



Power and Performance

for the Sugar Industry





Global Manufacturing, **TSUBAKI Quality**

TSUBAKI has sales and manufacturing locations around the world to provide our customers with the solutions they need.

These global manufacturing bases all provide consistent, dependable quality: TSUBAKI Quality.

TSUBAKI started in Japan a century ago, where we set the standards of carefully cultivated, fundamental technology, and quality control for all our manufacturing facilities worldwide.

Customers can rest assured that no matter where their product was made, TSUBAKI Quality was infused in the manufacturing process from beginning to end.

We will continue to listen to customers' needs and provide the products and solutions that have made TSUBAKI the global leader in power transmission.

**One Name,
One Quality**

TSUBAKI

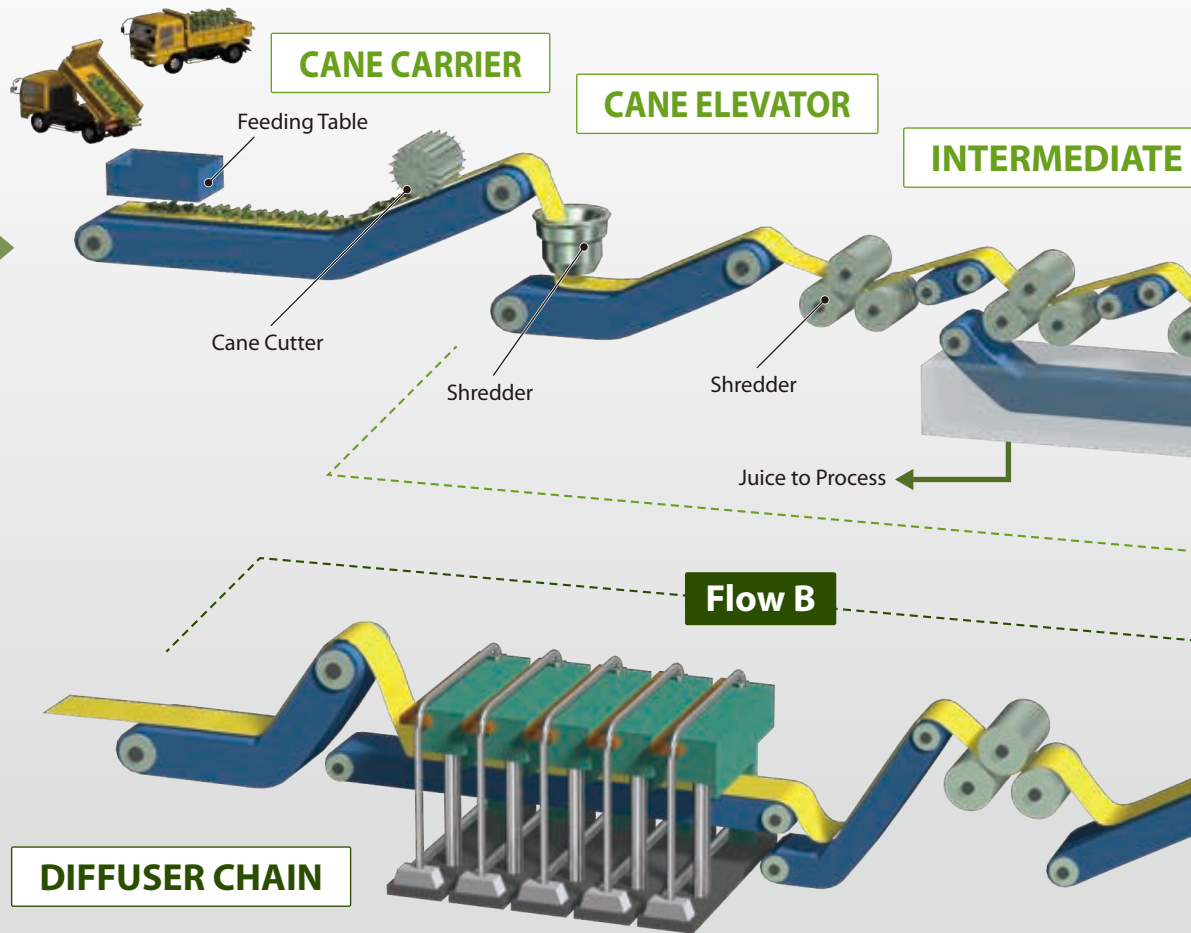


TSUBAKI Products for Sugar

CANE HARVESTER



Process Layout for MILL TYPE SYSTEM



Process Layout for DIFFUSER SYSTEM



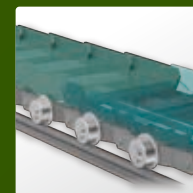
DRIVE CHAINS

PAGE 5



CANE HARVESTER CHAINS
MUD CONVEYOR CHAINS

PAGE 8



CANE BAGASSE CARRIER CHAIN with OUTBOARD ROLLERS

PAGE 10



UNDERFEED ROLLER CHAINS AND CRYSTALLIZER CHAINS

PAGE 6



CANE CARRIER CHAIN

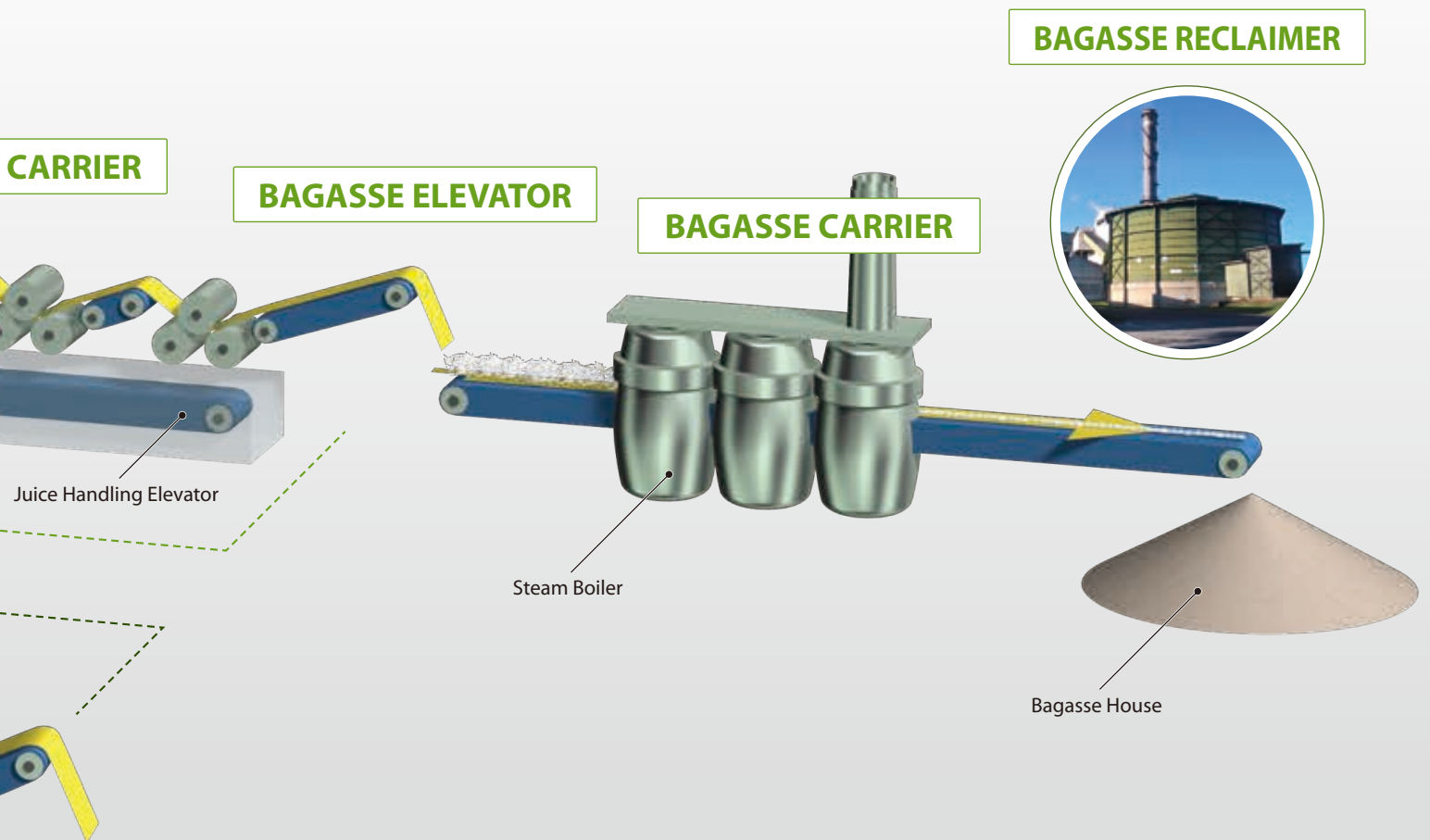
PAGE 9



INTERMEDIATE AND BAGASSE CARRIER CHAIN

PAGE 11

Industry



BO/BOP TYPE CHAIN ELEVATOR CHAIN

PAGE **12**



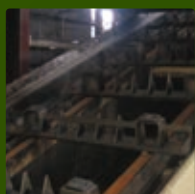
BAGASSE RECLAIMER CHAINS

PAGE **14**



CANE BIN POSITIONER (SPOTTER) OVERRUNNING CLUTCHES FOR BOILER OPERATION

PAGE **16**



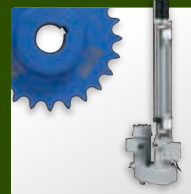
INTERMEDIATE CARRIER CHAINS

PAGE **13**



DIFFUSER CHAIN

PAGE **15**



SPROCKETS FOR LARGE SIZE CONVEYOR CHAIN POWER TRANSMISSION UNITS AND COMPONENTS
- POWER CYLINDER - CAM CLUTCH BOX - SHOCK MONITOR

PAGE **17**

Innovative Solutions for the Sugar Industry

DRIVE CHAINS



Drive Chain G8 Series



The G8 Series is a superior drive chain developed utilizing TSUBAKI's 100 years of manufacturing expertise.



Scan to see more about G8 Series Drive Chain

RS Roller Chain G8 (Standard Drive Chain)



Economical and Long Life

TSUBAKI's standard RS G8 Series Roller Chain uses a seamless solid bush developed by advanced TSUBAKI engineering and processing. TSUBAKI's patented lube groove technology in our precision solid bushes retains lubrication and provides superior wear life.

*Lube grooves available for RS80-RS140 only. (RS16B-RS28B for BS/DIN standard)

Solid bush
Lube groove*

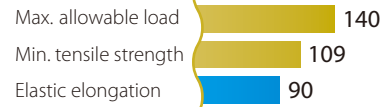
Super (Heavy Duty) Drive Chains



For Heavy Duty Transmission

TSUBAKI offers a variety of heavy duty and Super chains to provide users with a higher maximum allowable load, shock absorption, fatigue strength, and tensile strength than standard RS roller chains.

Super Chain Performance Comparison with RS Roller Chain



*With RS Roller Chain as benchmark (100)

Available sizes : RS80 – RS240, up to sextuple strand

Surface Treated NEPTUNE CHAIN®



Outstanding Corrosion Resistance

TSUBAKI's NEPTUNE CHAIN® combines uniquely developed base and resin coatings for superior corrosion and chemical resistance against water and alkalis.

In-house Salt Spray Test Results



TSUBAKI: 700hrs NO RUST



Company A: 100hrs



Company B: 300hrs



Company C: 400hrs

Titan™ Series Drive Chain



Superior Wear Life in High Speeds and Harsh Conditions

Titan™ Chain integrates the latest advancements from TSUBAKI's research and development to increase the wear life of roller chains in high speeds and harsh environments. Titan Chain incorporates the best features of our standard ANSI chain along with new and unique features to outperform other extended life chains.



1. Special Coated Pins



2. Zinc Coated Pin Link Plates and Black Oxide Roller Link Plates



3. Solid Lube Groove Bushes

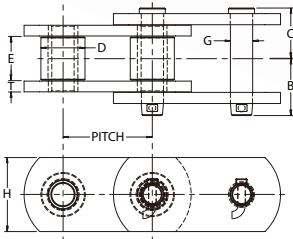
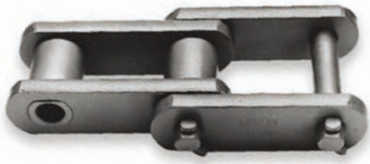


4. Ring Coined Connecting Links

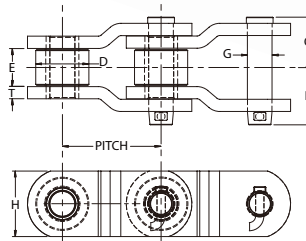
UNDERFEED ROLLER CHAINS AND CRYSTALLIZER CHAINS



Heavy Duty Roller Chain



Sty : S



Sty : O

Tsubaki engineering class heavy duty roller chain is designed for use in fields where applications require stronger than normal chain. Chains with greater ultimate strength have higher actual yield and greater fatigue strength. With Tsubaki chains, you get an extra reserve of strength to withstand high shock loads.

All dimensions are in mm unless otherwise indicated.

Chain No.	Pitch	Sty. ¹	ANSI No.	Pin End to CL	Pin Head to CL	Inside Width	Pin			Roller		Sidebar			Bushing		Avg. Ult. Stgth. kN{kgf}	Max Work Load kN{kgf}	Appx. Weight kg/m
							Dia.	Sty. ²	Matl. ³	Dia.	Matl. ³	Hgt.	Th.	Matl. ³	Dia.	Matl. ³			
				B	C	E	G			D		H	T						
US-2065 (RO1613AK)	50.80	O		42.93	36.58	32.3	14.99	K	AHTIH	28.70	AHT	41.40	7.87	AHT	20.57	ACH	289 {29,500}	17.7 {1,810}	11.3
RO-3140 (RO3140)	44.45	O		35.81	30.23	25.4	13.97	K	AHT	25.40	AHT	43.18	6.35	AHT	19.30	ACH	254 {25,900}	12.5 {1,270}	9.7
RO-3160 (RO3160)	50.80	O		38.86	33.27	31.8	13.72	K	AHT	28.70	AHT	49.28	6.35	AHT	20.32	ACH	299 {30,500}	15.3 {1,560}	10.0
RO-3180 (RO3180)	57.15	O		44.20	37.34	36.6	17.53	K	AHT	35.81	AHT	54.10	7.11	AHT	25.40	CCH	356 {36,300}	21.4 {2,180}	14.3
RO-25H (RO25H)	63.50	O		49.78	43.43	38.1	16.51	K	AHTIH	31.75	AHT	41.40	9.65	AHT	23.11	ACH	387 {39,500}	21.8 {2,220}	13.7
520RX	65.10	O		36.58	30.99	26.9	12.70	A	CHT	28.70	CHT	31.75	6.35	CHT	19.05	ACH	111 {11,300}	12.5 {1,270}	7.1
US-882 (RO588)	66.27	O		36.58	31.75	28.7	11.18	K	AHT	22.35	AHT	28.70	6.35	CHT	16.26	ACH	116 {11,800}	11.1 {1,130}	5.4
US-3011 (RO568)	77.90	O	2512	54.10	44.45	39.6	19.05	K	AHTIH	41.40	AHT	57.15	9.65	AHT	28.45	ACH	489 {49,900}	27.2 {2,770}	17.9
US-1030	78.11	O		46.74	39.62	38.1	16.00	K	AHTIH	31.75	AHT	38.10	7.87	HC	22.86	ACH	125 {12,700}	20.7 {2,110}	10.4
US-1031 (RO3)	78.11	O		46.74	40.39	38.1	16.00	K	AHTIH	31.75	AHT	38.10	7.87	CHT	22.86	ACH	214 {21,800}	20.7 {2,110}	10.4
US-3075 (RO3H)	78.11	O		50.80	43.69	38.1	16.51	K	AHTIH	31.75	AHT	44.45	9.65	AHT	23.11	ACH	333 {34,000}	22.7 {2,310}	14.3
US-3514 (RO1616)	88.90	O	2814	60.45	51.56	38.1	22.35	K	AHTIH	44.45	AHT	57.15	12.70	AHT	31.75	ACH	623 {63,500}	34.0 {3,490}	24.0
US-1241	103.20	O		65.02	57.15	49.3	22.35	K	AHTIH	44.45	AHT	57.15	12.70	AHT	31.75	ACH	498 {50,800}	40.0 {4,080}	24.3
US-1242 (RO4)	103.20	O		65.02	57.15	49.3	22.35	K	AHTIH	44.45	AHT	57.15	12.70	AHT	31.75	ACH	623 {63,500}	40.0 {4,080}	24.0
US-1245 (RO1245)	103.45	O	3315	69.85	60.45	49.3	23.88	K	AHTIH	45.21	AHT	60.45	14.22	AHT	33.27	ACH	756 {77,100}	44.9 {4,580}	26.8
US-4121 (RO1343)	103.89	O		69.85	60.45	49.3	25.40	K	AHTIH	47.75	AHT	69.85	14.22	AHT	35.31	AHT	935 {95,300}	47.6 {4,850}	20.2
US-4122 (RO1345)	103.89	O		69.85	60.45	49.3	27.94	K	AHTIH	50.80	AHT	69.85	14.22	AHT	38.10	AHT	1045 {106,600}	52.1 {5,310}	20.8
US-4522 (RO635)	114.30	O	3618	73.15	62.23	52.3	27.94	K	AHTIH	57.15	AHT	76.20	14.22	AHT	41.15	AHT	979 {99,800}	54.7 {5,580}	37.8
US-5031 (RO1602AA)	127.00	O	4020	85.85	77.72	69.9	31.75	K	AHTIH	63.50	AHT	88.90	16.00	AHT	44.45	ACH	1379 {140,600}	77.9 {7,940}	50.6
US-5035 (RO1605AK)	127.00	O		89.15	78.23	65.0	35.05	K	AHTIH	63.50	AHT	88.90	19.05	AHT	47.75	AHT	1557 {158,800}	87.2 {8,890}	56.7
US-5542	139.70	O		97.79	86.61	76.2	38.10	K	AHTIH	76.20	AHT	101.60	19.05	AHT	50.80	AHT	1868 {190,500}	105 {10,700}	73.1
US-5738	146.05	O		93.73	84.07	76.2	38.10	K	AHTIH	76.20	AHT	101.60	17.53	AHT	50.80	AHT	1691 {172,400}	102 {10,430}	68.5
US-6042 (RO6042)	152.40	O	4824	97.79	86.61	76.2	38.10	K	AHTIH	76.20	AHT	101.60	19.05	AHT	50.80	AHT	1868 {190,500}	105 {10,700}	67.0
US-6066	152.40	O		97.28	90.17	76.2	44.45	K	AHTIH	—	—	120.65	19.05	AHT	76.20	AHT	2669 {272,200}	123 {12,520}	76.9
US-645	63.50	S		50.80	42.93	38.1	22.35	K	AHT	39.62	AHT	54.10	9.65	AHT	30.23	ACH	556 {56,700}	30.7 {3,130}	19.5
3445XX	76.20	S		69.85	60.45	49.3	23.88	K	AHTIH	45.21	AHT	60.45	14.22	AHT	33.27	ACH	756 {77,100}	44.7 {4,560}	32.7
US-4031	101.60	S		84.84	73.91	69.9	31.75	K	AHTIH	63.50	AHT	88.90	16.00	AHT	44.45	ACH	1379 {140,600}	77.9 {7,940}	59.5
US-1353	103.89	S		78.49	67.56	55.6	33.27	K	AHTIH	66.80	AHT	88.90	16.00	AHT	47.75	ACH	935 {95,300}	71.2 {7,260}	56.0
US-5042	127.00	S		97.79	86.61	76.2	38.10	K	AHTIH	76.20	AHT	101.60	19.05	AHT	50.80	AHT	1868 {190,500}	105 {10,700}	78.9
US-6566	165.10	S		110.74	100.33	81.0	44.45	K	AHTIH	88.90	AHT	152.40	22.35	AHT	61.98	AHT	2669 {272,200}	136 {13,880}	105.8

Indicates chain is normally stocked. All others made to order.

¹Style: O= offset sidebar; S=straight sidebar

²Pin Style: K=Full round; A=Double flat

³Material: HC=High carbon; CHT=Carbon heat treated; AHT= Alloy heat treated; AHTIH=Alloy heat treated and induction hardened; CCH=Carbon case hardened; ACH=Alloy case hardened

Note: Dimensions are subject to change. Contact a Tsubaki representative to obtain certified prints for design and construction.

Engineering Class Sprockets

Engineering class chains and sprockets must work together, so buying them from the same source makes sense. When chains and sprockets articulate correctly, you get longer service life from your chain. That means long-term savings and real value for your operation.

Chain life is only as good as the sprocket that drives it, so maximize your operation with Engineering Class Sprockets from Tsubaki.



Tsubaki Conveyor Chains for the Sugar Industry

Thanks to our 100 years of experience and performance, Tsubaki is able to provide solutions to any imaginable problems users face when using conveyor chain.



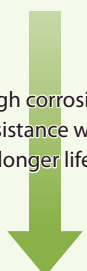
TSUBAKI Conveyor Chain Selection

We can adapt the materials used and heat treatment of the chains' components to match your application and operating environment. We also offer a line-up of chains with stainless steel components to protect against the corrosion, which is especially problematic on bagasse carriers and elevators.

The stainless steel components these chains use can be heat treated to provide wear and corrosion resistance, as well as additional strength.

	Link Plate	Pin	Bush	Roller
Basic series	Alloy heat treated	Alloy heat treated	Alloy heat treated	Alloy heat treated
Bush corrosion resistance	Alloy heat treated	Alloy heat treated	400 series stainless steel heat treated	Alloy heat treated
Pin/bush corrosion resistance	Alloy heat treated	400 series stainless steel heat treated	400 series stainless steel heat treated	Alloy heat treated

High corrosion resistance with longer life

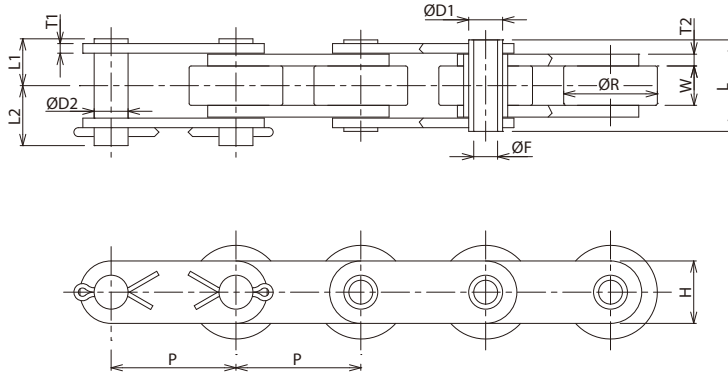


Innovative Solutions for the Sugar Industry

CANE HARVESTER CHAINS

Our cane harvester chains are manufactured to Tsubaki's exacting specifications at our ISO certified manufacturing facility.

All of our components are shot peened and the chain is also statically pre-loaded to give it enhanced wear life in the harsh conditions of the cane fields.



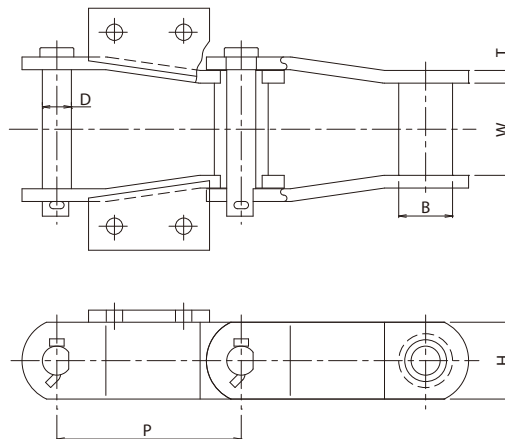
Upper dimensions: mm
Lower dimensions: inches

Chain No.	P	R	W	T1	T2	H	D1	D2	F	L	L1	L2
RF264HP	50.8 2.00	38.1 1.50	16 0.63	3.9 0.15	4.8 0.19	25.4 1.00	13.8 0.54	13.8 0.54	9.7 0.38	37.2 1.46	19.05 0.75	24.4 0.96

Innovative Solutions for the Sugar Industry

MUD CONVEYOR CHAINS

Tsubaki manufactures a wide range of mud conveyor chains specially designed for the damp conditions they face, such as models that use stainless steel pins and bushes to protect against corrosion and wear. Additional sizes and series are available on request.



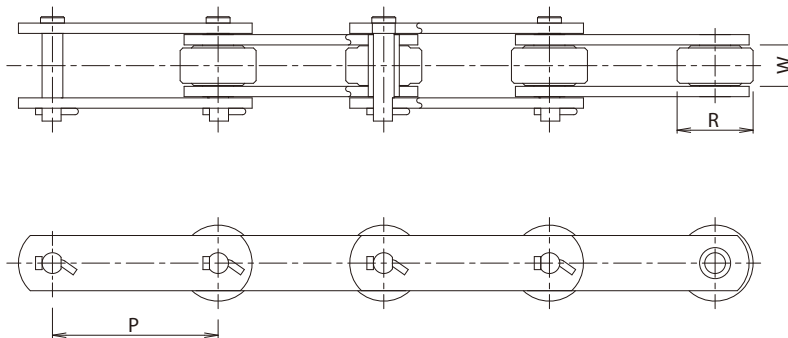
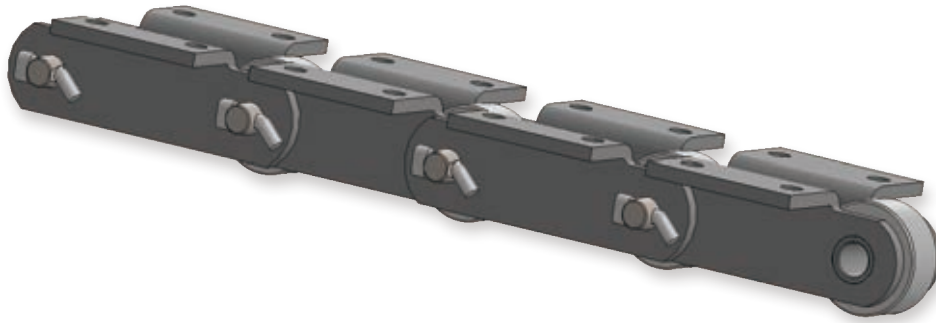
Upper dimensions: mm
Lower dimensions: inches

Chain No.	P	B	W	T	H	D
BOP152.4	152.4 6.00	31.75 1.25	61.9 2.44	9.7 0.38	38.1 1.50	19.5 0.77

Innovative Solutions for the Sugar Industry

CANE CARRIER CHAIN

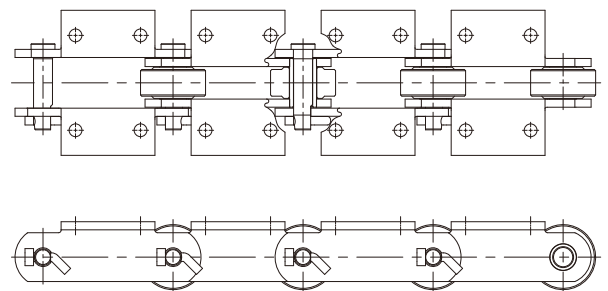
Cane carrier chains operate under the harshest conditions in sugar mills. Tsubaki offers a wide variety of cane carrier chains that provide excellent durability and wear resistance. We select the most appropriate materials and heat treatment to meet the demands of the application.



Upper dimensions: mm
Lower dimensions: inches

Chain No.	P	R	W
RF205	78.11 3.075	31.8 1.25	37.1 1.46
RF2188	101.6 4.00	44.45 1.75	31.6 1.24
RF0904	101.6 4.00	50.8 4.00	29.4 1.16
RF1113	102.6 4.039	50.8 4.00	31.6 1.24
RF2124	152.4 6.00	69.9 2.75	37.1 1.46
RF0906	152.4 6.00	69.9 2.75	37.1 1.46
RF09060	152.4 6.00	69.9 2.75	37.1 1.46
RF09061	152.4 6.00	69.9 2.75	37.1 1.46
RF2178A	152.4 6.00	69.9 2.75	38.1 1.5
RF2198A	152.4 6.00	69.9 2.75	38.1 1.5
RF09063	152.4 6.00	76.2 3.00	36.5 1.44
RF2315	228.6 9.00	76.2 3.00	43 1.69
RF2129	228.6 9.00	82.5 3.25	37.1 1.46

►► Attachments



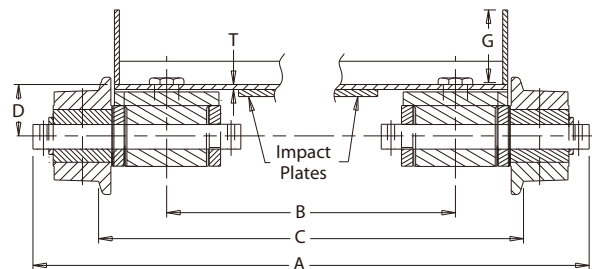
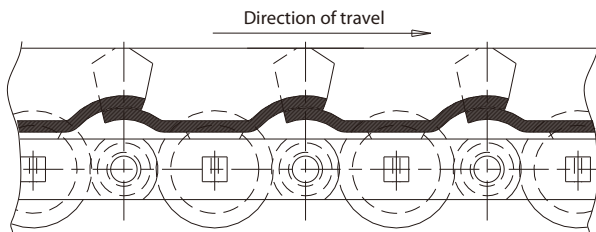
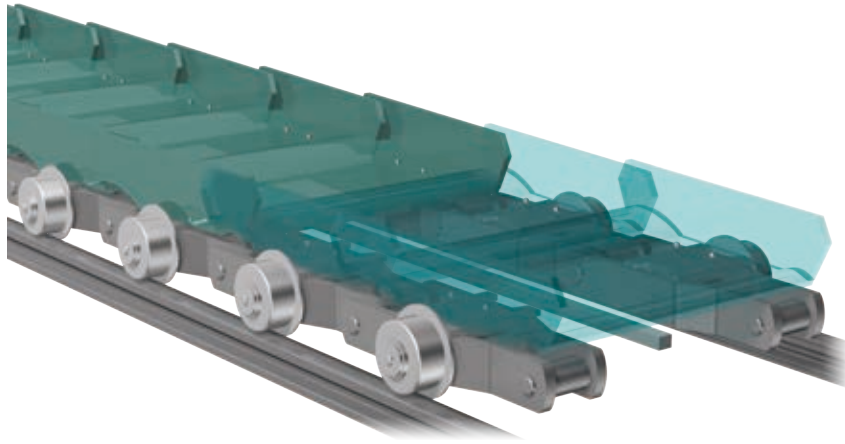
Other chains not shown are also available.
Contact a Tsubaki representative for more information.

Innovative Solutions for the Sugar Industry

CANE BAGASSE CARRIER CHAIN with OUTBOARD ROLLERS

The unique outboard roller design from Tsubaki makes maintenance a breeze. The chain is designed to maintain a thin layer of lubrication on the bearing surface, extending the service life of the system.

And the convenient location of the rollers makes it easy to replace a broken one without dismantling the entire system, eliminating excessive and costly downtime.



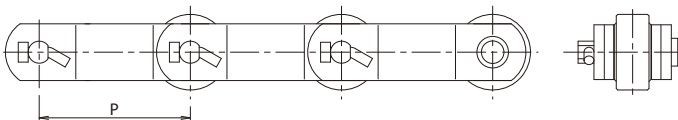
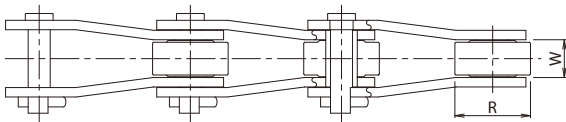
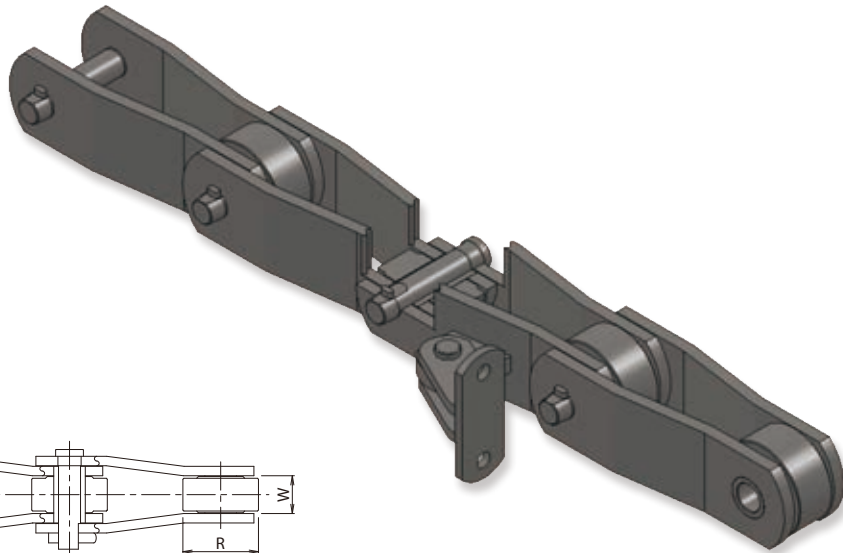
OBR Style Apron Conveyors

Upper dimensions: mm
Lower dimensions: inches

Style	Chain No.	Pitch	Width			Centerline Chain to Top of Pan Bead	Base Dimension	Pan Thick.	Max. Work Load kg (Lbs.)	Weights/Lbs.		
			Overall	Center to Center Sprocket	Track Gauge					Conveyor Wt. Per Meter (Ft.) 457.20mm (18") Pan	Approx. Wt. Each 25.40mm (1") Added to Height	Wt. Added Each 152.40mm (6") of Width
			A	B	C	D	G	T				
Style A OBR Aprons	961R	228.6 9.00	712.72 28.06	374.65 14.75	573.02 22.56	73.15 2.88	101.6 4.00	6.35 0.25	8,164.75 18,000	52.3 115.2	1.3 2.9	3.8 8.3
	2397R	304.8 12.00	692.15 27.25	385.83 15.19	553.97 21.81	95.25 3.75	101.6 4.00	6.35 0.25	8,346.19 18,400	42.0 92.5	1.2 2.6	3.4 7.5
	1706R	304.8 12.00	712.72 28.06	374.65 14.75	573.02 22.56	95.25 3.75	101.6 4.00	6.35 0.25	12,700.72 28,000	49.3 108.7	1.2 2.6	3.4 7.5
	2614R	304.8 12.00	703.33 27.69	360.43 14.19	560.32 22.06	107.95 4.25	101.6 4.00	6.35 0.25	15,875.90 35,000	71.3 157.1	1.2 2.6	3.4 7.5
	2614R	304.8 12.00	703.33 27.69	360.43 14.19	560.32 22.06	111.25 4.38	101.6 4.00	9.652 0.38	15,875.90 35,000	78.2 172.4	1.8 4.0	5.1 11.3

INTERMEDIATE AND BAGASSE CARRIER

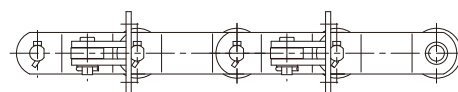
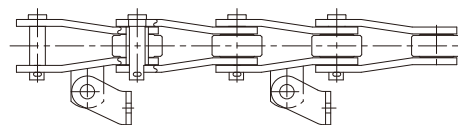
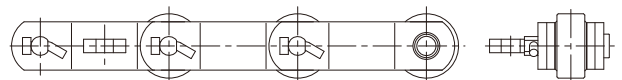
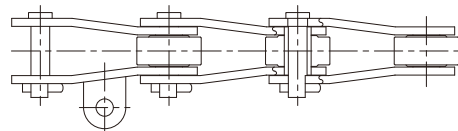
Resistance to both corrosion and wear is essential for Intermediate and Bagasse Carrier Chain. Tsubaki Intermediate and Bagasse Carrier Chain meet the requirements of these applications and also provide outstanding durability.



Upper dimensions: mm
Lower dimensions: inches

Chain No.	P	R	W
RO1112	93.7 3.688	44.45 1.75	27.6 1.09
RO1124	101.6 4.00	50.8 2.00	32.3 1.27
RO1125	101.6 4.00	50.8 2.00	32.6 1.28
RO0904	101.6 4.00	50.8 2.00	29.4 1.16
RO1113	102.6 4.04	50.8 2.00	37.5 1.48
RO1130	152.4 6.00	63.5 2.50	37.6 1.48
RO2184	152.4 6.00	76.2 3.00	34.9 1.37
RO2184A	152.4 6.00	76.2 3.00	34.9 1.37
RO0906	152.4 6.00	69.9 2.75	37.1 1.46
RO09060	152.4 6.00	69.9 2.75	37.1 1.46
RO09061	152.4 6.00	69.9 2.75	37.1 1.46
RO2178A	152.4 6.00	69.9 2.75	38.1 1.5
RO203.2	203.2 8.00	89 3.50	46.1 1.81
RO228.6	228.6 9.00	89 3.50	46.1 1.81
RO228.6	228.6 9.00	99 3.90	47 1.85
RO228.6	228.6 9.00	99 3.90	48 1.89

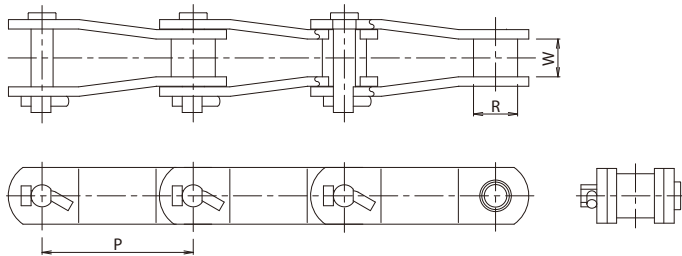
►►► Attachments



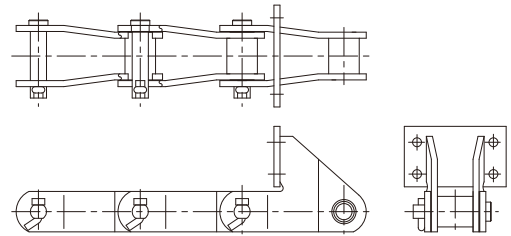
Other chains not shown are also available.
Contact a Tsubaki representative for more information.

CHAIN

BO/BOP Type Chain



►► Attachments



Upper dimensions: mm
Lower dimensions: inches

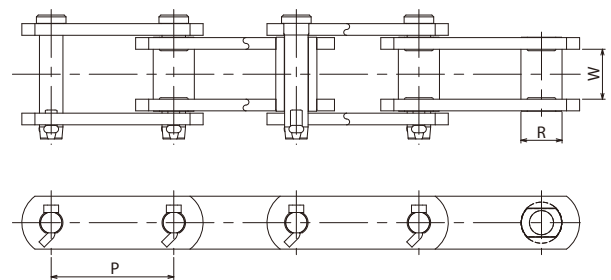
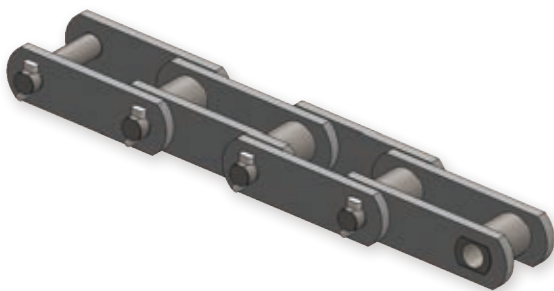
Chain No.	P	R	W
BO09060	152.4 6.00	35 1.38	37.1 1.46
BO2184A	152.4 6.00	42 1.65	34.9 1.37
BOP160	160 6.30	48 1.89	56 2.20

Chain No.	P	R	W
BOP160A	160 6.30	48 1.89	56 2.20
BOP200	200 7.87	48 1.89	56 2.20
BOP200A	200 7.87	48 1.89	56 2.20

ELEVATOR CHAIN

Tsubaki ANSI bushed chains for use in elevators and conveyors have been specially designed to offer maximum performance and durability. These high strength chains are compatible with sprockets used for cast iron combination chains.

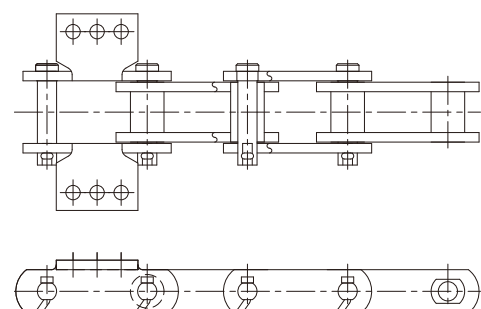
BF Type Chain TSUBAKI recommends the BT and VT series



Upper dimensions: mm
Lower dimensions: inches

Chain No.	P	R	W
BF188	66.27 2.609	22.2 0.88	27 1.06
BF131	78.11 3.08	31.8 1.25	33.3 1.31
BF102B	101.6 4.00	25.4 1.00	54 2.13
BF111	120.9 4.76	36.5 1.44	66.7 2.63
BF110	152.4 6.00	31.8 1.25	54 2.13
BF150	153.67 6.05	44.5 1.75	84.1 3.31

►► Attachments



INTERMEDIATE CARRIER CHAINS

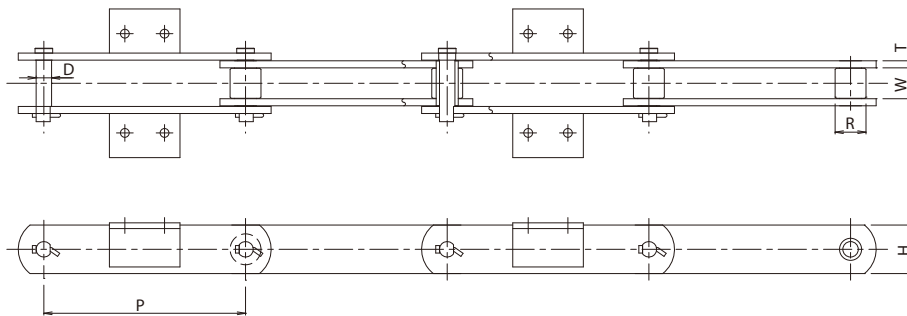
RF Conveyor Type



Our RF Series intermediate carrier chains are built from the finest material and use the same special stainless steel grade for the pin and bush that was designed for the bagasse reclaimer application to protect against corrosion and wear.

The pin and bush areas are also lubricated with MoS₂ grease during assembly. Further, since the chain is normally not lubricated during operation this MoS₂ grease has been baked on in areas to provide additional lubrication functions.

Additional sizes and series are available on request.



Upper dimensions: mm
Lower dimensions: inches

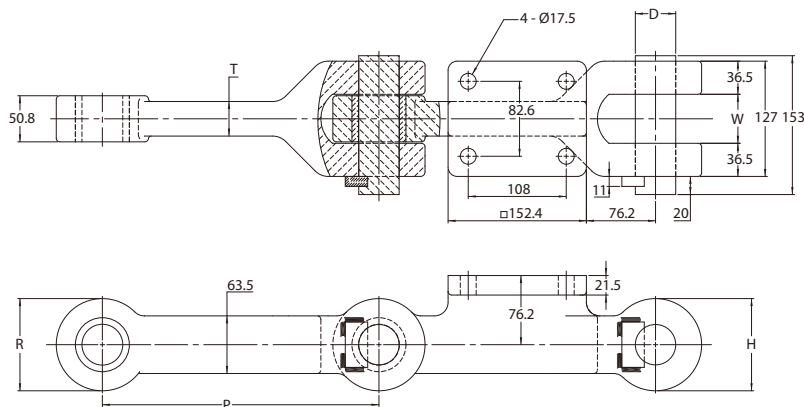
Chain No.	P	R	W	T	H	D
RFP457.2S	457.2 18.00	70 2.76	70 2.76	16 0.63	110 4.33	35 1.38

Cast Dog Bone Link Type



Our cast dog bone link type chains are built strong and have special design features such as stainless steel pins and bushes to protect against the harsh conditions these chains face.

Additional sizes and series are available on request.



Upper dimensions: mm
Lower dimensions: inches

Chain No.	P	R	W	T	H	D
C304.8	304.8 12.00	101.6 4.00	54 2.13	38.1 1.50	101.6 4.00	44.5 1.75

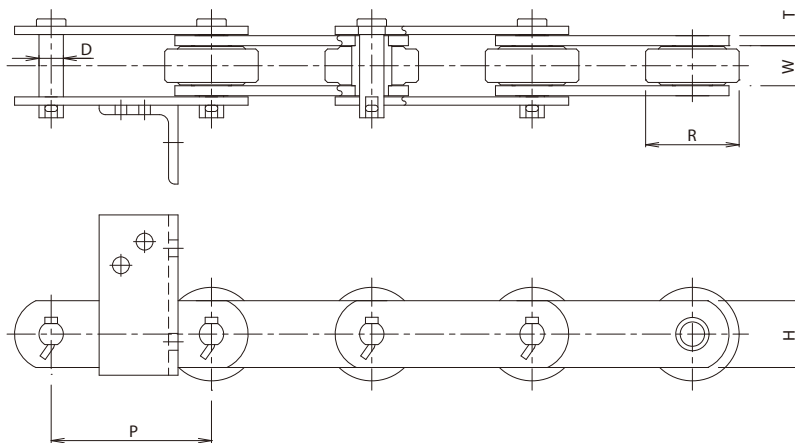
BAGASSE RECLAIMER CHAINS

The bagasse reclaimer powers the mill and so is the most critical chain application.

Tsubaki has spent thoroughly researched the market research and field tested its chains to come up with a grade of stainless steel that has the highest combined levels of corrosion resistance, strength, and wear properties.

In addition to this unique stainless steel grade we also through harden and induction harden our pins to give them the best wear life possible. Due to the lack of lubrication during operation we also lubricate the pin and bushing area with MoS₂ grease during assembly and also bake this grease onto certain areas.

Our attachments are also robotically welded to the chain to ensure the deepest and strongest weld penetration possible.



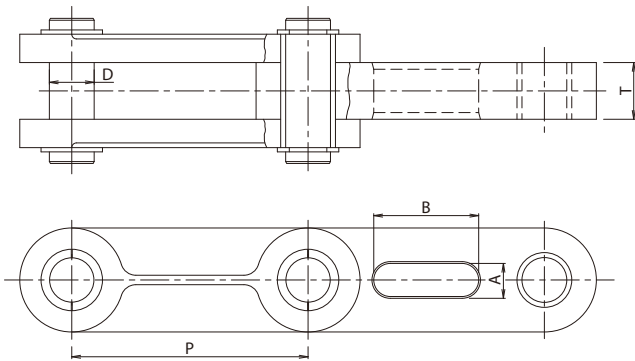
Upper dimensions: mm
Lower dimensions: inches

Chain No.	P	R	W	T	H	D
RFP152.4R-6LF2	152.4 6.00	88.9 3.50	31.8 1.25	9.5 0.37	63.5 2.50	23.2 0.91
RFP152.4R-6LF2-H	152.4 6.00	88.9 3.50	31.8 1.25	9.5 0.37	63.5 2.50	31.8 1.25

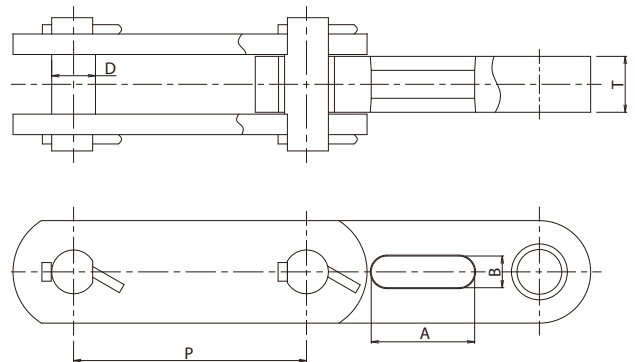
DIFFUSER CHAIN

As with bagasse carriers and bagasse elevator chains, Tsubaki Diffuser Chains use a unique stainless steel material developed by Tsubaki that combines wear resistance, corrosion resistance, and durability.

They are used in sugar mills around the world.



Type 1



Type 2

Upper dimensions: mm
Lower dimensions: inches

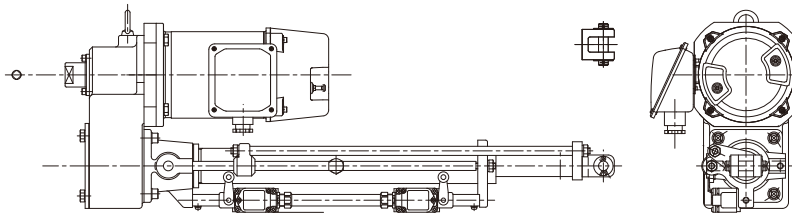
Chain No.	type	P	D	T	A	B
NEF250	1,2	250	47	60	111	35
		9.84	1.85	2.36	4.37	1.38
NEF500	2	500	49	60	135	35
		19.685	1.93	2.36	5.31	1.38

Innovative Solutions for the Sugar Industry

CANE BIN POSITIONER (SPOTTER)

Our Power Cylinders come with a full range of options such as limit switches, rotary encoders, and potentiometers for all your positioning requirements.

Additional sizes and series are available on request.

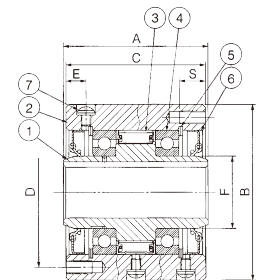
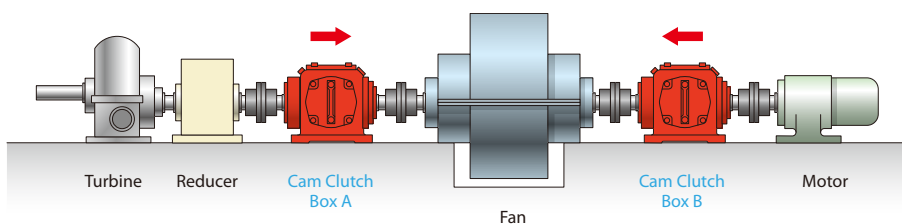


Power Cylinder Model		Rated Thrust N (kgf)	Nominal Speed 50/60Hz mm/s	Motor Output kW	Rod Movement Per One Turn of Manual Shaft mm	Rod Rotating Force N·m (kgf·m)	Nominal Stroke mm
LPTB 250 LPTC 250	S	2.45k {250}	12.5/15	0.1	2.0	2.60 {0.27}	200, 300, 400, 500, 600
	L		25/30	0.1	1.0		
	M		50/60	0.2	2.0		
	H		100/120	0.4	4.0		
LPTB 500 LPTC 500	S	4.90k {500}	12.5/15	0.1	2.0	5.20 {0.53}	200, 300, 400, 500, 600, 800
	L		25/30	0.2	1.0		
	M		50/60	0.4	2.0		
	H		100/120	0.75	3.9		
LPTB 1000 LPTC 1000	S	9.80k (7.84k) {1000} ({800})	12.5/15	0.2	2.0	13.8 {1.41}	200, 300, 400, 500, 600, 800 *1000 (Rated thrust is 7.84kN)
	L		25/30	0.4	1.0		
	M		50/60	0.75	2.0		
	H		100/120	1.5	4.0		

Innovative Solutions for the Sugar Industry

OVERRUNNING CLUTCHES FOR BOILER OPERATION

Our MG and MI Series are just two of a larger range of overrunning clutches we can provide to mills to meet their overrunning and power saving requirements. Other sizes and series are available on request.



Model	Torque Capacity (N·m)	Drag Torque (N·m)	Max. Overrunning (r/min)		Max. Indexing (cycle/min)	Bore Size		A	B (h7)	C	PCD D	E	F	S	H-M No. of Tapped Holes × Size × Pitch	Lubrication Filler Plug Size × Pitch	Oil (ml)	Weight (kg)
			Inner Race	Outer Race		Dia. (H7)	Keyway											
MG 300	314	0.23	2,800	900	—	19	5 × 2	63	77	60	66	10.4	28.5	13	4 × M6 × P1.0	M6 × P1.0	25	1.8
MI 300		0.31	50	—	300												50	
MG 400	539	0.29	2,600	800	—	22	5 × 2	70	88	67	73	10.7	31.7	16	4 × M8 × P1.25	M6 × P1.0	30	2.7
MI 400		0.38	50	—	300												60	
MG 500	1,620	0.51	2,400	800	—	31.5	7 × 3	89	108	86	92	12.3	44.4	16	4 × M8 × P1.25	M6 × P1.0	50	5.0
MI 500		0.68	50	—	300												100	
MG 600	3,140	0.85	2,100	700	—	50	12 × 3.5	95	136	92	120	12.8	69.8	16	6 × M8 × P1.25	M6 × P1.0	80	8.6
MI 600		1.54	30	—	300												160	
MG 700	5,880	1.70	1,500	500	—	70	18 × 6	127	180	124	160	19.8	101.5	20	6 × M10 × P1.5	M6 × P1.0	135	19.5
MI 700		2.63	30	—	300												200	
MG 750	9,500	3.43	1,800	600	—	85	24 × 6	153	200	150	175	75	110	25	8 × M14 × P2.0	M8 × P1.25	400	37.0
MI 750		4.12	30	—	300												250	

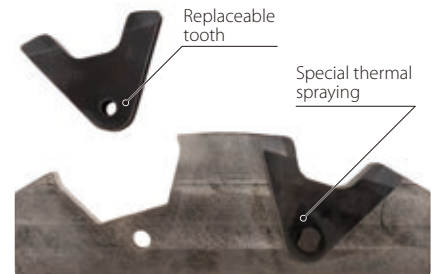
INNOVATIVE SOLUTIONS FOR THE SUGAR INDUSTRY

Sprockets for Large Size Conveyor Chain

Replaceable Sprocket Teeth



Tsubaki also offers a line-up of sprockets where just the teeth can be replaced, which can reduce the massive replacement costs and labor associated with replacing sprockets. We can also deliver sprockets already assembled onto their shafts.



Smart Tooth® Sprockets



Tsubaki Smart Tooth® Sprockets with patented Wear Indicator technology offer users the ability to identify and schedule drive system maintenance before critical component failure occurs. The result is extended chain life and reduced downtime for increased productivity.

Tsubaki's long history of designing innovative chain and sprocket products ensures you will receive the best system solution.



Comparison – New (1) vs. Worn Sprocket (2)

Power Cylinder



Tsubaki Power Cylinders are completely self-contained, motorized linear actuator units, available in a variety of types and speeds.

Their compact size and ease of installation make them ideally suited to a variety of cement sugar mill applications.



Scan to see more about Power Cylinder

Cam Clutch Box



The Cam Clutch Box Series offers Cam Clutches designed within cases that use an ideal lubrication method to enable continuous high-speed operation.

Shock Monitor



This motor power-detecting load sensor can detect a subtle load change in your equipment with a simple wiring system.

Large Size Conveyor Chain Inquiry Sheet

Specify the following when ordering Large Size Conveyor Chain.

Conveyor Name		Ave. Tensile Strength	kN{kgf}
Items Conveyed		Chain Pitch	mm
Corrosion Resistance		Attachment	every link
Wear Resistance		Conveyance Method	Pushed by Dog Direct Conveyance Other
Temp. of Items	Temp. °C	Operating Time	h/d
Dimensions of Items		Running Method	Continuous, Intermittent, Reverse (yes/no)
Mass of Items	MAX kg/each	Lubrication	Can/cannot use
Amt. Conveyed	MAX t/h (loose items) kg/conveyor (individual items)	Motor	AC/DC kW × r/min × motor(s)
		Sprocket No. of Teeth	NT (PCD mm)
Conveyor Length	m	Sprocket Shaft Hole Dia.	φ H8 · H7
Lifting Height	m	Hub	Type() φ × L
No. of Strands	strands (spacing m)	Keyway	No () JIS · b × t parallel
Chain Speed	m/min	Tooth Finishing	Precision fused Machine cut Induction hardened

In case of replacement :

1 Brand of existing chain : Manufactured by	
2 Chain No. :	
3 Attachment :	(Attachment spacing : pitches)
4 Breaking load :	kgf (lbs.)
5 Chain pitch :	mm (inch.)
6 Chain life :	years (seasons)
7 Weakest component parts :	() Pin, () Bushing, () Roller, () Others _____
8 Cause of low chain life :	() Wear, () Corrosion, () Others _____

Simple diagram of conveyor and chain: Include conveyor configuration, intake, discharge methods, rail configuration, return side uptake, etc.

Co. Name:	Division or Department:
Name:	Tel:
Date:	Fax:



TSUBAKIMOTO CHAIN CO.

Japan Tsubakimoto Chain Co. <https://tsubakimoto.com/>

Global Group Companies

AMERICAS

United States U.S. Tsubaki Power Transmission, LLC <https://www.ustsubaki.com/>
Brazil Tsubaki Brasil Equipamentos Industriais Ltda. <https://tsubaki.ind.br/>
Canada Tsubaki of Canada Limited <https://tsubaki.ca/>

EUROPE

Netherlands Tsubakimoto Europe B.V. <https://tsubaki.eu/>
France Kabelschlepp France S.A.R.L. <https://tsubaki-kabelschlepp.com/fr-fr/>
Germany Tsubaki Deutschland GmbH <https://tsubaki.de/>
Tsubaki Kabelschlepp GmbH <https://tsubaki-kabelschlepp.com/de-de/>
Italy Kabelschlepp Italia S.R.L. <https://tsubaki-kabelschlepp.com/it-it/>
Spain Tsubaki Ibérica Power Transmission S.L. <https://tsubaki.es/>
United Kingdom Tsubakimoto UK Ltd. <https://tsubaki.eu/>
Slovakia Kabelschlepp-Systemtechnik, spol. s.r.o. <https://tsubaki-kabelschlepp.com/sk-sk/>
Poland Kabelschlepp Sp. z o.o. <https://kabelschlepp.pl/>

INDIAN OCEAN RIM

Singapore Tsubakimoto Singapore Pte. Ltd. <https://tsubaki.sg/>
Australia Tsubaki Australia Pty. Limited <https://tsubaki.com.au/>
India Tsubaki India Power Transmission Private Limited <https://en.tsubaki.in/>
Indonesia PT. Tsubaki Indonesia Trading <https://tsubaki.id/>
Malaysia Tsubaki Power Transmission (Malaysia) Sdn. Bhd. <https://en.tsubaki.my/>
New Zealand Tsubaki Australia Pty. Limited - New Zealand Branch <https://tsubaki.com.au/>
Philippines Tsubakimoto Philippines Corporation <https://en.tsubaki.ph/>
Thailand Tsubakimoto (Thailand) Co., Ltd. <https://tsubaki.co.th/>
Vietnam Tsubakimoto Vietnam Co., Ltd. <https://tsubaki.net.vn/>

EAST ASIA

Republic of Korea Tsubakimoto Korea Co., Ltd. <https://tsubakimoto-tck.co.kr/>
Taiwan Taiwan Tsubakimoto Trading Co., Ltd. <https://tsubakimoto.tw/>

CHINA

China Tsubakimoto Chain (Shanghai) Co., Ltd. <https://www.tsubaki-sh.cn/>



The Tsubaki Eco Link logo is used only on products that satisfy the standards for environmental friendliness set by the Tsubaki Group.