect food applications. Inspectors are commissioned to conduct risk assessments based on each individual application, weighing the cleanliness, ability to sanitize, and durability of the material/parts. From this definition, there is no set rule and what is accepted in one application may not be in the next. From industry experience, stainless steels or certain food grade plastics are usually accepted for direct food contact. For indirect food contact, as long as clean, sanitizable, and durable materials are used, inspection should find them acceptable.

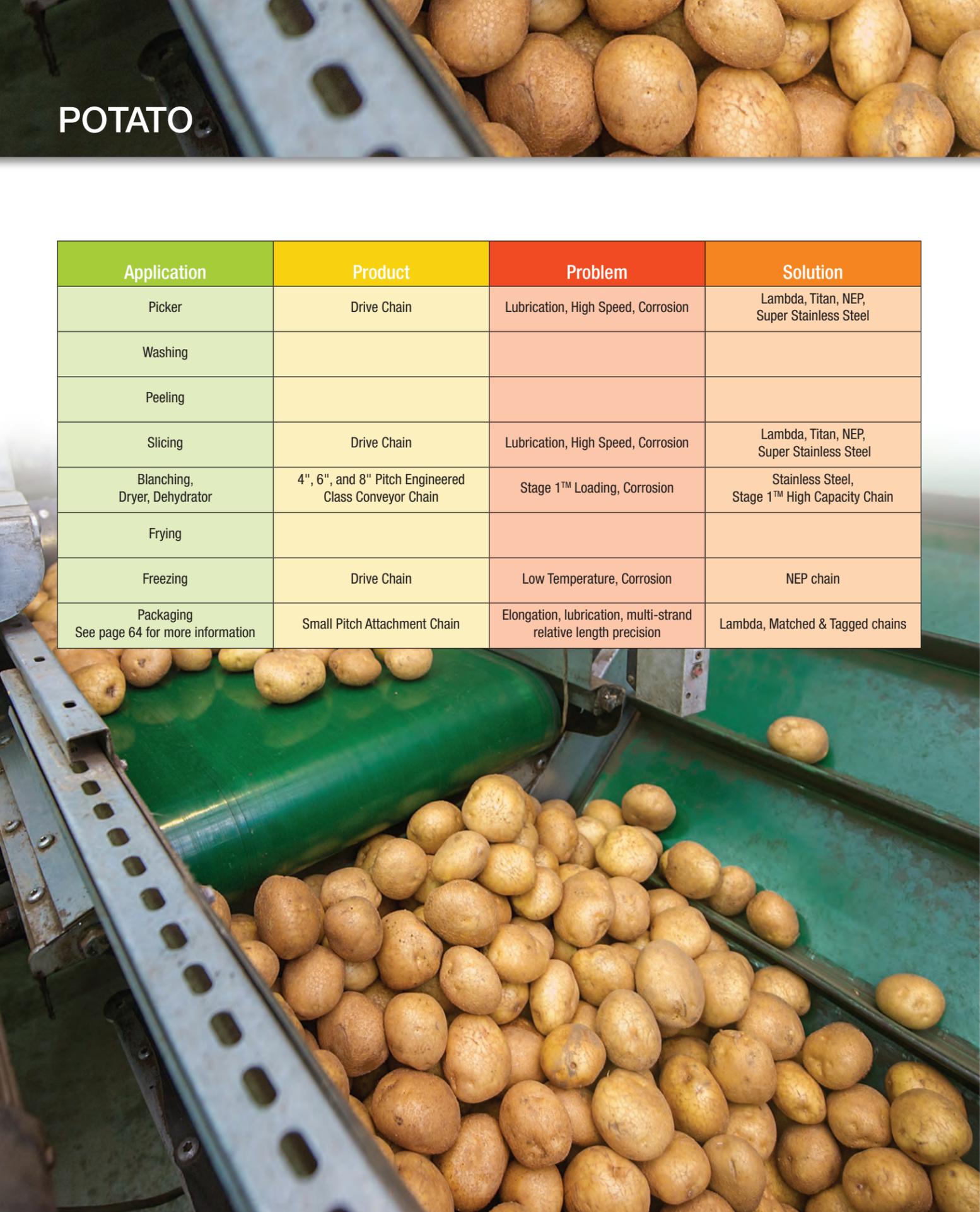
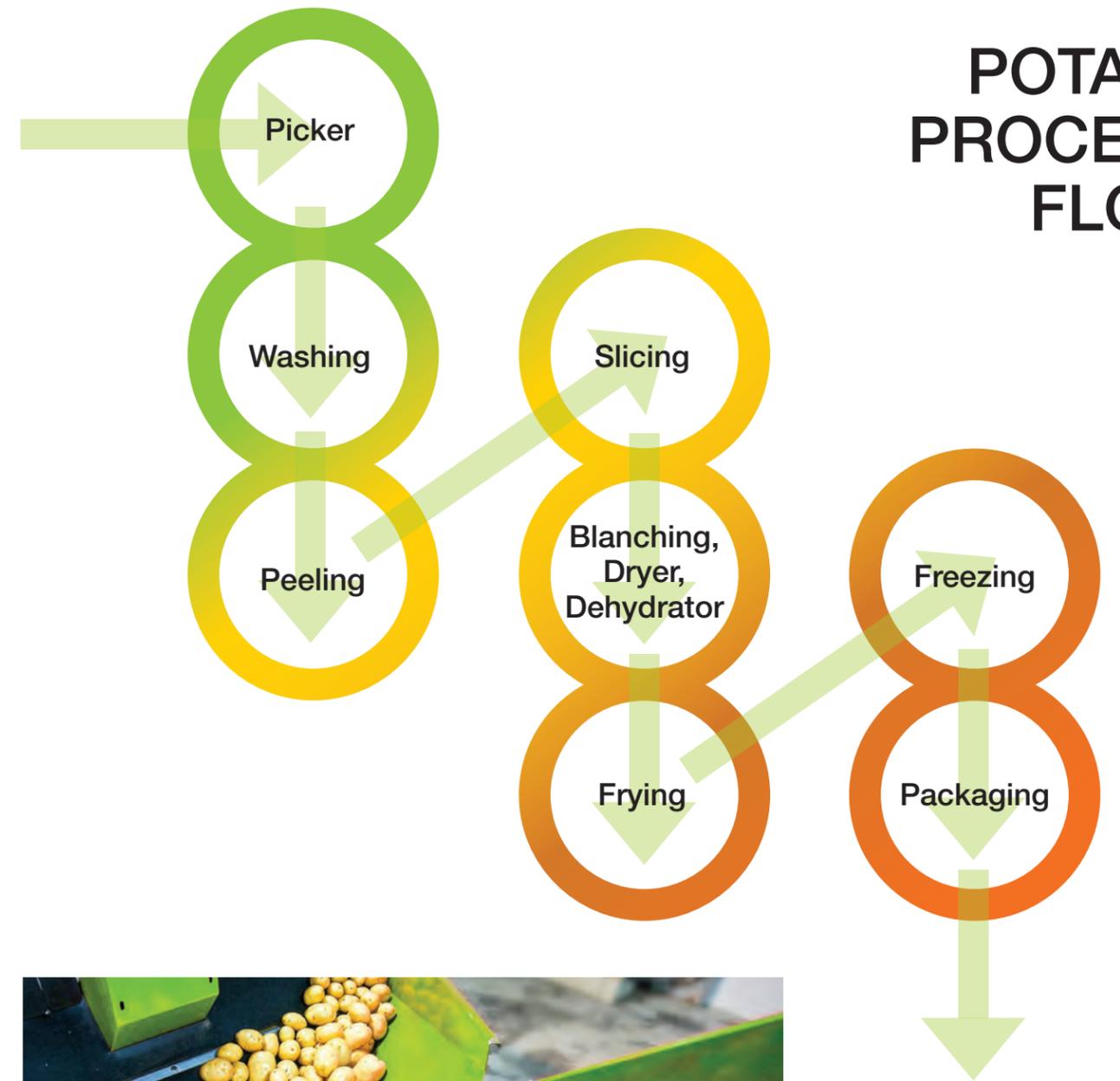


Which of Tsubaki's products are usually specified in food facilities?

There are numerous Tsubaki products in food facilities all over Canada. The most commonly used would be stainless steel chain and sprockets from any of Tsubaki's stainless steel lines. These chains provide the temperature and corrosion resistance necessary for any conveying needs in a food facility, while easily passing inspection. The second most popular product would be Tsubaki's Neptune coated chain. These are often used in indirect applications, providing a full strength chain that is able to withstand the harsh washdown environment. The wide assortment of attachments available with Neptune chain also helps facilities attach stainless steel slats or other holders, if necessary, to directly handle the food. Tsubaki offers a nickel plated chain as well, however, due to the fact that nickel plating is prone to chip under concentrated impact, nickel plated products should be used with caution. Contact Tsubaki Technical Services for guidance during selection.



Application	Product	Problem	Solution
Picker	Drive Chain	Lubrication, High Speed, Corrosion	Lambda, Titan, NEP, Super Stainless Steel
Washing			
Peeling			
Slicing	Drive Chain	Lubrication, High Speed, Corrosion	Lambda, Titan, NEP, Super Stainless Steel
Blanching, Dryer, Dehydrator	4", 6", and 8" Pitch Engineered Class Conveyor Chain	Stage 1™ Loading, Corrosion	Stainless Steel, Stage 1™ High Capacity Chain
Frying			
Freezing	Drive Chain	Low Temperature, Corrosion	NEP chain
Packaging See page 64 for more information	Small Pitch Attachment Chain	Elongation, lubrication, multi-strand relative length precision	Lambda, Matched & Tagged chains



PICKER

SLICING

LEADING THE MOVEMENT

Lambda Chain



Product	Problem	Challenge	Solution
Drive Chain	Lubrication	Operators cannot lubricate the chain regularly due possible product contamination	Lambda chain features a food-grade lubricant in the sintered metal bushing allowing for maintenance free operation
	High Speed	High speed drives limit the ability of operators to lubricate chain without employing costly oil baths	Titan chain features an abrasion resistant coated pin
	Corrosion	Run off from the product and environment and lack of lubrication can cause the chain to corrode causing breaks and lower operation life	NEP chain is formulated to resist corrosion caused from product run-off. For additional corrosion resistance, Tsubaki offers SUPER Stainless

Lambda Chain

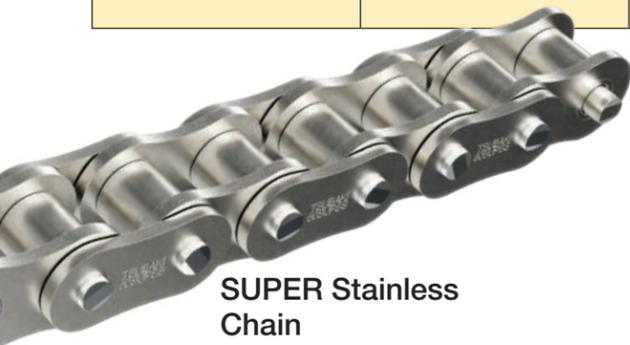


Titan Chain



Product	Problem	Challenge	Solution
Drive Chain	Lubrication	Operators cannot lubricate the chain regularly due possible product contamination	Lambda chain features a food-grade lubricant in the sintered metal bushing allowing for maintenance free operation. Lambda can be combined with NEP to provide corrosion resistance, maintenance free operation
	High Speed	To provide the speed required operators generally don't lubricate the chain due to possible product contamination and oil splash-off	Titan chain features an abrasion resistant coated pin
	Corrosion	Run off from the potato cutting process can cause the chain to corrode. This can lead to lower chain life and possible failure.	NEP chain is formulated to resist corrosion caused from product run-off. For additional corrosion resistance, Tsubaki offers SUPER Stainless

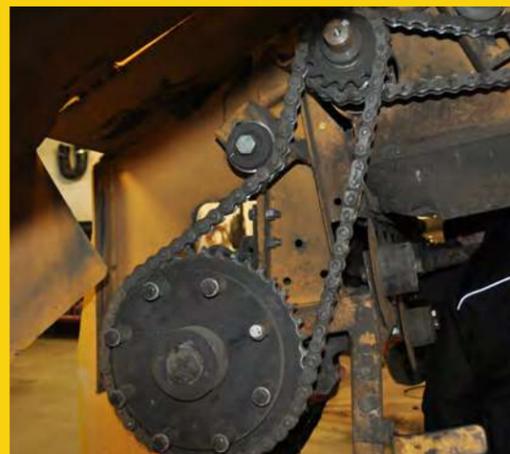
SUPER Stainless Chain



Titan Chain

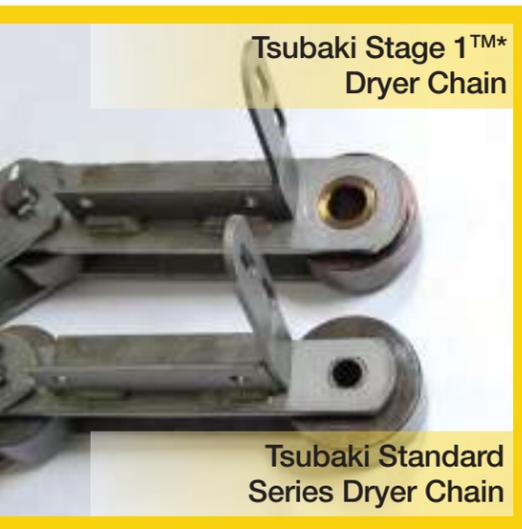


SUPER Stainless Chain



Product	Problem	Challenge	Solution
4", 6", and 8" Pitch Engineered Class Conveyor Chain	Stage 1™ Loading	Stage 1™ conveyors generally transport more load than subsequent conveyors because the product is saturated with water. The extra load causes the Stage 1™ conveyors to wear at a faster rate.	Stage 1™ Conveyors have upgraded sidebars, bushings, and pins to increase bearing area and strength.
	Corrosion	The high humidity and water in these applications rapidly corrode unprotected steel chains. Lubrication practices are generally inadequate to protect the conveyor chain or avoided due to concerns of product contamination.	Various grades and combinations of plated or stainless steels to maximize performance and reduce corrosion.

Product	Problem	Challenge	Solution
Drive Chain	Low Temperature Operation	Temperatures below -10°C degrade chain performance by reducing Maximum Allowable Load	Tsubaki chains demonstrate effective performance down to -40
	Corrosion	Chain corrode due to the relative high humidity in Potato Plants that condenses at low temperature.	NEP chain provides effective chain protection at low temperatures



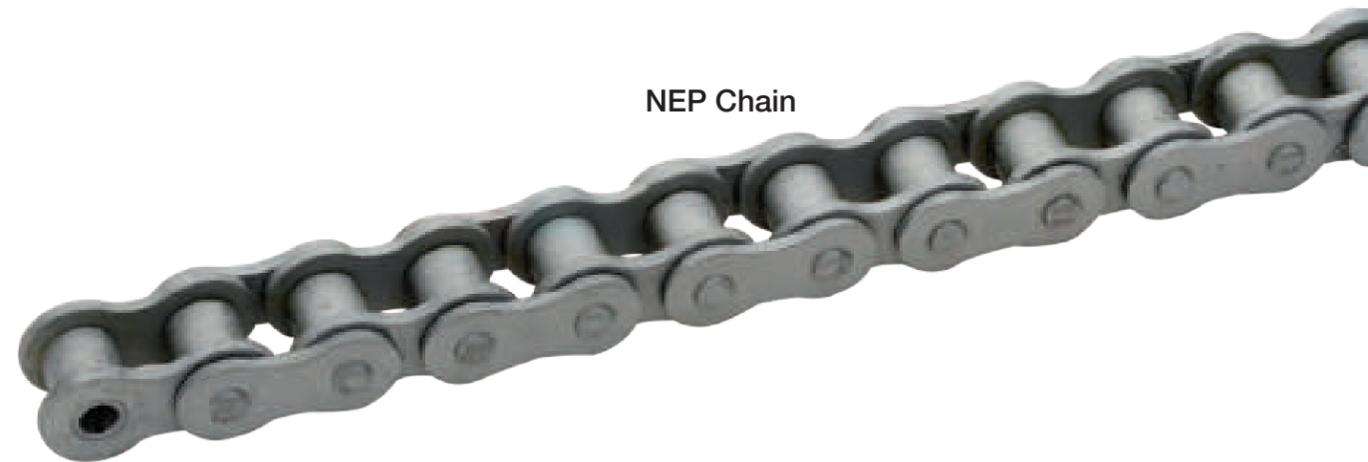
Stage 1™ Industrial Dryer/Dehydrator Chain Premium "Best Practice" Features:

- Working load over 42% greater than industry standard
- Maximized bearing areas result in a 900lb. working load improvement
- Tallest, thickest side plates achievable per operating envelope
- Fully round, increased diameter and thicker walled bushing
- Increased pin and cotter diameters
- Premium mig welded chain attachment
- Available in 6", 9" and 12" pitch options. Custom sizes available upon request

Stage 1™ are designed to be drop-in replacements without any significant modifications.
*Compatible with: National®, Aeroglide®, Proctor & Schwartz, FEC®, and others



Stainless Steel chain

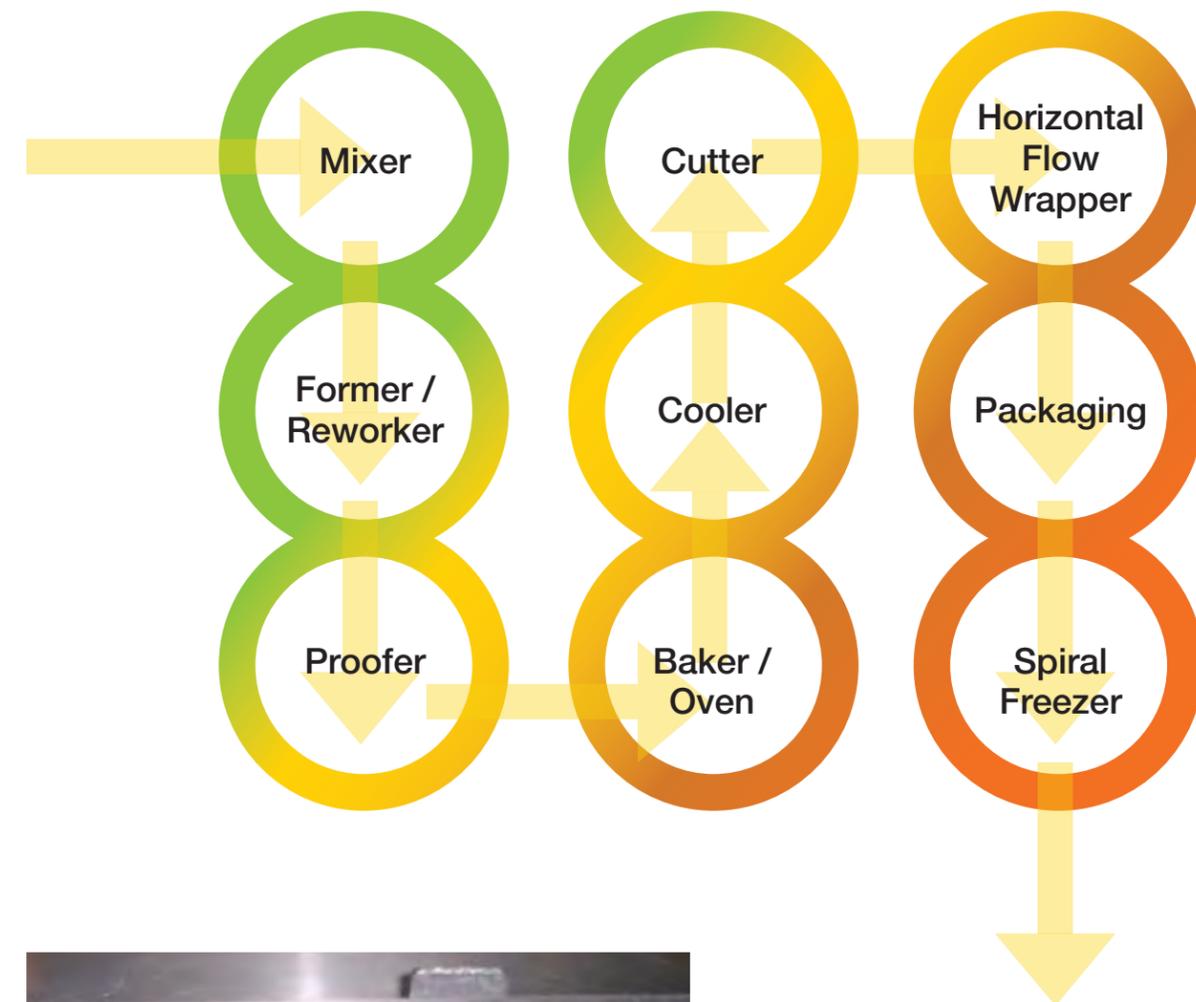


NEP Chain



Application	Product	Problem	Solution
Mixer			
Former / Reworker			
Proofer	C2060H EN/EC Extended Pin, Double-Pitch Button Attachment	High Heat, Humidity. Generally not lubricated resulting in elongation	-10°C to 150°C Lambda 150°C to 230°C High Temp Lambda 230°C to 400°C Titan
Baker / Oven	C2060H Extended Pin EN/EC, Engineered Class Chain. Double Pitch Button Attachment	High Heat, Humidity. Applications generally not lubricated	-10°C to 150°C Lambda 150°C to 230°C High Temp Lambda 230°C to 400°C Titan
Cooler	C2060H EN/EC Extended Pin, Double-Pitch Button Attachment KT Cold Resistant Chain	Elongation Due To Low Temperature corrosion, multi-strand length precision	KT Cold Resistant Chain NEP, Super Stainless, Matched & Tagged Chain
Cutter			
Horizontal Flow Wrapper	40/INVA02L, UM Inwardly Bent Attachment	General Elongation, Corrosion	Lambda, NEP, Lambda-NEP
Packaging See page 64 for more information	SD Pusher Attachment Chains	Elongation, lubrication, multi-strand relative length precision	Lambda, Matched & Tagged chains
Spiral Freezer	Drive Chain - e.g. RS2032B KT Cold Resistant Chain	Low Temperature corrosion	NEP Chain KT Cold Resistant Chain

BAKERY PROCESS FLOW



PROOFER

COST SAVINGS!

Application: Proofer drive
 Savings: \$1,002.59 in 5.1 months
 Tsubaki solution: Customer used premium Tsubaki RS drive chain versus a low-cost chain.

LEADING THE MOVEMENT

BAKER / OVEN

LEADING THE MOVEMENT

Product	Problem	Challenge	Solution
Small Pitch Attachment Chain: C2060H EN/EC Extended Pin Double-Pitch Button Attachment	Chains generally not lubricated due to product contamination concerns	Non lubricated chains often experience increased wear rate. Proofers are often long serpentine systems with large loads.	Tsubaki self-lubricating or maintenance free chains: -10°C to 150°C Lambda 150°C to 230°C High Temp Lambda 230°C to 400°C Titan
	High Heat	Chain performance degrades at high temperatures	Tsubaki chains are rated to 150°C. Between 150°C and 250°C chain performance degrades.* Between 250°C and 400°C Tsubaki offers a wide range of Stainless Steel options for high temperature operation.
	Humidity	Chains subject to high humidity often corrode in operation resulting in premature wear and failure	For Proofers less than 60°C Tsubaki NEP chain has proven performance. For high humidity applications from 60°C to 400°C consider Stainless Steel Options

Product	Problem	Challenge	Solution
Small Pitch Attachment Chain: C2060H EN/EC Extended Pin Double-Pitch Button Attachment	Chains generally not lubricated due to product contamination concerns	Non lubricated chains often experience increased wear rate. Bakers and Oven are often long and/or serpentine conveyor systems with large accumulated loads.	Tsubaki self-lubricating or maintenance free chains: -10°C to 150°C Lambda 150°C to 230°C High Temp Lambda 230°C to 400°C Titan
	High Heat	Chain performance degrades at high temperatures	Tsubaki chains are rated to 150°C. Between 150°C and 250°C chain performance degrades.* Between 250°C and 400°C Tsubaki offers a wide range of Stainless Steel options for high temperature operation.
	Humidity	Chains subject to high humidity often corrode in operation resulting in premature wear and failure	For Baker/Ovens less than 60°C Tsubaki NEP chain has proven performance. For high humidity applications from 60°C to 400°C consider Stainless Steel Options

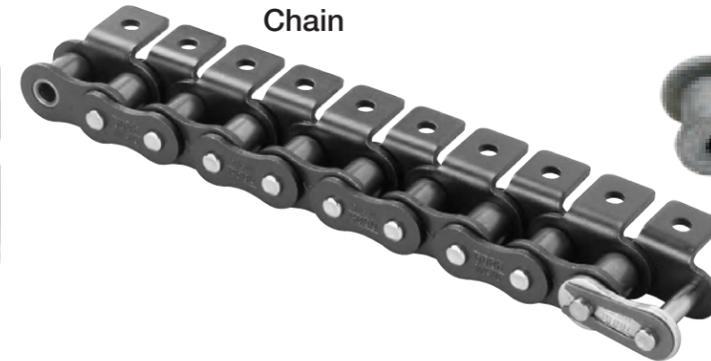
Stainless Steel chain



Titan Chain



Attachment Chain



NEP Chain

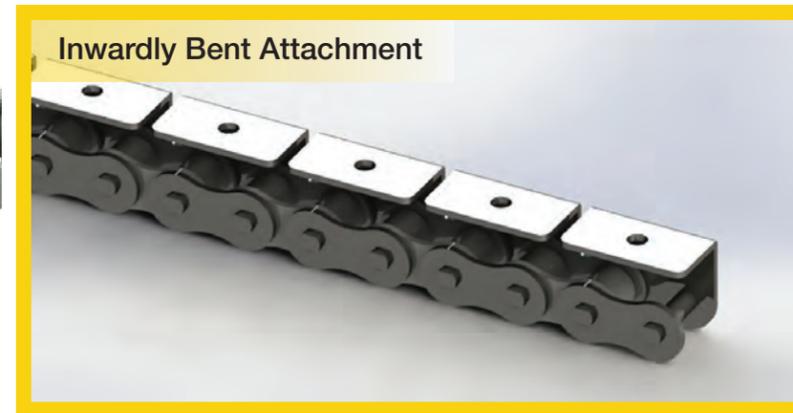
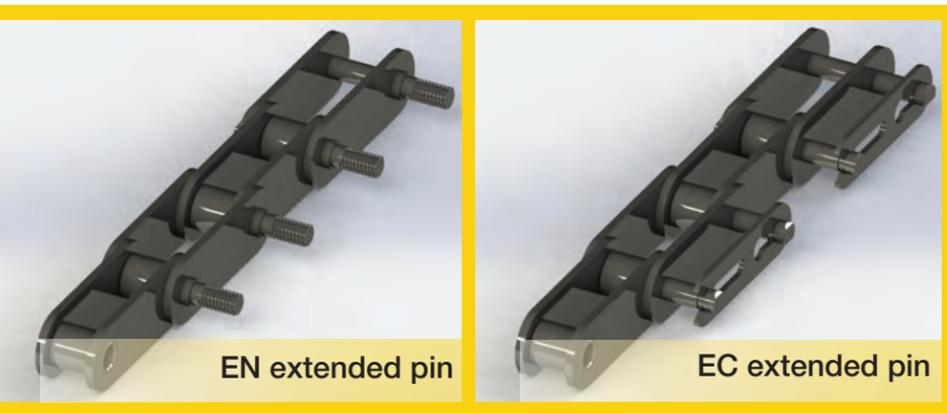


Product	Problem	Challenge	Solution
Small Pitch Attachment Chain: C2060H EN/EC Extended Pin Double-Pitch Button Attachment Attachment KT Cold Resistant Chain	Low Temperature Operation	Temperatures below -10°C degrade chain performance by reducing Maximum Allowable Load	Tsubaki chains demonstrate effective performance down to -40°C; KT Series Cold Resistant Chain - ideal for temperature between -40°C to 60°C with little to no lost in strength compared to standard chain.
	Corrosion	Chain corrodes due to the relative high humidity that condenses at low temperature.	NEP chain provides effective chain protection to -10°C Super Stainless Steel provides AS series corrosion resistance with standard steel strength down to -20°C
	Multi-strand relative length precision	Multi-strand conveyors are particularly susceptible to relative length differences.	Matched & Tagged strands may be provided. This optional process can reduce initial relative length differences between multiple strands to +/-0.5mm



Product	Problem	Challenge	Solution
DOBOY CHAIN™ 40/INVA02L, UM Inwardly Bent Attachment,	Chains generally not lubricated due to product contamination concerns	Chains may be subject to rapid elongation due to lack of lubrication.	Tsubaki Lambda provides self lubrication operation for applications that generally cannot be lubricated
	Corrosion	Chain corrode due to the relative high humidity that condenses at low temperature.	NEP chains provide excellent corrosion resistance

Doboy Chain is a trademark of Alkar.



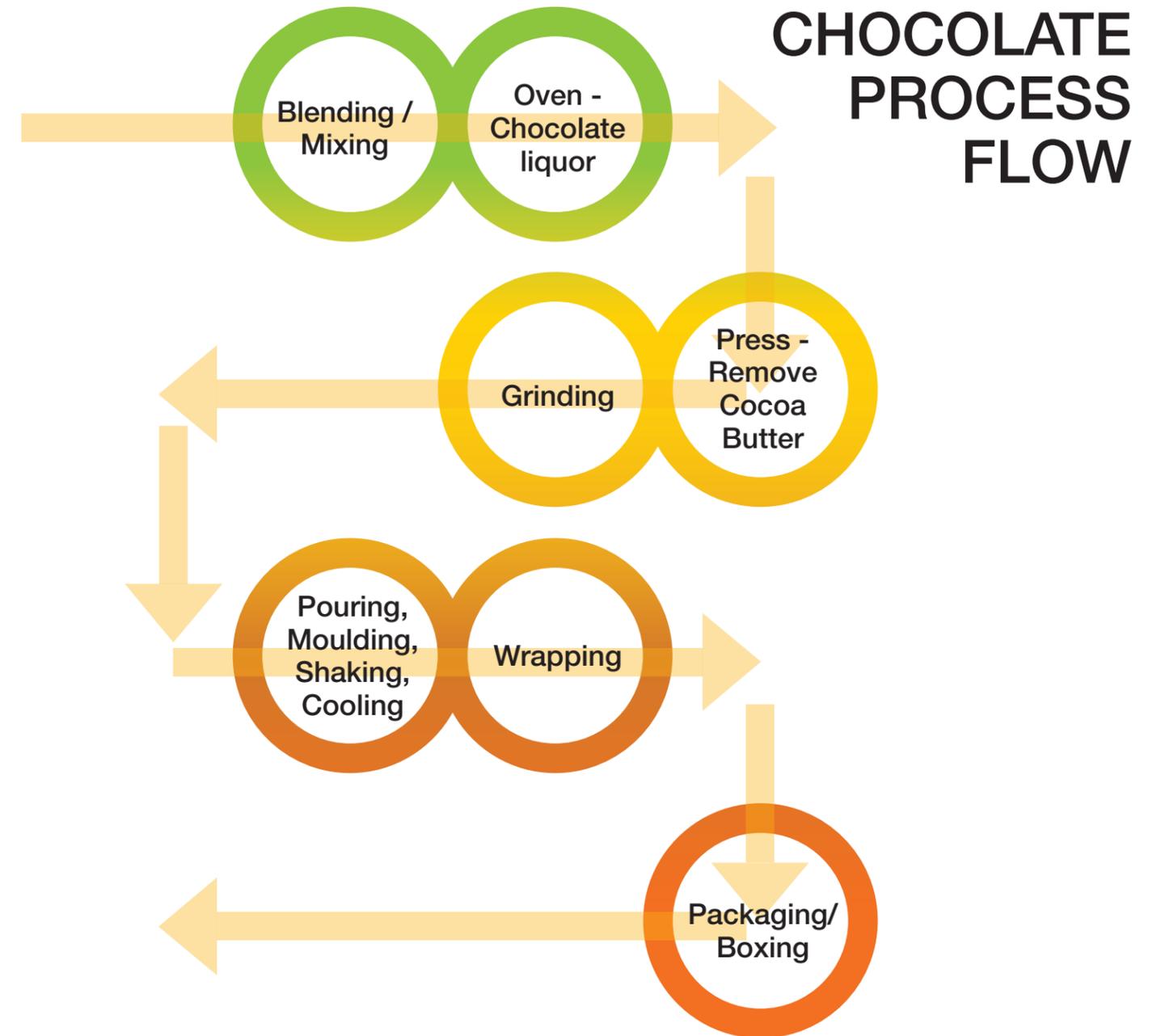
Product	Problem	Challenge	Solution
Drive Chain RS2032B KT Cold Resistant Chain	Low Temperature Operation	Temperatures below -10°C degrade chain performance by reducing Maximum Allowable Load	Tsubaki chains demonstrate effective performance down to -40°C; KT Series Cold Resistant Chain - ideal for temperatures between -40°C to 60°C with little to no lost in strength compared to standard chain.
	Corrosion	Unprotected chains may corrode in operation due to condensation at low temperatures	NEP chain provides effective chain protection to -10°C Stainless steel can operate to -20°C



NEP Chain



Application	Product	Problem	Solution
Blending / Mixing			
Oven - Chocolate liquor			
Press - Remove Cocoa Butter			
Grinding			
Pouring, Moulding, Shaking, Cooling	80 SPCL D1 Attachment Chain Integral Extended Step Threaded Pin	Long Length - Effect of chain elongation is increased dramatically.	Lambda
		Strand elongation variation. Strands closer to the drive elongate at a faster rate resulting in misaligned attachments	Lambda, pre-stretched matched & tagged
Packaging/Boxing/Wrapping See page 64 for more information	Small Pitch Attachment Chain	Elongation, lubrication, multi-strand relative length precision	Lambda, Matched & Tagged chains



POURING, MOULDING, SHAKING, COOLING

COST SAVINGS!

Application: Freezer Tunnel
 Savings: \$1,671.70 in 17 months
 Tsubaki solution: Replaced WP chain with Lambda self-lubricating chain

LEADING THE MOVEMENT

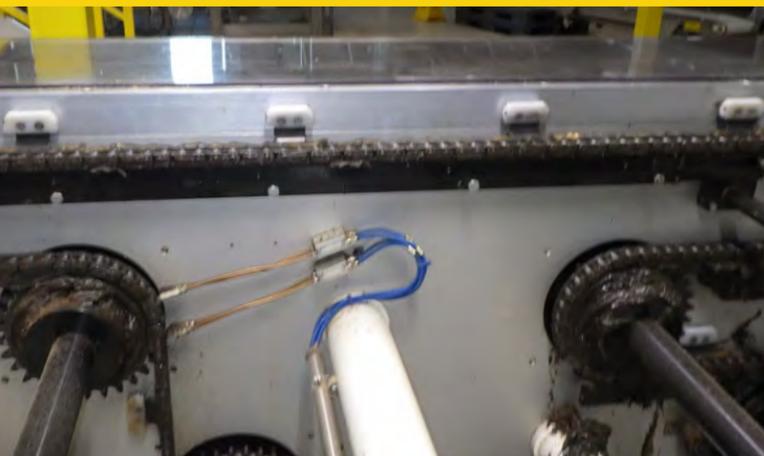
LEADING THE MOVEMENT

Product	Problem	Challenge	Solution
Small Pitch Attachment Chain: 80 Special Extended Pin	These conveyor systems tend to have very long conveyor chains that operate in a serpentine formation. The long length results in large accumulated tension. Chains are generally not lubricated due to product contamination concerns	Long serpentine systems result in large accumulated tension combined with no lubrication which may result in rapid chain elongation	Lambda self-lubricating chain offers maintenance free operation and low-elongation performance in applications where lubrication is not desirable or possible.
	Strand elongation variation. Strands closer to the drive elongate at a faster rate resulting in misaligned attachments	Strands that elongate at different rates may cause attachment misalignment	Lambda, pre-stretched matched & tagged

80 Special Extended Pin



Lambda Chain

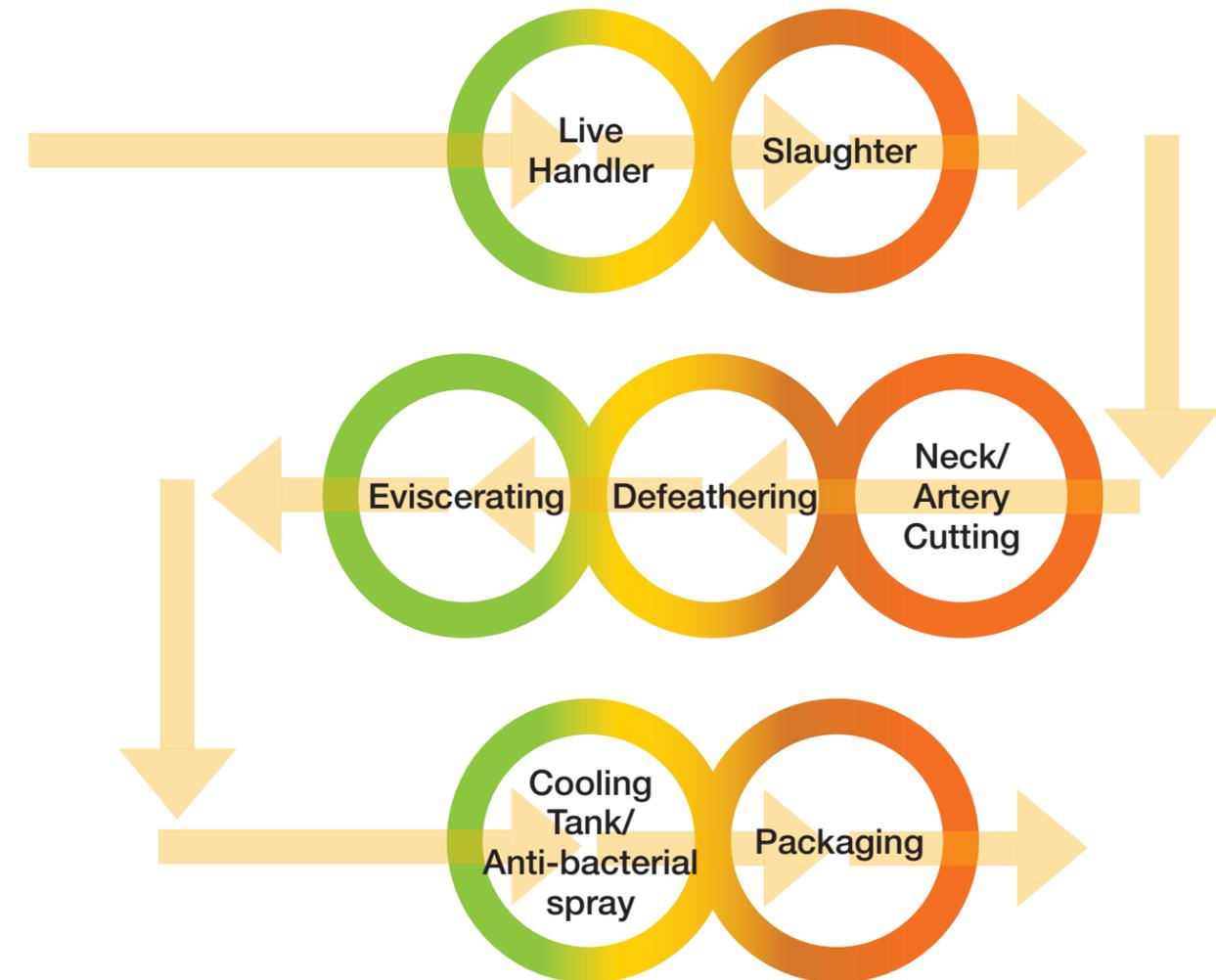


Application: Gas pit
 Savings: \$879.64 in 13.8 months, to date and counting
 Tsubaki solution: Poultry-processing operation replaced OEM chain with Tsubaki Lambda self-lubricating chain.

LEADING THE MOVEMENT

Application	Product	Problem	Solution
Live Handler			
Slaughter	Overhead Conveyor Drop Forged Rivetless	Potential requirement for corrosion resistant chain to prevent contamination dripping onto product	Corrosion resistant plating - Zinc or Triple Plating
Neck/Artery Cutting			
Defeathering			
Eviscerating	Attachment Chain - SS Sticker Chain	Chains generally not lubricated due to direct food contact	LSC Series chain provides an engineering plastic sleeve between pin and bushing helping to reduce the rate of wear Super Stainless Steel
Cooling Tank/Anti-bacterial spray			
Packaging See page 64 for more information	Small Pitch Attachment Chain SD Attachment	Elongation, lubrication, multi-strand relative length precision	Lambda, Matched & Tagged chains

POULTRY PROCESS FLOW



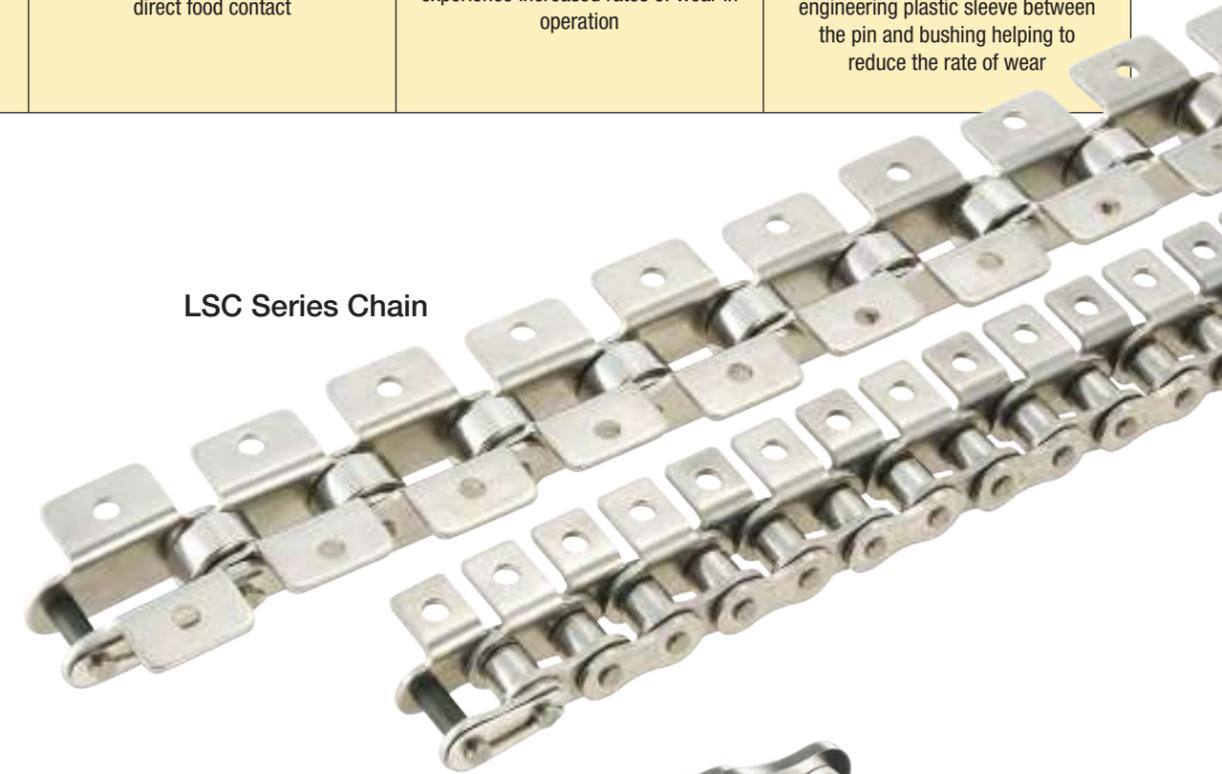
Product	Problem	Challenge	Solution
Overhead Conveyor Drop Forged Rivetless	Potential requirement for corrosion resistant chain to prevent contamination dripping onto product	Food plants often don't lubricate overhead conveyors due to concerns of contaminating the hanging poultry products below	Tsubaki offers corrosion resistant version of the most common Drop Forged Rivetless Chains

Product	Problem	Challenge	Solution
Attachment Chain - SS Sticker Chain	Chains generally not lubricated due to direct food contact	Non-lubricated stainless steel chains may experience increased rates of wear in operation	Tsubaki Super Stainless Steel has the same rate of wear as standard chain. LSC Series Chain provides an engineering plastic sleeve between the pin and bushing helping to reduce the rate of wear

Drop Forged Rivetless Chain



LSC Series Chain

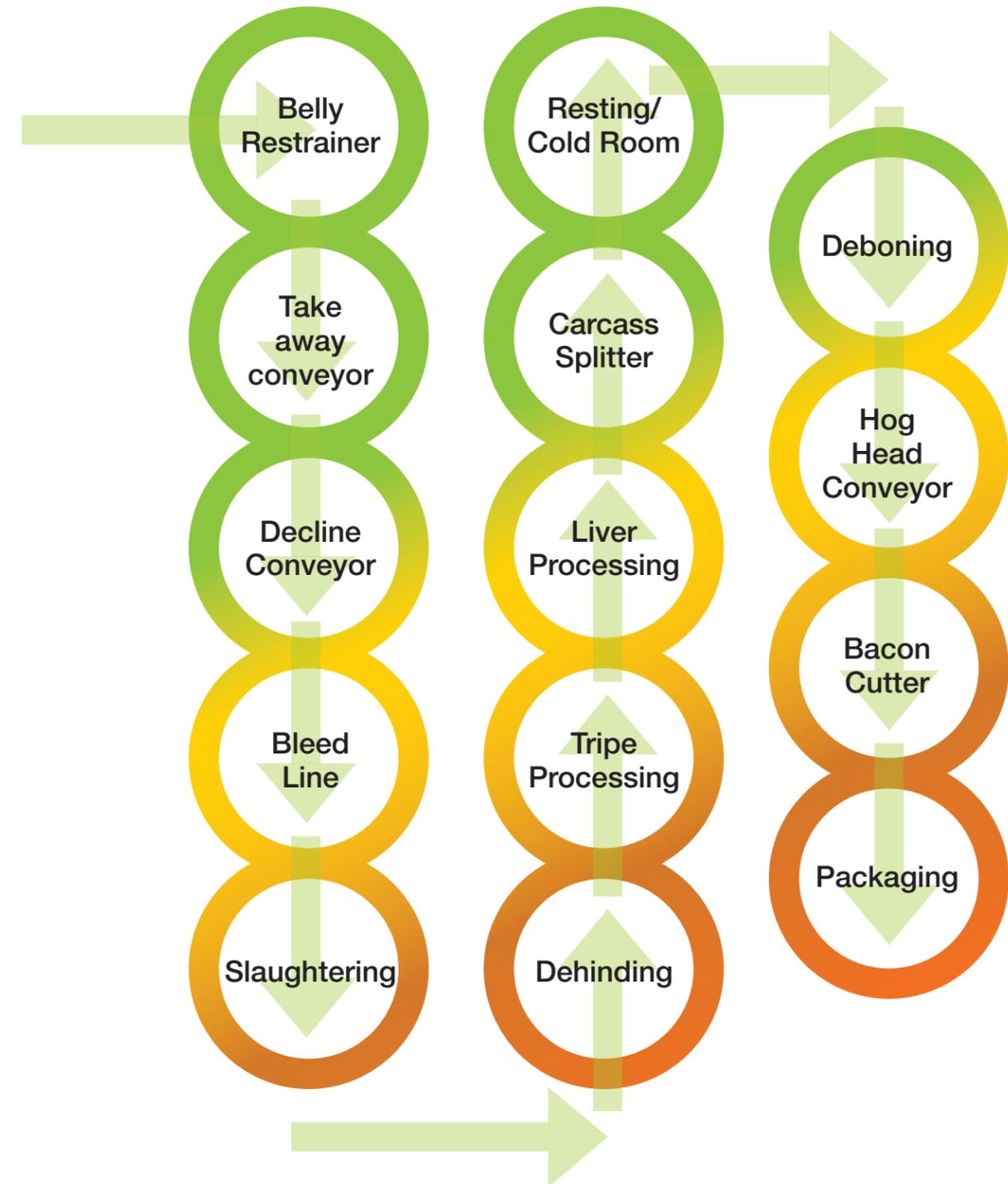


SUPER Stainless Chain



Application	Product	Problem	Solution
Belly Restrainer	Conveyor Chain DS1113 with standard K2 attachments	Shock Load, Corrosion	DS-1113 C/W standard K2 attachments with countersunk holes, zinc-plated sidebars, pins and roller as well as heat treated stainless steel bushings
Take away conveyor	Conveyor Chain DS1113 and DS6272 with standard K2 attachments	Shock Load, Corrosion	DS-1113 & DS-6272 C/W standard K2 attachments with countersunk holes, zinc-plated sidebars, pins and roller as well as heat treated stainless steel bushings
Decline Conveyor	DS6272K23L	Corrosion Roller Wear	Zinc Plated/Triple Plated, Resin Roller Sleeve
Bleed Line	Drop Forged Rivetless		
Slaughtering			
Dehinding	Overhead Conveyor Drop Forged Rivetless	Potential requirement for corrosion resistant chain to prevent contamination dripping onto product	Corrosion resistant plating - Zinc or Triple Plating
Tripe Processing			
Liver Processing			
Carcass Splitter			
Resting/Cold Room			
Deboning			
Hog Head Conveyor	Conveyor Chain		
Bacon Cutter	RF06B-2ASSK0/2L	Premature wear, 300 Series Stainless not suitable for load and speed of application	AS Series Stainless
Packaging See page 65 for more information	Small Pitch Attachment Chain SD Pusher Attachment Chains Gripper Chains Vacuum Wrapper Chains	Low Elongation Threshold, Timing, High tension results in increased bearing load	Case hardened pins, Lambda

RED MEAT PROCESS FLOW



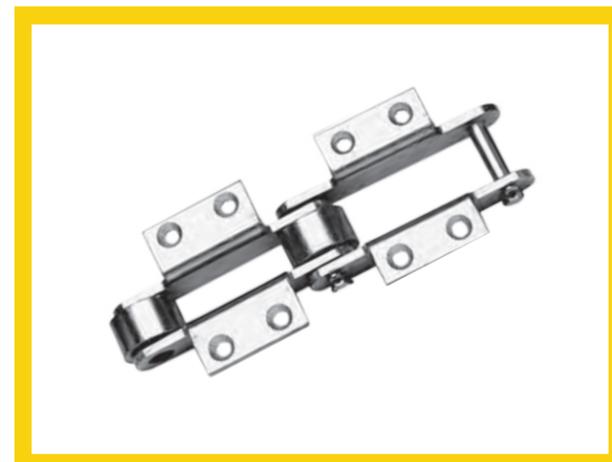
BELLY RESTRAINER, TAKE AWAY CONVEYOR

DECLINE CONVEYOR

LEADING THE MOVEMENT

BELLY RESTRAINER			
Product	Problem	Challenge	Solution
Conveyor Chain DS1113 with standard K2 attachments	Shock Load, Corrosion	Run off from the carcass and clean up can cause the chain to corrode. This may cause failure	DS-1113 C/W standard K2 attachments with countersunk holes, zinc-plated sidebars, pins and roller as well as heat treated stainless steel bushings

TAKE AWAY CONVEYOR			
Product	Problem	Challenge	Solution
Conveyor Chain DS1113 and DS6272 with standard K2 attachments	Shock Load, Corrosion	Run off from the carcass and clean up can cause the chain to corrode. This may cause failure	DS-1113 & DS-6272 C/W standard K2 attachments with countersunk holes, zinc-plated sidebars, pins and roller as well as heat treated stainless steel bushings



DS6272 engineered class chain

- Feature K-2 attachments; Acetal insert rollers; heat treated stainless steel bushings; and electro-galvanized sidebars, pins, and rollers.
- Lube-free operation for a clean environment.

COST SAVINGS!

Application: Decline Conveyor
 Savings: \$25,675.74 in 46 months
 Tsubaki solution: Replaced competitor's chain with Tsubaki's DS6272 engineered class chain

LEADING THE MOVEMENT

Product	Problem	Challenge	Solution
DS6272K23L	Corrosion	Run off from the carcass and clean up can cause the chain to corrode. This may cause failure	Tsubaki zinc plated DS6272 roller conveyor chain
	Roller Wear	Long conveyors often experience roller wear failure before chain elongation failure	Tsubaki DS6272 chain has a special sleeve between bushing and roller to reduce the roller wear.



DS6272 engineered class chain

- Feature K-2 attachments; Acetal insert rollers; heat treated stainless steel bushings; and electro-galvanized sidebars, pins, and rollers.
- Lube-free operation for a clean environment.



COST SAVINGS!

Application: Overhead Trolley
 Savings: \$28,886.25 in 48 months
 Tsubaki solution: Replaced competitor's drop forged rivetless chain with Tsubaki's

LEADING THE MOVEMENT

Product	Problem	Challenge	Solution
Overhead Conveyor Drop Forged Rivetless	Potential requirement for corrosion resistant chain to prevent contamination dripping onto product	Food plants often don't lubricate overhead conveyors due to concerns of contaminating the hanging products below	Tsubaki offers corrosion resistant version of the most common Drop Forged Rivetless Chains

Product	Problem	Challenge	Solution
RF06B-2ASSK0/2L	Premature wear	300 Series Stainless not suitable for load and speed of application	AS Series Stainless



Drop Forged Rivetless Chain



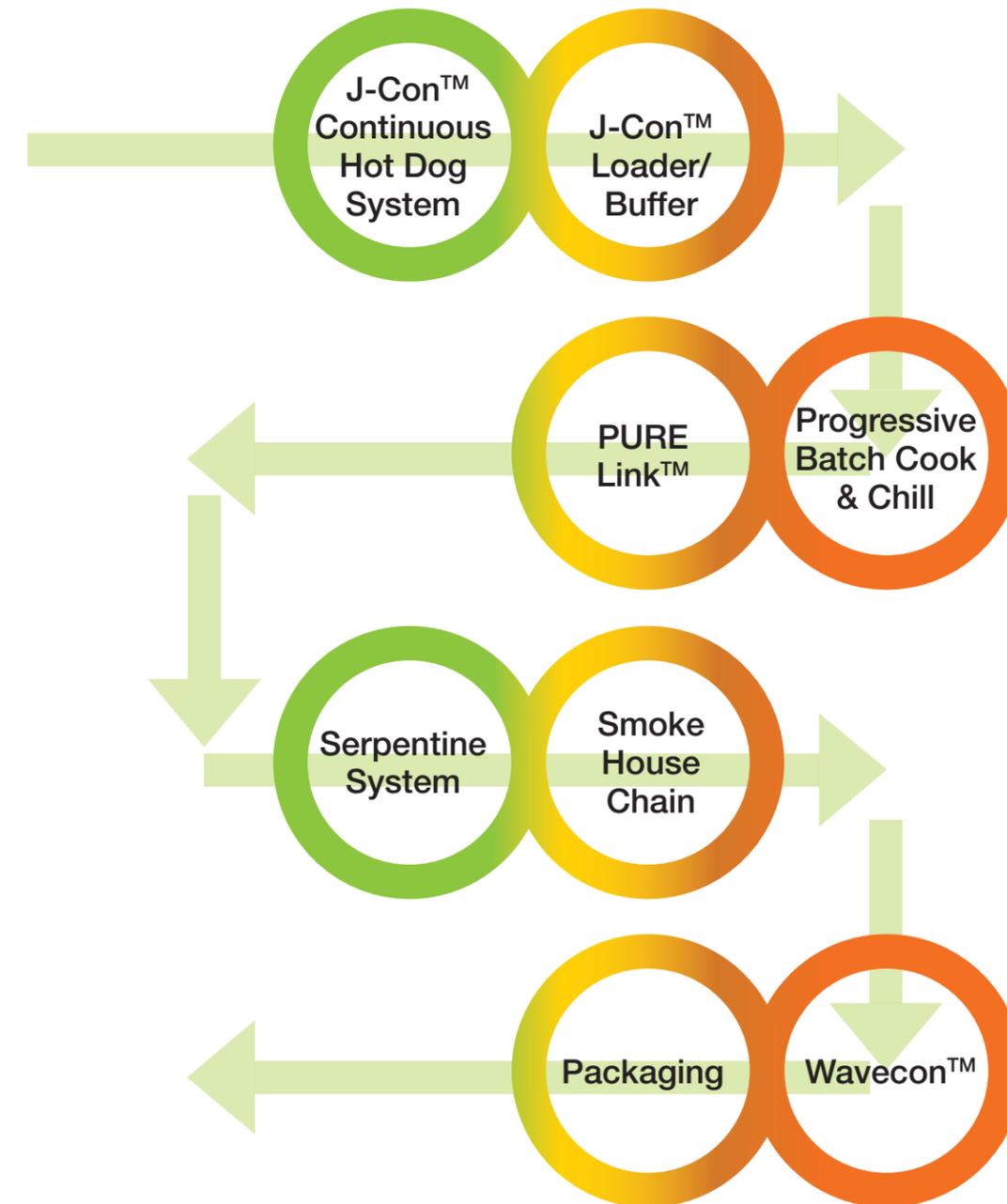
Stainless Steel chain

RF06B-2ASSK0/2L

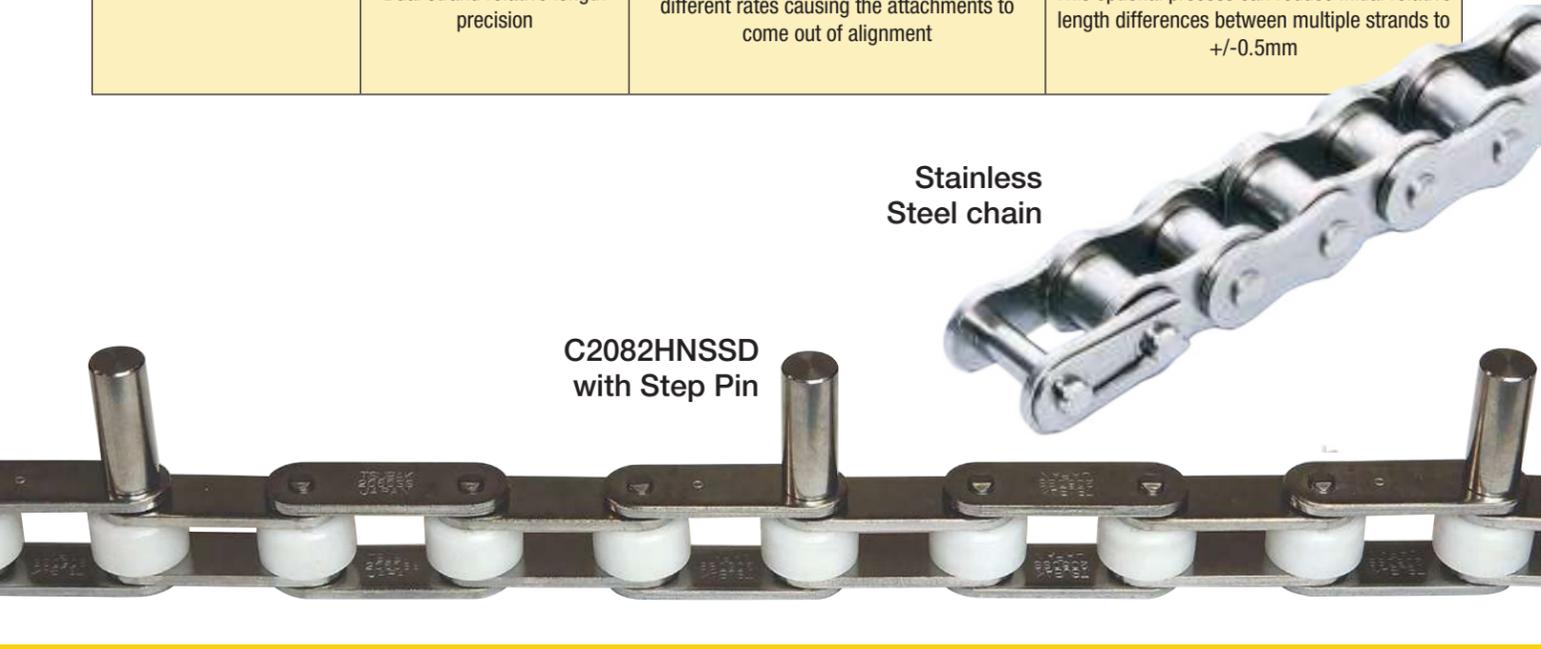


Application	Product	Problem	Solution
J-Con™ Continuous Hot Dog System			
J-Con™ Loader/Buffer			
Progressive Batch Cook & Chill			
PURE Link™			
Serpentine System			
Smoke House Chain	C2082HNSSD W/ BLOCKS 100NS D1 STEP PIN	Corrosion Roller Wear Dual strand uneven wear	316 NS Stainless Construction Delrin Roller - Chemical Resistant Plastic Matched & Tagged
Wavecon™			
Packaging See page 65 for more information	Small Pitch Attachment Chain SD Pusher Attachment Chains Gripper Chains Vacuum Wrapper Chains	Elongation, lubrication, multi-strand relative length precision	Lambda, Matched & Tagged chains

SECONDARY MEAT PROCESS FLOW

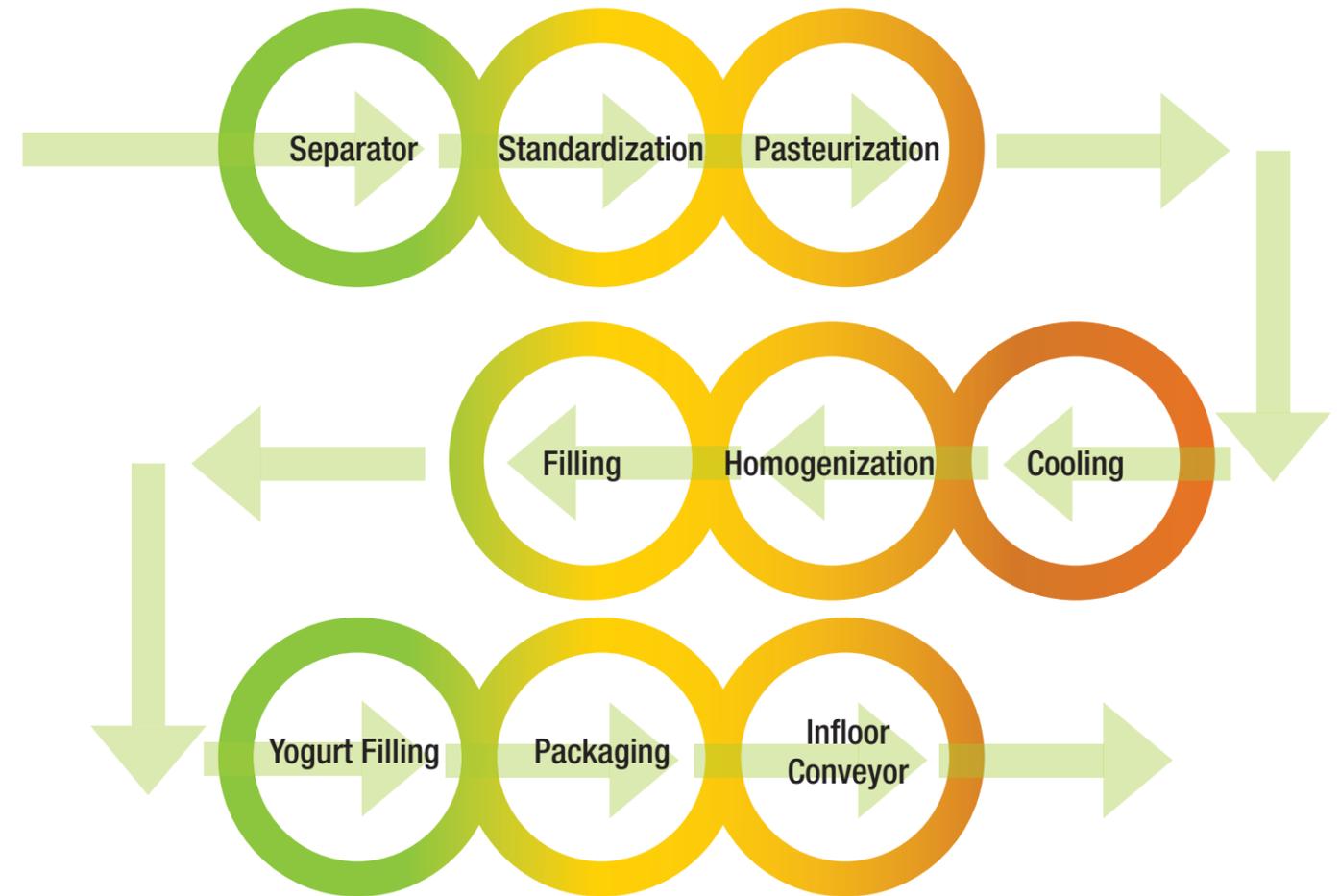


Product	Problem	Challenge	Solution
C2082HNSSD W/ BLOCKS 100NS D1 STEP PIN	Corrosion	304 Stainless Steel chain not sufficient corrosion protection for Smoke House applications	316 NS Stainless Construction
	Roller Wear	Increased roller wear due to high humidity and chemicals in the curing process	Delrin Roller - Chemical Resistant Plastic
	Dual strand relative length precision	Dual strand conveyors often wear at different rates causing the attachments to come out of alignment	Matched & Tagged strands may be provided. This optional process can reduce initial relative length differences between multiple strands to +/-0.5mm



Application	Product	Problem	Solution
Separator			
Standardization			
Pasteurization			
Cooling			
Homogenization			
Filling	Attachment Chain	Regular washdown, corrosion, and elongation	304 Stainless Steel, 600 Stainless Steel for increased strength or Super Stainless Steel for no loss of strength compared to carbon chain
Yogurt Filling	Small Pitch Attachment Chain: C2060H EN/EC Extended Pin Double-Pitch Button Attachment	Relative strand elongation rate, timing	Lambda
Packaging See page 65 for more information	Small Pitch Attachment Chain SD Pusher Attachment Chains Gripper Chains	Elongation, lubrication, multi-strand relative length precision	Lambda, Matched & Tagged chains
Infloor Conveyor	Double Flex Chains, DF3500	Double-Flex infloor conveyors are long systems that result in large accumulated chain tension.	DF3500

DAIRY PROCESS FLOW



YOGURT FILLING

COST SAVINGS!

Application: Dessert-forming conveyor
 Savings: \$2,249.62 in 13 months
 Tsubaki solution: Replaced standard nickel-plated chain with Tsubaki Lambda attachment chain.

LEADING THE MOVEMENT

INFLOOR CONVEYOR

LEADING THE MOVEMENT

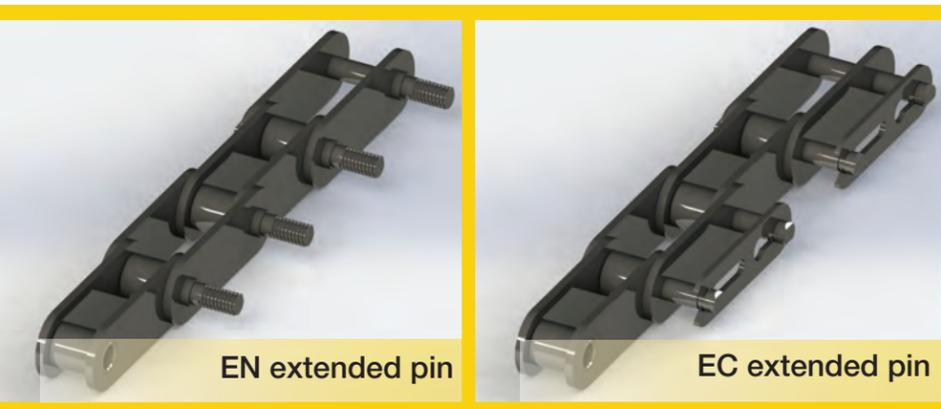
Product	Problem	Challenge	Solution
Small Pitch Attachment Chain: C2060H EN/EC Extended Pin Double-Pitch Button Attachment	Chains are generally not lubricated due to product contamination concerns.	Non-lubricated chains often experience increased wear rate.	Tsubaki Lambda chain offers maintenance free operation due to their oil impregnated sintered metal bushings.

Product	Problem	Challenge	Solution
Double Flex Chains DF3500	Elongation	Double-Flex infloor conveyors are long systems that result in large accumulated chain tension.	The material and component hardness are selected to cost-effectively maximize the wear ability of all parts resulting in long-lasting performance.

Lambda Chain

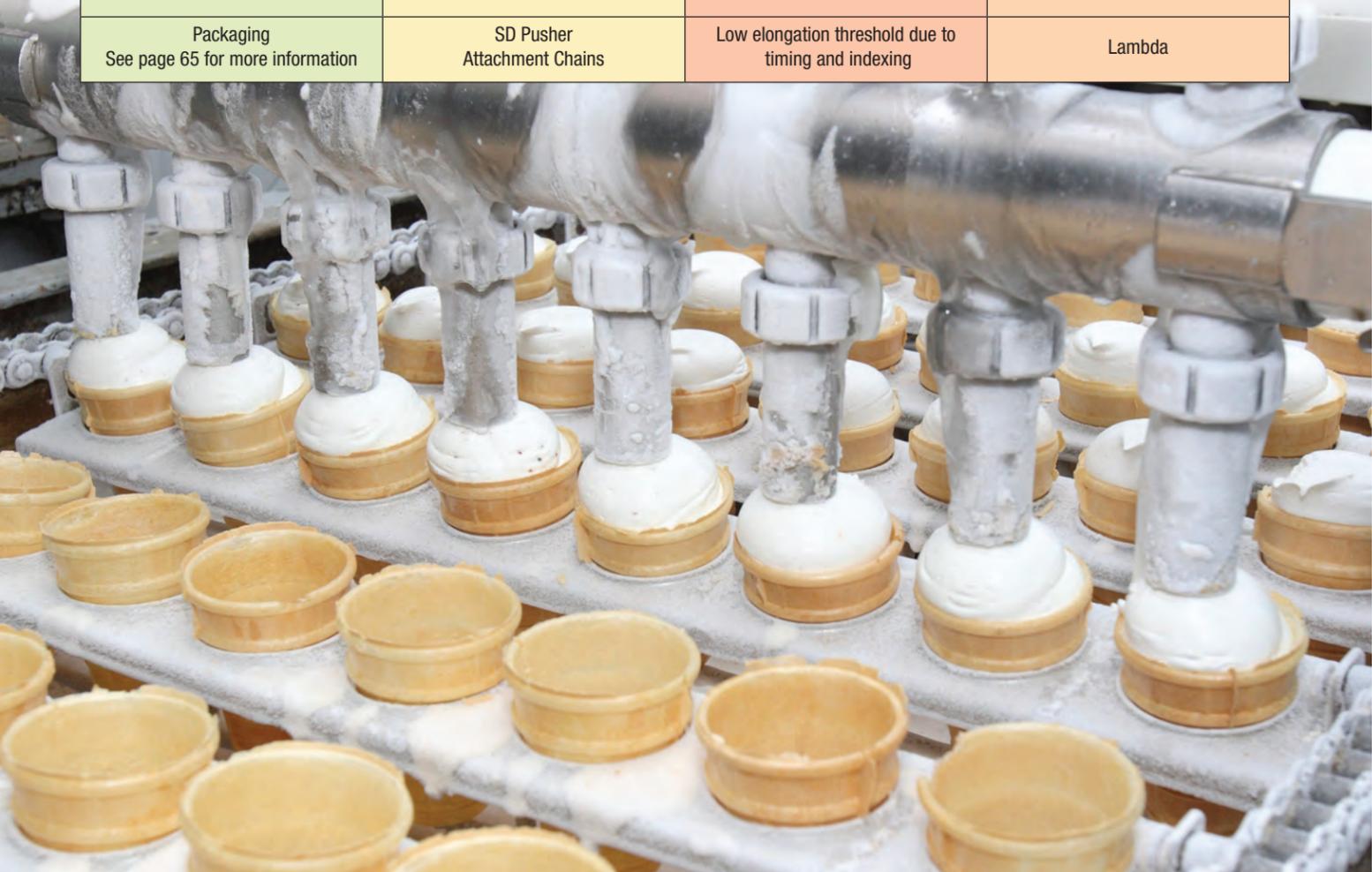
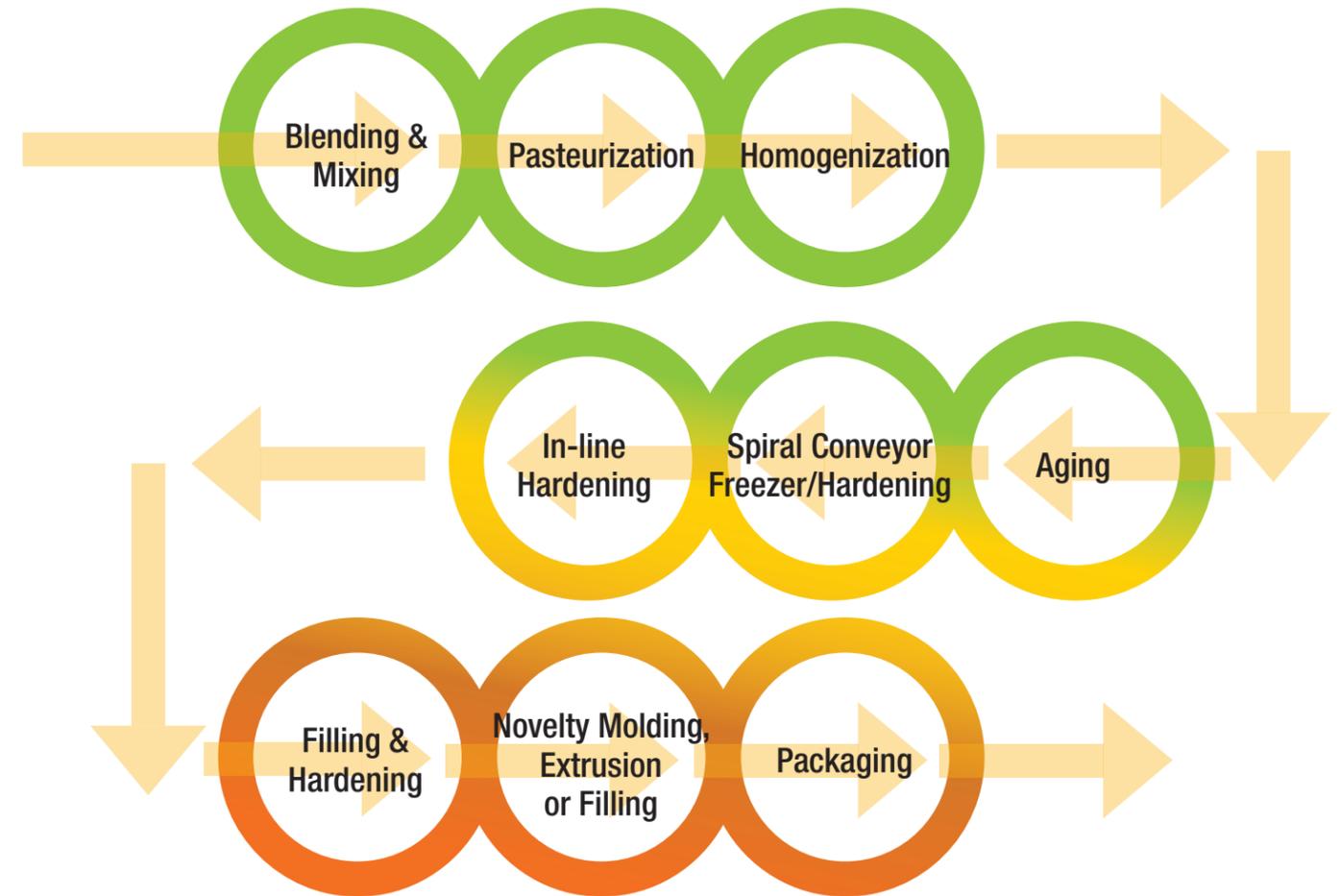


Double Flex Chain DF3500



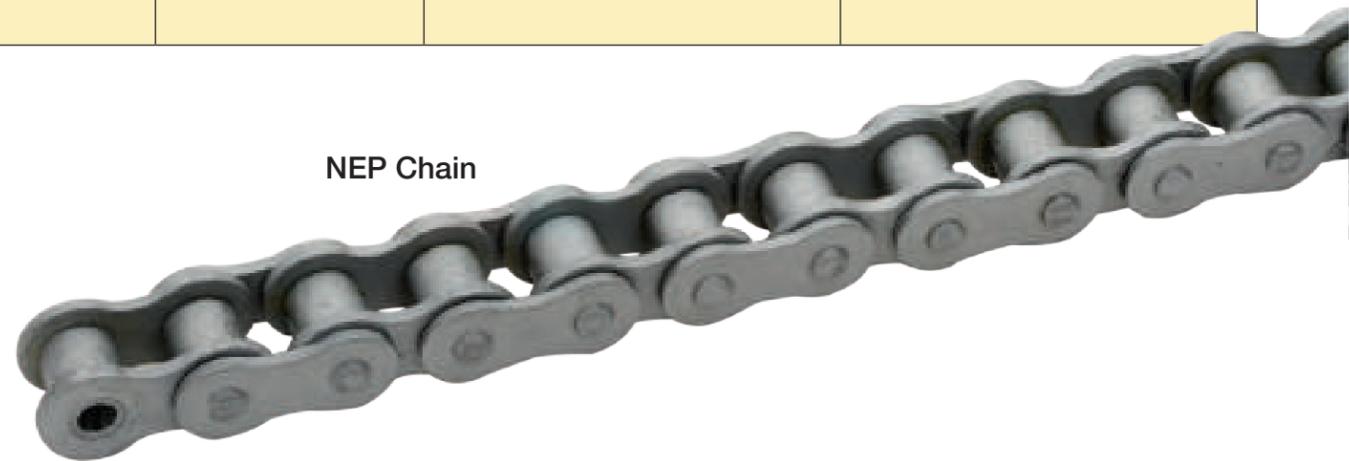
Application	Product	Problem	Solution
Blending & Mixing			
Pasteurization			
Homogenization			
Aging			
Spiral Conveyor Freezer/Hardening	Drive Chain	Humidity/Condensation, Corrosion	RS2032B-NEP
In-line Hardening	Small Pitch Attachment Chain	Low Temperature, Corrosion, Multi-strand relative length precision	NEP, Matched and Tagged Chains
Filling & Hardening			
Novelty Molding, Extrusion or Filling			
Packaging See page 65 for more information	SD Pusher Attachment Chains	Low elongation threshold due to timing and indexing	Lambda

ICE CREAM PROCESS FLOW

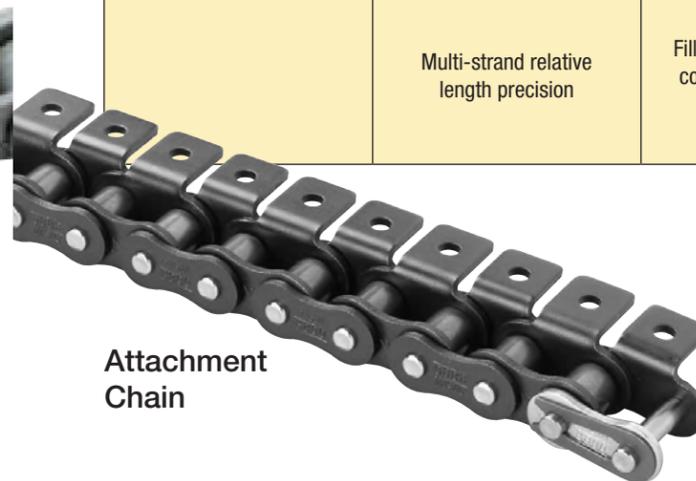


Product	Problem	Challenge	Solution
Drive Chain	Low Temperature Operation	Temperatures below -10°C degrade chain performance by reducing Maximum Allowable Load	Tsubaki chains demonstrate effective performance down to -40°C
	Corrosion	Chain corrodes due to the relative high humidity in Ice Cream plants that condenses at low temperature.	NEP chain provides effective chain protection at low temperatures

Product	Problem	Challenge	Solution
Small Attachment Chain	Low Temperature Operation	Temperatures below -10°C degrade chain performance by reducing Maximum Allowable Load	Tsubaki chains demonstrate effective performance down to -40°C
	Corrosion	Chain corrodes due to the relative high humidity in Ice Cream plants that condenses at low temperature.	NEP chain provides effective chain protection at low temperatures.
	Multi-strand relative length precision	Filling machines that employ multi-strand conveyors are particularly susceptible to relative length differences.	Matched & Tagged strands may be provided. This optional process can reduce initial relative length differences between multiple strands to +/-0.5mm.



NEP Chain



Attachment Chain



NEP Chain



Industry / Products		Problem	Challenge	Solution
	Potato Products Small Pitch Attachment Chain	Elongation	Packaging machines cannot tolerate chain elongation due to timing and/or indexing requirements	Lambda chain provides superior maintenance-free operation. The oil-impregnated sintered metal bushing ensure there is always sufficient lubrication between the pin and bushing
	Bakery Products SD Pusher Attachment Chains			
	Chocolate Products Small Pitch Attachment Chain	Multi-strand relative length precision	Packaging machines that employ multi-strand conveyors are particularly susceptible to relative length differences.	Matched & Tagged strands may be provided. This optional process can reduce initial relative length differences between multiple strands to +/-0.5mm
	Poultry Products Small Pitch Attachment Chain SD Attachment			

Industry / Products		Problem	Challenge	Solution
	Red Meat Products Small Pitch Attachment Chain SD Pusher Attachment Chains Gripper Chains Vacuum Wrapper Chains	Low Elongation Threshold, Timing, High tension results in increased bearing load	Run off from the carcass and clean up can cause the chain to corrode. This may cause failure	Case hardened pins, Lambda
	Secondary Meat Processing Products Small Pitch Attachment Chain SD Pusher Attachment Chains Gripper Chains Vacuum Wrapper Chains			
	Dairy Products Small Pitch Attachment Chain SD Pusher Attachment Chains Gripper Chains	Multi-strand relative length precision	Packaging machines that employ multi-strand conveyors are particularly susceptible to relative length differences.	Matched & Tagged strands may be provided. This optional process can reduce initial relative length differences between multiple strands to +/-0.5mm
	Ice Cream Products SD Pusher Attachment Chains	Low elongation threshold due to timing and indexing		Lambda



TSUBAKI SCAN AND PLAN

LEADING THE MOVEMENT

ScanandPlan
by Tsubaki

Get instant, secure access to stay on top of your critical applications

For 15 years Tsubaki has built a library of customer critical applications that fully documents cost saving solutions and replacement tracking details

Scan and Plan gets you instant access to:

- Distributor
- Distributor Contact Name
- Product Part Number / Description
- Quantity
- Anticipated Replacement Date
- Cost Savings ROI Date
- Photo Gallery
- Request for Technical Support Service Call
- Get a Quote
- Tsubaki Representative

KNOWLEDGE IS POWER!

At Tsubaki we want you to have the best possible information at your fingertips in order to make the best possible decision.



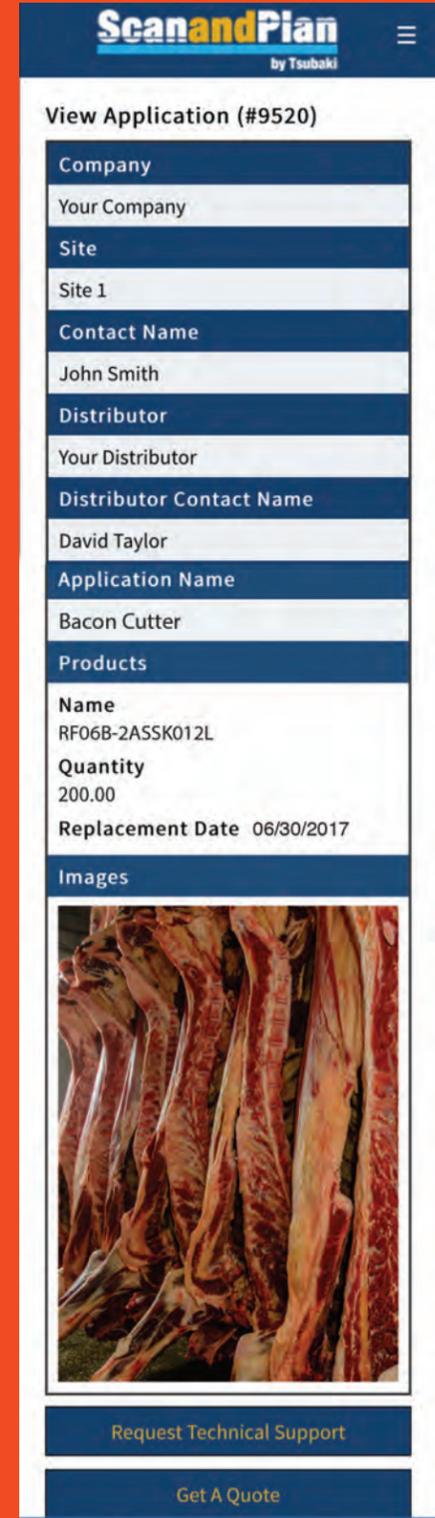
Scan and Plan is as EASY as 1, 2, 3...

Step 1: Contact your local Tsubaki representative to get access to our new QR code system

Step 2: Scan the QR label to get relevant information about your application

Step 3: Use the tool to proactively plan ahead and avoid an unplanned breakdown!

Contact us now to find out how you can get the "Advantage by Tsubaki".



More than a respected name; more than exceptional chain

Tsubaki is more than the world's premier supplier of industrial chain. We're your ultimate source for related products. The same commitment to quality, innovation and performance that built our good name stands behind our entire line of products. In the food-processing industry, we convey value.



Sprockets

Made in Canada. Tsubaki's ISO-certified facility can meet your demands, no matter how unique. Bore options include finished, bushing style, powerlock, splined, split, square, hex and other custom combinations. Tsubaki offers a wide range of materials and surface finishes, including the best suited carbon steels, different types of stainless, nickel and zinc plating. Trust the world's largest chain manufacturer to know the correct hardness levels for your sprocket teeth.



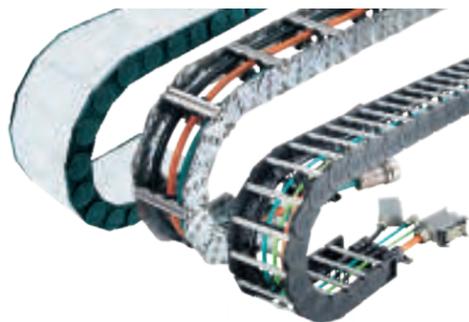
Powerlock – keyless locking device

End your high-machining expenses for long-shaft keyways, splined shafts, threads, grooves and steps. The Tsubaki Powerlock offers exacting, slip-free location. Eliminate backlash damage to keyways from heavy loads; the Powerlock fits tightly around the shaft/hub and is not affected by load reversals.



Shock relay – the electronic shear pin

Protect your equipment and investment. Unexpected shock loads can damage chains, drives, gears, bearings — entire mechanical assemblies. When shock relay detects a problem, it shuts down the line quickly, safely and securely. After the problem is corrected, the shock relay is reset with the touch of a button. No tear down is required. That means improved efficiency, reduced downtime and big savings in both time and money.



KabelSchlepp

Protect your cables and hoses with Tsubaki KabelSchlepp carriers! We offer a full range of metal and polymer carrier systems along with a wide range of power and control cables, hydraulic hoses and pneumatic tubes.

Totaltrax—From Design to the Complete System

We develop, design and supply all components required for your individual cable and hose carrier system. You receive a ready-to-connect, assembled cable carrier system, packed and ready for installation.

At Tsubaki, we support what we sell. This means that we are your partner in reducing downtime, lowering maintenance costs and increasing productivity. Not everyone can say that. Tsubaki's Technical Services staff is available for on-site inspections and will recommend the best solution for your application. We can also tailor our in-house seminar workshops to your individual needs.

Our services include the following:

Maintenance Seminars

- Professional Audio-Video Presentation.
- Hands on Learning.
- Certificate of Attendance.
- Course Material Handout Package.
- Metal Chain Wear Scale.
- Group Picture.

Site Surveys

- Two-Person Teams from Tsubaki.
- Chain Identification and Drawing.
- Wear Life Estimate.
- Identify Condition and Critical Points.
- Establish Regular Follow-Up Schedule.
- Report will be provided within 1 week of survey completion.

Application Troubleshooting and/or Wear Analysis

- Tsubaki Technical Services Staff Site Visit.
- Initial Evaluation.
- Full report will be provided within 48 hours of completion of site visit including selection verification.

Facility Tour and Full Day Seminars

Sprocket Manufacturing Facility Tour:

- Learn the techniques and processes used in sprocket production.

Various Seminar Topics Available:

- Maintenance
 - Troubleshooting
 - Basic and Advanced Product Selection
 - Chain Academy (Basic School)
- (Meals / snacks / beverages may be provided).

Failure and/or Wear Analysis

- A full report will be provided within 48 hours and will include photos, failure / wear causes, effects and solutions.
- If more time (ie. over 48 hours) is required to complete the final report, we will provide the findings to date in a preliminary report.

Sample Identification

- Chain Number and Sketch.

Chain Selection

Simple Selection:

A report that indicates selection process only.

Intermediate Selection:

Detailed Report.
Drawing of Selected Product.
Calculations.
Double Check Sign Off.

Advanced Selection (includes all of above plus:)

Expected Life Estimate.
Maintenance Requirements and Schedule.



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CAT-FOOD-TCL

Note: In accordance with the policy of Tsubaki of Canada Limited to consistently improve its products, the specifications in this catalogue are subject to change without notice. Please contact Tsubaki for current prices.