

# 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 our product was made,

TSUBAKI Quality was infused in the manufacturing process from beginning to end.

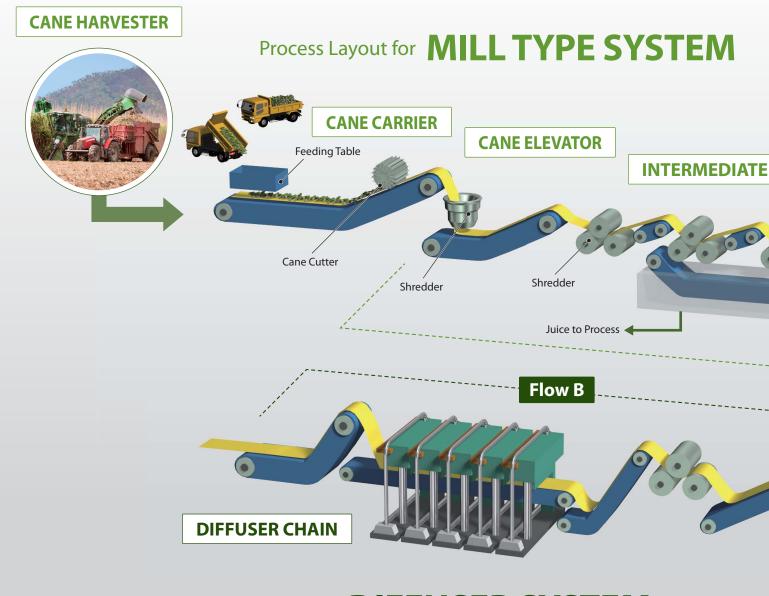
We will continue to listen to customers' needs and provide the products and solutions that have made TSUBAKI the global leader in power transmission.

One Name, One Quality

**TSUBAKI** 



# **TSUBAKI Products for Sugar**



Process Layout for **DIFFUSER SYSTEM** 



**DRIVE CHAINS** 

**CANE HARVESTER** 



**CANE BAGASSE CARRIER CHAIN** with OUTBOARD **ROLLERS** 

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**UNDERFEED ROLLER CHAINS** AND CRYSTALLIZER **CHAINS** 

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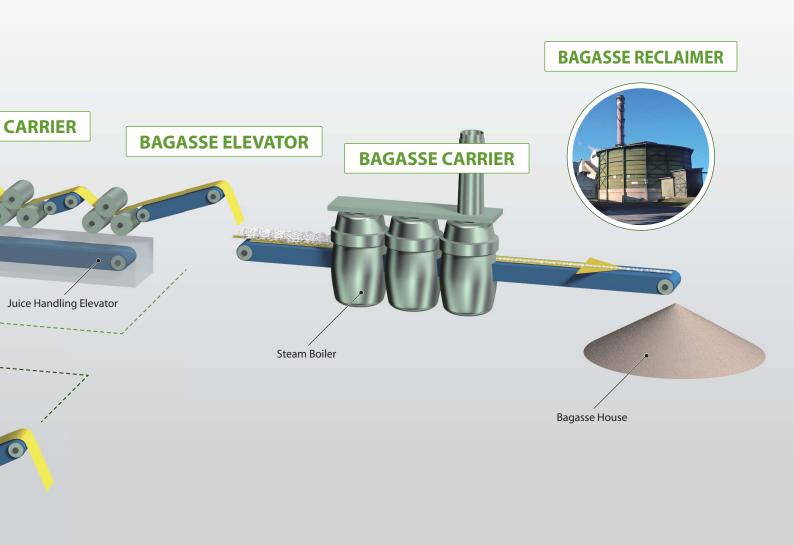
**CANE CARRIER** CHAIN

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**INTERMEDIATE** AND BAGASSE **CARRIER CHAIN** 

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# Industry





BO/BOP TYPE CHAIN ELEVATOR CHAIN

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BAGASSE RECLAIMER CHAINS

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CANE BIN POSITIONER (SPOTTER) OVERRUNNING CLUTCHES FOR BOILER OPERATION

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INTERMEDIATE CARRIER CHAINS

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DIFFUSER CHAIN

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

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# **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 Drive Chain G8 Series

#### RS Roller Chain G8 (Standard Drive Chain)



#### **Economical and Long Life**

TSUBAKI's standard RS G8 Roller Chain uses a seamless solid bushing developed by advanced TSUBAKI engineering and processing. TSUBAKI's patented lube groove technology in our precision solid bushings retain lubrication and provide 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.



#### **Surface Treated NEPTUNE CHAIN®**



#### **Out Standing Corrosion Resistance**

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



### **Drive Chain titan™ Series**



#### Superior Wear Life in High Speed and Harsh Condition

The titan™ Chain integrates the latest advancements from TSUBAKI's research and development to increase the wear life of roller chains in high speed and harsh environments. Our titan™ chain incorporates 4 best features of our standard ANSI chain coupled with new and unique features to outperform other extended life chains.



2 7inc Coated Pin Link Plates



Groove Bushes



1. Special Coated Pins

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

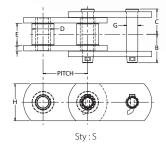
4. Ring-Coined Connecting Links

# UNDERFEED ROLLER CHAINS AND CRYSTALLIZER CHAINS

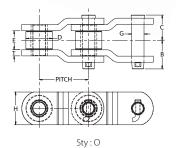


# **Heavy Duty Roller Chain**









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 other						ess otnerwise ii	naicatea.												
			ANSI	Pin	Pin	Inside		Pin		Ro	ller	9	Sideba	r	Bus	hing	Avg. Ult.	Max	Аррх.
Chain No.	Pitch	Sty. <sup>1</sup>	No.	End to CL	Head to CL	Width	Dia.	Sty. <sup>2</sup>	Matl. <sup>3</sup>	Dia.	Matl. <sup>3</sup>	Hgt.	Th.	Matl. <sup>3</sup>	Dia.	Matl. <sup>3</sup>	Stgth. kN{kgf}	Work Load kN{kgf}	Weight kg/m
				В	C	Е	G			D		H	Т						
US-2065 (RO1613AK)	50.80	0		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	0		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	0		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	0		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	0		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	0		36.58	30.99	26.9	12.70	Α	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	0		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	0	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	0		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	0		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	0		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	0	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}	34.2 {3,490}	24.0
US-1241	103.20	0		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	0		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	0	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	0		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	0		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	0	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	0	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	0		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	0		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	0		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	0	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	0		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-64S	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
344SXX	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.

<sup>1</sup>Style: O= offset sidebar; S=straight sidebar

<sup>2</sup>Pin Style: K=Full round; A=Double flat

<sup>3</sup>Material: 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 Union Chain 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 Sugar Industry

Thanks to our 100 years of experience and performance, Tsubaki is able to provide solutions to any problems imaginable 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.

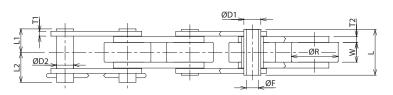
	Link Plate	Pin	Bush	Roller
Basic series	Alloy heat treated	Alloy heat treated	Alloy heat treated	Alloy heat treated
Bush corrosion resistance	Alloy heat treated	Alloy heat treated	400 series stainless steel heat treated	Alloy heat treated
Pin/Bush corrosion resistance	Alloy heat treated	400 series stainless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



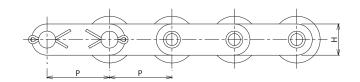
# **CANE HARVESTER CHAINS**

Our Cane Harvester chains are manufactured to Tsubaki's exacting specifications at a quality endorsed ISO globally certified facility.

All of our components are Shot Peened & the chain is also Statically Pre-loaded to give it an enhanced wear life in the tuff conditions of the cane fields.







Upper dimensions...mm Lower dimensions...inches

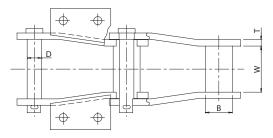
ChainNo.	Р	R	W	T1	T2	Н	D1	D2	F	L	L1	L2
RF264HP	50.8	38.1	16	3.9	4.8	25.4	13.8	13.8	9.7	37.2	19.05	24.4
	2.00	1.50	0.63	0.15	0.19	1.00	0.54	0.54	0.38	1.46	0.75	0.96

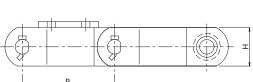
#### **Innovative Solutions for the Sugar Industry**

# **MUD CONVEYOR CHAINS**

Tsubaki Manufacture a wide range of Mud Conveyor chains specially designed for the damp conditions they face such as Stainless Steel pins & bushes to protect against corrosion & wear.

Additional sizes & series are available on request.



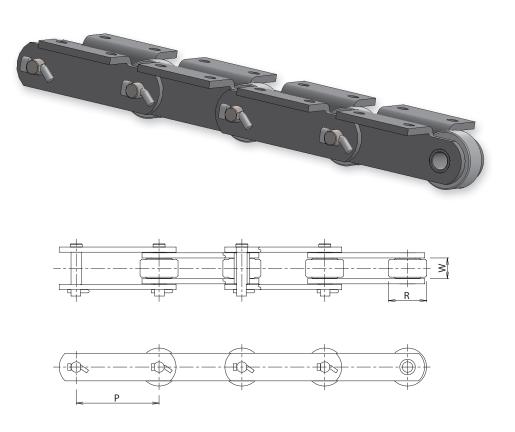




ChainNo.	Р	В	W	Т	Н	D
BOP152.4	152.4	31.75	61.9	9.7	38.1	19.5
	6.00	1.25	2.44	0.38	1.50	0.77

# **CANE CARRIER CHAIN**

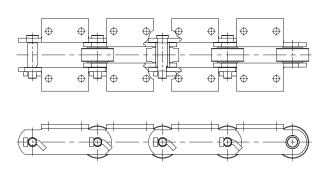
Cane carrier chains operate under the most harsh conditions in sugar mills. Tsubaki has a wide variety of cane carrier chains that provide excellent durability and wear resistance. Tsubaki selects the most appropriate materials and heat treatment to meet the demands of the application.



Upper dimensions...mm Lower dimensions...inches

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

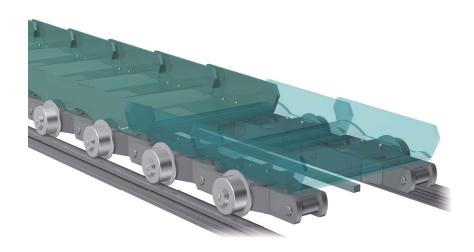
#### >>> Attachments

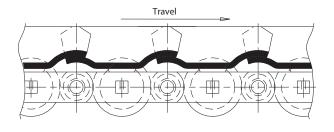


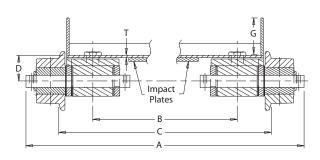
Chains not in this catalogue is also available. Please consult Tsubaki.

# 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 in the bearing surface, extending the working 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.





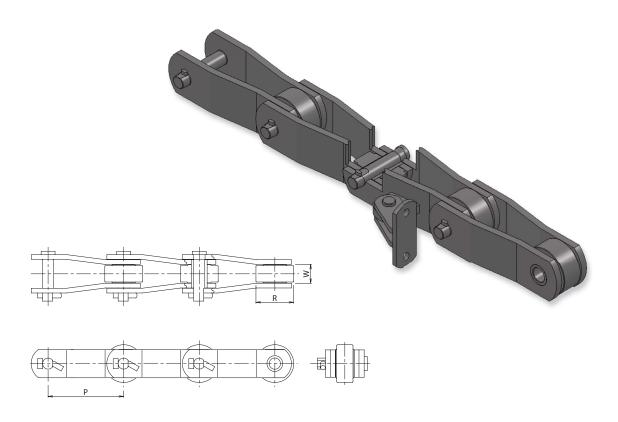


#### **OBR Style Apron Conveyors**

				Width							Weights/Lbs.	
Style	Chain Number	Pitch	Overall	Center to Center Sprocket	Track Gauge	Centerline Chain to Top of Pan Bead	Base Dimension	Pan Thick.	Max. Work Load kg (Lbs.)	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
			Α	В	С	D	O	Т				
	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
Ctudo A	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
Style A OBR	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
Aprons	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

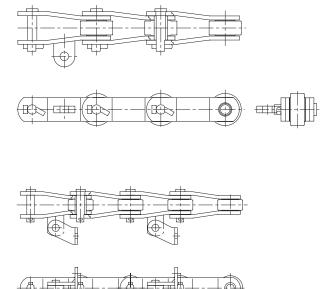
Resistance to both corrosion and wear is essential for Intermediate and Bagasse Carrier Chain. Tsubaki Intermediate and Bagasse Carrier Chain meet the requirements of these applications and also provide outstanding durability.



Upper dimensions...mm Lower dimensions...inches

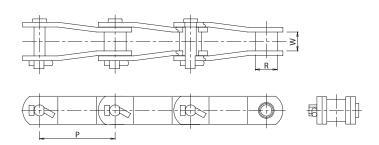
Chain No.	Р	R	W
RO1112	93.7	44.45	27.6
201121	3.688	1.75	1.09
RO1124	101.6 4.00	50.8 2.00	32.3 1.27
RO1125	101.6	50.8	32.6
1101123	4.00	2.00	1.28
RO0904	101.6	50.8	29.4
	4.00	2.00	1.16
RO1113	102.6 4.04	50.8 2.00	37.5 1.48
RO1130	152.4	63.5	37.6
	6.00	2.50	1.48
RO2184	152.4 6.00	76.2 3.00	34.9 1.37
RO2184A	152.4	76.2	34.9
110210-111	6.00	3.00	1.37
RO0906	152.4	69.9	37.1
	6.00	2.75	1.46
RO09060	152.4 6.00	69.9 2.75	37.1 1.46
RO09061	152.4	69.9	37.1
	6.00	2.75	1.46
RO2178A	152.4	69.9	38.1
	6.00	2.75	1.5
RO203.2	203.2 8.00	89	46.1
D0220 C		3.50	1.81
RO228.6	228.6 9.00	89 3.50	46.1 1.81
RO228.6	228.6	99	47
	9.00	3.90	1.85
RO228.6	228.6	99	48
	9.00	3.90	1.89

#### **▶▶▶** Attachments

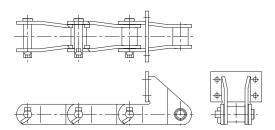


 $Chains \ not \ in \ this \ catalogue \ is \ also \ available. \ Please \ consult \ Tsubaki.$ 

# **BO/BOP Type Chain**



#### >>> Attachments



Upper dimensions...mm Lower dimensions...inches

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

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

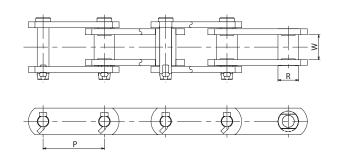
# **ELEVATOR CHAIN**

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.

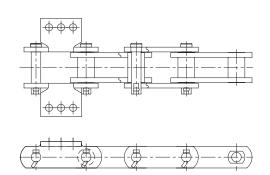




Upper dimensions...mm Lower dimensions...inches

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

**▶▶▶** Attachments



# INTERMEDIATE CARRIER CHAINS

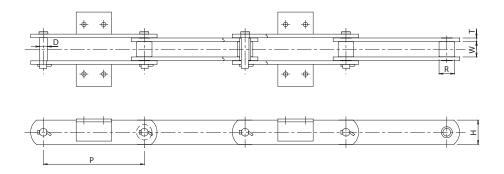
# **RF Conveyor Type**

Our RF Series of Intermediate Carrier chains are built from the finest material & use the same special Stainless steel grade for the pin & bush that was designed for the Bagasse Reclaimer application to protect against corrosion & wear.

The pin & bushing areas are also lubricated with MoS2 grease during assembly & the solid areas have it baked on due to the lack of lubrication the chain receives when running.

Additional sizes & series are available on request.





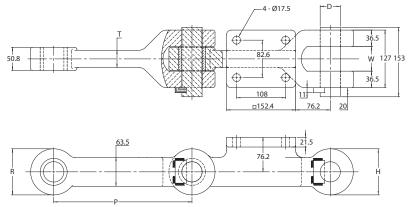
Upper dimensions…mm Lower dimensions…inches

ChainNo.	Р	R	W	Т	Н	D
RFP457.2S	457.2	70	70	16	110	35
	18.00	2.76	2.76	0.63	4.33	1.38

# **Cast Dog Bone Link Type**

Our Cast Dog Bone link chains are built strong & have special design features such as Stainless Steel pins & bushes to protect against the harsh conditions these chains face. Additional sizes & series are available on request.





ChainNo.	Р	R	W	T	Н	D
C304.8	304.8	101.6	54	38.1	101.6	44.5
	12.00	4.00	2.13	1.50	4.00	1.75

# BAGASSE RECLAIMER CHAINS

The Bagasse Reclaimer is the most critical chain application as it powers the Mill. Tsubaki has spent a considerable amount of time doing market research & field testing to come up with a grade of stainless steel that has the highest combined levels of corrosion resistance, strength & wear properties . In addition to this unique stainless steel grade we also through harden & induction harden our pins to give them the best wear life possible.

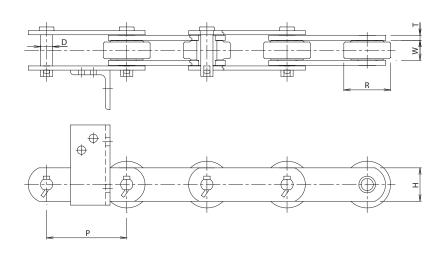
Due to the lack of lubrication during operation we also lubricate the pin & bushing area with MoS2 grease during assembly & also bake this grease onto the solid areas.

Our attachments are also robotically welded to the chain giving them the deepest & strongest penetration possible.







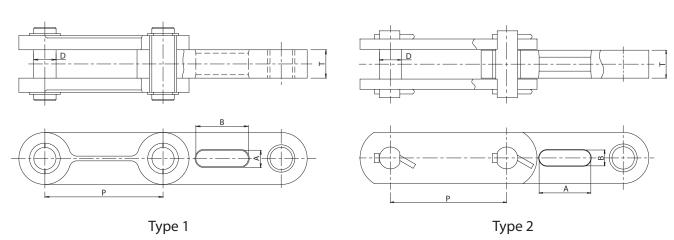


ChainNo.	Р	R	W	Т	Н	D
RFP152.4R-6LF2	152.4	88.9	31.8	9.5	63.5	23.2
	6.00	3.50	1.25	0.37	2.50	0.91
RFP152.4R-6LF2-H	152.4	88.9	31.8	9.5	63.5	31.8
	6.00	3.50	1.25	0.37	2.50	1.25

# **DIFFUSER CHAIN**

As with bagasse carriers and bagasse elevator chains, Tsubaki Diffuser Chains use a unique stainless steel material uniquely developed by Tsubaki combining wear resistance, corrosion resistance, and durability. They are used in sugar mills around the world.

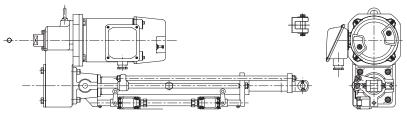




ChainNo.	type	Р	D	Т	Α	В
NEF250	1,2	250 9.84	47 1.85	60 2.36	111 4.37	35 1.38
NEF500	2	500 19.685	49 1.93	60 2.36	135 5.31	35 1.38

# CANE BIN POSITIONER (SPOTTER)

Our Power Cylinders come with a full range of options such as Limit switches, Rotary Encoders & Potentiometers for all your positioning requirements. Additional Sizes & Series are available on request.



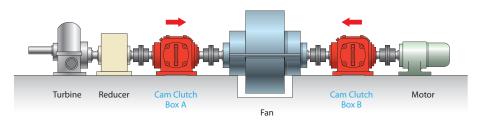


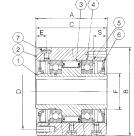
Power Cylinder Model		Rated Thrust N {kgf}	Nominal Speed 50/60Hz mm/s	Motor Output kW	Rod Movement Per One Turn of Manual shaft mm	Rod Rotating Force N·m {kgf·m}	Nominal Stroke mm		
	S		12.5/15	0.1	2.0				
LPTB 250	L	2.45k	25/30	0.1	1.0	2.60	200, 300, 400, 500, 600		
LPTC 250	М	{250}	50/60	0.2	2.0	{0.27}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

#### **Innovative Solutions for the Sugar Industry**

# OVERRUNNING CLUTCHES FOR BOILER OPERATION

Our MG & MI series are just two of a larger range of Overrunning clutches we can provide for the Mills overrunning & power saving requirements. More Sizes & Series are available on request.





Model	Torque Capacity	Drag Torque	Ma Overru (r/n	ınning	Max. Indexing	Bore	Size	Α	В	c	PCD	Е	F	S	No. of	Lubrication Filler Plug		Weight
	(N·m)	(N·m)	Inner Race	Outer Race	(cycle/min)	Dia. (H7)	Keyway		(h7)		D				Tapped Holes × Size × Pitch	Size × Pitch	(ml)	(kg)
MG 300 MI 300	314	0.23 0.31	2,800 50	900	— 300	19	5×2	63	77	60	66	10.4	28.5	13	4×M6 ×P1.0	M6 × P1.0	25 50	1.8
MG 400 MI 400	539	0.29 0.38	2,600 50	800	— 300	22	5×2	70	88	67	73	10.7	31.7	16	4 × M8 × P1.25	M6 × P1.0	30 60	2.7
MG 500 MI 500	1,620	0.51 0.68	2,400 50	800	— 300	31.5	7×3	89	108	86	92	12.3	44.4	16	4 × M8 × P1.25	M6 × P1.0	50 100	5.0
MG 600 MI 600	3,140	0.85 1.54	2,100 30	700 —	— 300	50	12×3.5	95	136	92	120	12.8	69.8	16	6 × M8 × P1.25	M6 × P1.0	80 160	8.6
MG 700 MI 700	5,880	1.70 2.63	1,500 30	500 —	— 300	70	18×6	127	180	124	160	19.8	101.5	20	6 × M10 × P1.5	M6 × P1.0	135 260	19.5
MG 750 MI 750	9,500	3.43 4.12	1,800 30	600 —	— 300	85	24×6	153	200	150	175	75	110	25	8 × M14 × P2.0	M8 × P1.25	400 800	37.0

# INNOVATIVE SOLUTIONS FOR THE SUGAR INDUSTRY

#### **Sprockets for Large Size Conveyor Chain**

#### **Replaceable Sprocket Blades**



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



#### smart tooth® Sprockets



TSUBAKI's 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 assures 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 of your equipment with a simple wiring system.

#### Large Size Conveyor Chain Inquiry Sheet

Date:

		-, <del>-</del>	<u> </u>							
Specify the following	ng when ord	ering Large S	ize 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	er				
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)	Motor	AC/DC kW × r/min × motor(s)					
7 and Gonvoyou			kg/conveyor (individual items)	Sprocket No. of Teeth	NT (PCD mm)					
Conveyor Length			m	Sprocket Shaft Hole Dia.	φ Н8 • Н7					
Lifting Height			m	Hub	Type( ) $\phi$ × L					
No. of Strands			strands (spacing m)	Keyway	No ( ) JIS·b ×t parallel					
Chain Speed			m/min	Tooth Finishing	Precision fused Machine cut Induction harder	ned				
In case of replacemen	t:									
1 Brand of existing c	nain : Manufac	tured by								
2 Chain No. :										
3 Attachment :	(Att	achment spacing	g: pitc	hes)						
4 Breaking load :	k	gf (	lbs.)							
5 Chain pitch :	mm	1 (	inch.)							
6 Chain life :	years	(	seasons)							
7 Weakest componer	nt parts : (	) Pin, (	) Bushing, (	) Roller, (	) Others	=				
8 Cause of low chain	life : (	) Wear, (	) Corrosion, (	) Others						
Simple diagram of con	veyor and chai	n: Include conve	yor configuration, intake	e, discharge methods, rail	configuration, return side uptake, etc.					
						, 				
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						,				
O- N	<u>i</u>			District Co.						
Co. Name:				Division or Departr	nent:					
Name:				Tel:						

Fax:



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