



WEBSTER

SINCE 1876

SUGAR MILL CHAINS



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ISO9001 Registered

HISTORY

Since 1876 Webster Industries, Inc has provided conveying solutions of all types to a broad range of markets with a variety of products and expertise. Towner K. Webster founded Webster Industries with his “Common Sense” elevator bucket in Chicago, Illinois. In 1907 Webster relocated to Tiffin, Ohio where our corporate headquarters reside today. Over the past century Webster has evolved from producing elevator buckets to being the world’s leading manufacturer of engineered class chains, commercial castings and vibrating conveyors.

LOCATIONS

Our Tiffin headquarters has over 300,000 square feet of manufacturing space and includes a malleable iron foundry, punch press operations, heat treat facility, machine shop, sheet metal fabrication department, chain assembly area, in-plant laboratory and testing facilities. Our two warehousing and assembly locations located in Meridian, Mississippi and Tualatin, Oregon allow for quick access to over \$7 million dollars of inventory throughout North America. Our three manufacturing facilities stock over 250,000 feet of chain to serve our customer requirements.

VERTICAL INTEGRATION

Vertical Integration Manufacturing system—While most other companies rely increasingly on outsourcing to produce its products, Webster Industries continues to invest heavily in our vertical integration. To Webster, vertical integration guarantees superior product design, consistent product quality, and the best deliveries in the industry. All aspects of your chain are made under one roof in Tiffin, Ohio. Webster’s reputation for high quality products comes from the same principles it was founded on American materials, American labor and American pride.

FOUNDRY



PUNCH PRESS



MACHINE SHOP



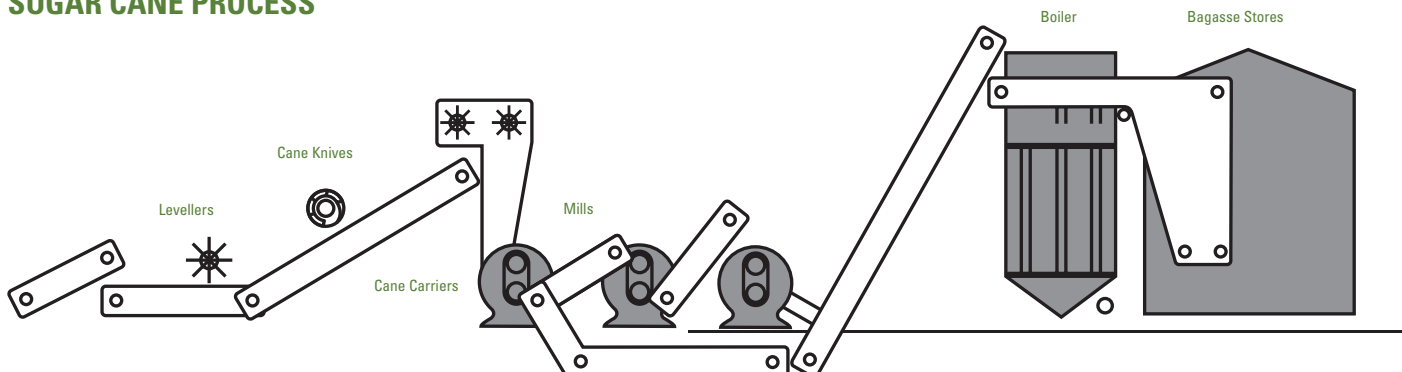
HEAT TREAT



CHAIN ASSEMBLY



SUGAR CANE PROCESS



American Materials, Labor, and Pride.

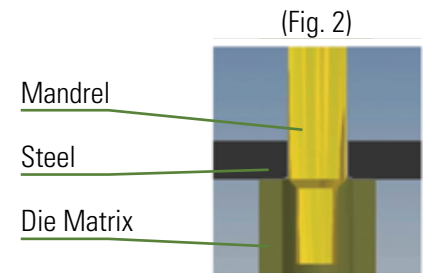
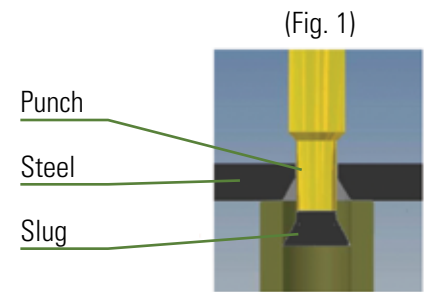


WEBSTER'S EXCLUSIVE BURNISHED PITCH HOLE ADVANTAGE

Webster Industries utilizes a wide variety of manufacturing processes in order to balance the level of quality to the application of the chain to the overall cost. In other words, we use the highest quality solution which drives value to our customers. Two such processes are utilized in manufacturing the pitch holes of our chains. One is burnishing and the other is perfect hole sizing.

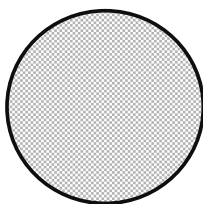
Burnishing is a unique cold forming process used by Webster where a graduated mandrel (punch) is used to punch the sidebar pitch holes. First the punch pierces the sidebar material producing a heavy tapered slug, (Fig. 1). The mandrel rubs the metal surface of the pitch hole with sufficient force to cause plastic flowing of the metal. This rubbing or smearing (burnishing) action of the metal fills the break out or tapered portion of the hole that was caused in the initial piercing operation, (Fig. 2).

Webster's burnished holes achieve 85% to 90% bearing surface. Compared to single-punch holes, this is at least five times more surface for the pin to rest against. This results in a minimum of five times the material to resist deformation of the hole under heavy loads.



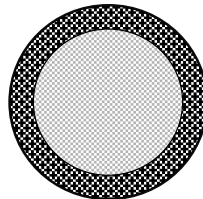
WEBSTER'S INDUCTION HARDENING PROCESS

Induction hardening is a non-contact heating process which utilizes the principle of electromagnetic induction to produce heat inside the surface layer of a work-piece. By placing a conductive material (pin) into a strong alternating magnetic field (coil), electrical current can be made to flow in the material thereby creating heat. The current generated flows predominantly in the surface layer of the part. The depth of hardened layer is determined by the frequency of the alternating field, the surface density and permeability of the material, the heat time and the pin diameter or material thickness. By immersing the part in a water, oil or polymer based quench the surface layer is altered to form a martensitic structure which is harder than the base metal. The core of the material remains the same and its original properties are unaffected after induction hardening process is complete.



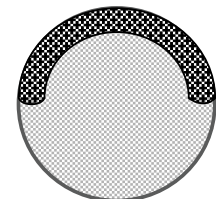
WEBSTER THRU-HARDENED PINS

Webster's Pins are made of Duralloy®. thru-hardened to 35/40 Rc where the diameter is less than 3/4".



CIRCUMFERENTIAL INDUCTION HARDENING

The load bearing surface of the thru-hardened pin is induction hardened to 55/60 Rc to the appropriate depth, usually 10% of the body diameter, 360° around the body of the pin. The induction hardened areas do extend into the press fit areas of the pin to maintain the integrity of the pin and guard against failure due to pin shear. This also puts the I.H. stop and start areas under compression which eliminates potential cracking.



WEBSTER COMPETITORS SELECTIVE INDUCTION HARDENING

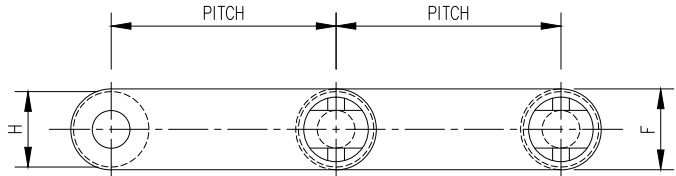
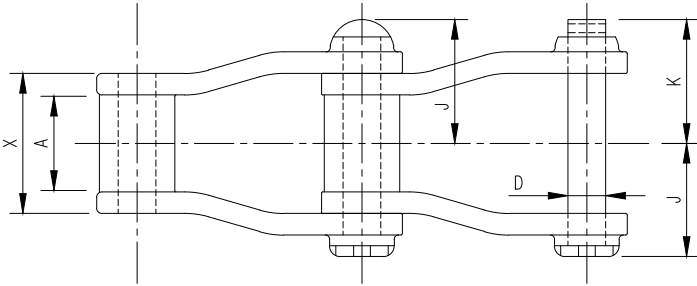
Only the area where expected wear occurs is hardened. Pin must be oriented properly during assembly to receive the benefit of the induction hardened surface. The start and stop area of this induction hardening zone can promote cracking and ultimately chain failure.



Cast Chains

Cast chains are manufactured using cast links and heat treated steel pins. They are designed with slightly larger clearances that allow material to easily work its way out of the chain joint. Cast chains are used in a variety of

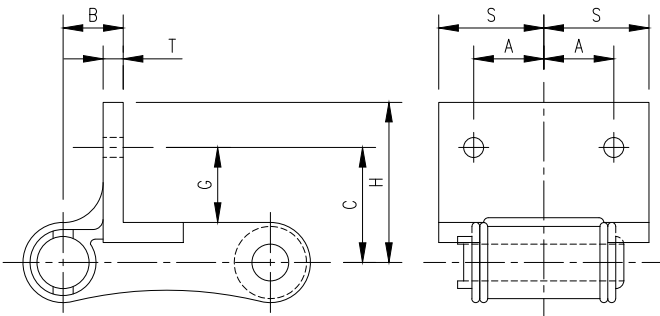
applications such as sewage treatment, water filtration, fertilizer handling, sugar processing and waste wood conveying. They are readily available from stock with standard attachments.



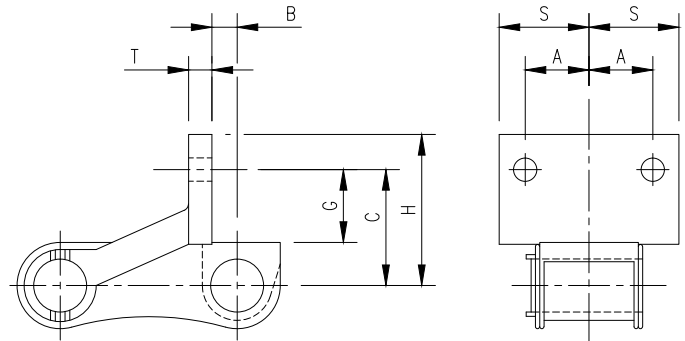
CHAIN DIMENSIONS

Chain No.	Average Pitch Inches	Approx. Links in 10 Feet	Average Weight Per Ft. Lbs.	Average Ultimate Strength in Lbs.		Rated Working Load in Lbs. ★		Barrel Length X	Sidebar Height F	Max. Spkt. Width A	Pin Dia. D	Barrel Dia. H	Overall Width	
				Malleable	Duramal	Malleable	Duramal						℄ to Cotter End K	℄ to Head or Rivet End J
477	2.308	52	2.0	9,600	12,000	1,365	1,640	1 ¼	1	11/16	7/16	13/16	1 9/32	1 5/32
488	2.609	46	2.9	11,000	13,750	1,775	2,130	1 5/8	15/16	15/16	7/16	7/8	1 7/16	1 5/16
4103	3.075	39	5.7	22,000	27,500	3,515	4,218	1 7/8	1 ½	1 1/8	¾	1 ¼	1 27/32	1 25/32

F2 ATTACHMENT



F29 ATTACHMENT



F2

Chain No.	A	B	C	G	H	S	T	Weight Per Ft. Lbs. ▲	Bolt Size
477	7/8	¾	1 1/16	15/16	2	1 15/16	¼	3.7	5/16
488	1	1 1/8	1 3/32	15/16	2 1/32	1 ½	¼	4.5	5/16

F29

Chain No.	A	B	C	G	H	S	T	Weight Per Ft. Lbs. ▲	Bolt Size
4103	1 1/4	1 1/8	2 1/4	1 1/4	2 1/2	1 1/8	13/32	9.6	3/4

★ See page A-12 for Service Factor, Table 9, and page A-13 for Speed Factor, Tables 10 and 11 in Webster master #400 catalog.

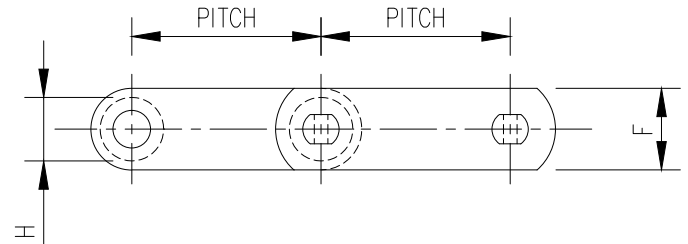
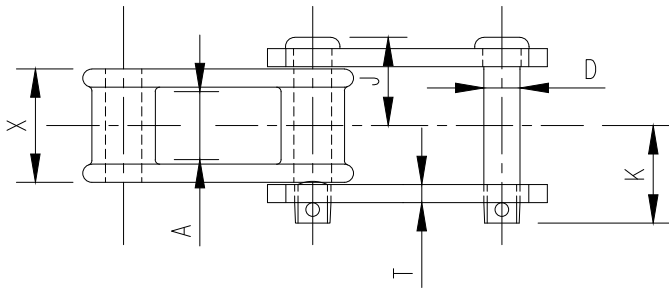
▲ Weights of attachments coupled every pitch.



Combination Chains

Combination chains are manufactured using hardened cast links, steel sidebars and heat treated steel pins. Combination chains alternate steel sidebars and cast links making them ideal for handling stone, gravel, coal and

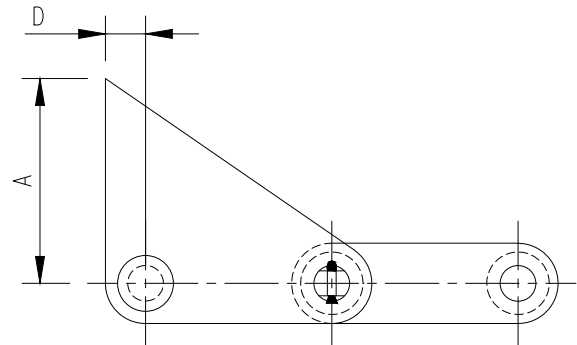
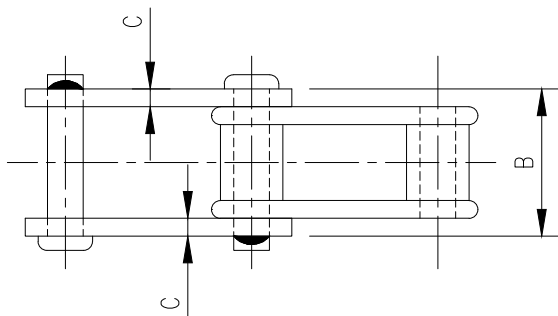
other abrasive materials. They are commonly used in light to medium-duty bucket elevator applications. Combination chains come with a variety of standard attachments for immediate delivery.



CHAIN DIMENSIONS

Chain No.	Average Pitch Inches	Approx. Links in 10 Feet	Average Weight Per Ft. Lbs.	Average Ultimate Strength in Lbs.	Rated Working Load in Lbs.★	Sidebars		Barrel Length	Overall Width		Pins	Barrels	Max. Spkt. Width
				Duramal	Duramal	Thk.	Height		to Cotter End	to Head or Rivet End	Dia.	Nominal Dia.	
						T	F	X	K	J	D	H	A
N102B	4.000	30	6.7	30,000	5,000	3/8	1 1/2	2 7/8	2 3/16	2 1/16	5/8	1	1 15/16
N111	4.760	25	9.7	45,000	7,500	3/8	1 3/4	3 3/8	2 19/32	2 11/32	3/4	1 1/16	2 3/8
N132	6.050	20	14.4	62,500	10,400	1/2	2	4 3/8	3 1/2	3 1/32	1	1 3/4	3 1/8

S1 ATTACHMENT



S1

Chain No.	A	B	C	D	Weight Per Ft. Lbs.
N102B	3 3/4	3 11/16	3/8	13/16	9.4
N111	4 3/8	4 3/16	3/8	7/8	10.5
N132	5	5 7/16	1/2	1 1/8	15.9

★ See page A-12 for Service Factor, Table 9, and page A-13 for Speed Factor, Tables 10 and 11 in Webster master #400 catalog.

▲ ▲ Weights of attachments coupled every other pitch.

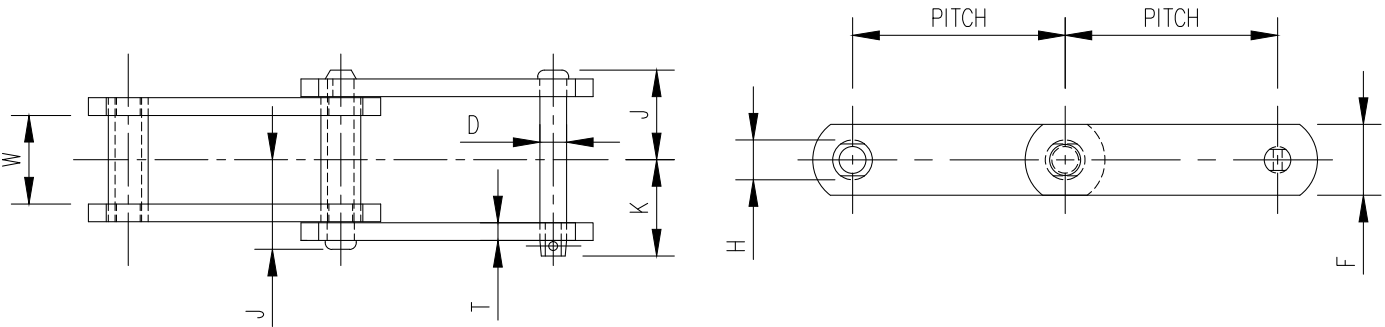
SUGAR MILL CHAINS



Hardened Steel Bushed Chains (HSB)

Hardened steel bushed (HSB) chains are manufactured using hardened bushings, heat treated sidebars and heat treated pins. HSB chains are available as a more rugged alternative to combination chains. All steel construction gives them higher load ratings as well as longer life.

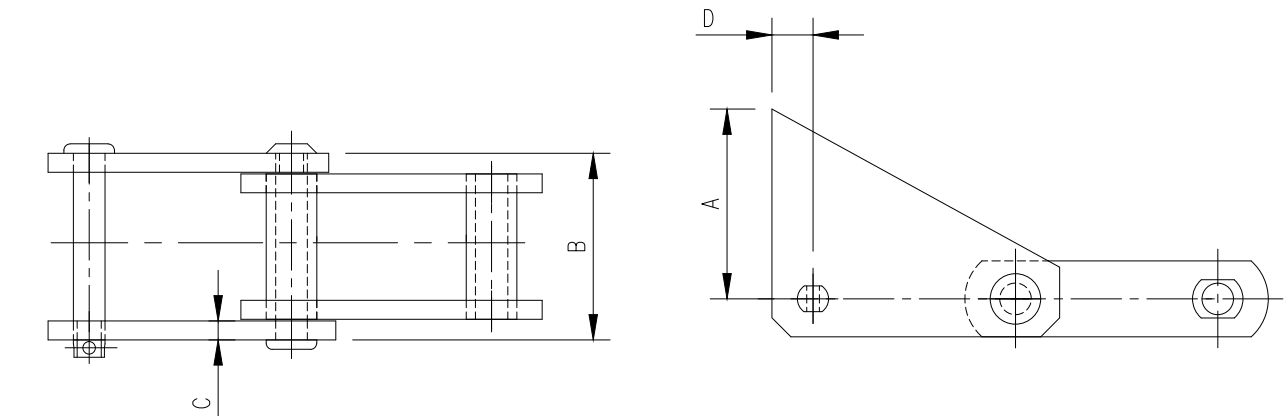
HSB chains are well suited for medium to heavy-duty applications such as cement, gypsum, coal and other abrasive materials. They are readily available from stock with standard attachments.



CHAIN DIMENSIONS

Chain No.	Average Pitch Inches	Approx. Links in 10 Feet	Average Weight Per Ft. Lbs.	Average Ultimate Strength in Lbs.	Rated Working Load in Lbs. ⚠	Sidebars			Inside Sidebars	Overall Width		Pins		Bushings	
						Thk.	Height	Material		⚙ to Cotter End	⚙ to Head or Rivet End	Dia.	Material	Outside Dia.	Material
										T	F			Material	
HSB102B	4.000	30	6.9	40,000	6,290	3⁄8	1 ½	M.C.H.T.	2 ⅛	2 3⁄16	2 ⅛	5⁄8	ALY. H.T.	1	L.C.C.H.
HSB111	4.760	25	10.2	50,000	8,850	3⁄8	2	M.C.H.T.	2 5⁄8	2 19⁄32	2 11⁄32	¾	ALY. I.H.	1 7⁄16	L.C.C.H.

S1 ATTACHMENT



S1

Chain No.	A	B	C	D	Weight Per Ft. Lbs.
HSB102B	3 3/4	3 11/16	3/8	13/16	9.8
HSB111	4 3/8	4 3/16	3/8	7/8	13.3

ABBREVIATIONS OF MATERIAL AND TREATMENT

M.C.H.T.Medium Carbon, Heat Treated
 ALY.H.T.Alloy Steel, Heat Treated
 ALY.I.H.Alloy Steel, Induction Hardened
 L.C.C.H.Low Carbon, Case Hardened
 ALY.C.H.Alloy Steel, Case Hardened

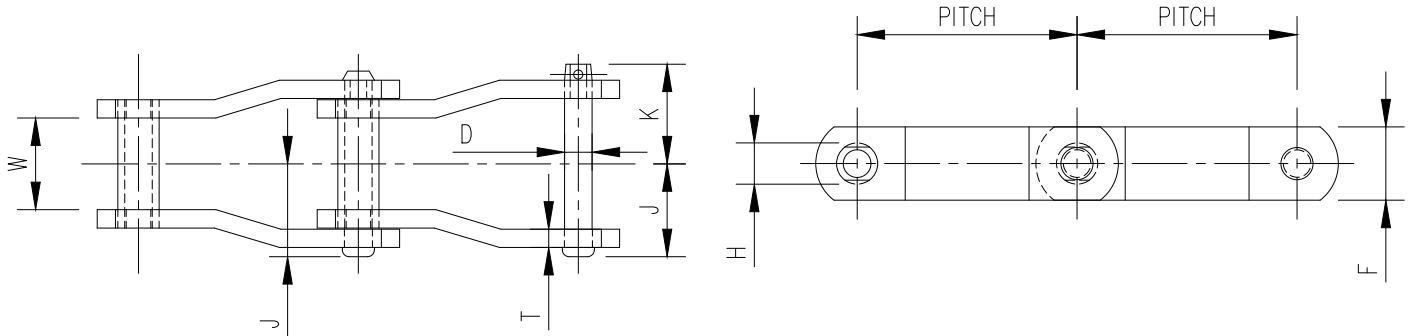
☆ See page A-12 for Service Factor, Table 9, and page A-13 for Speed Factor, Tables 10 and 11 in Webster master #400 catalog.

△ △ Weights of attachments coupled every other pitch.



SUGAR MILL CHAINS

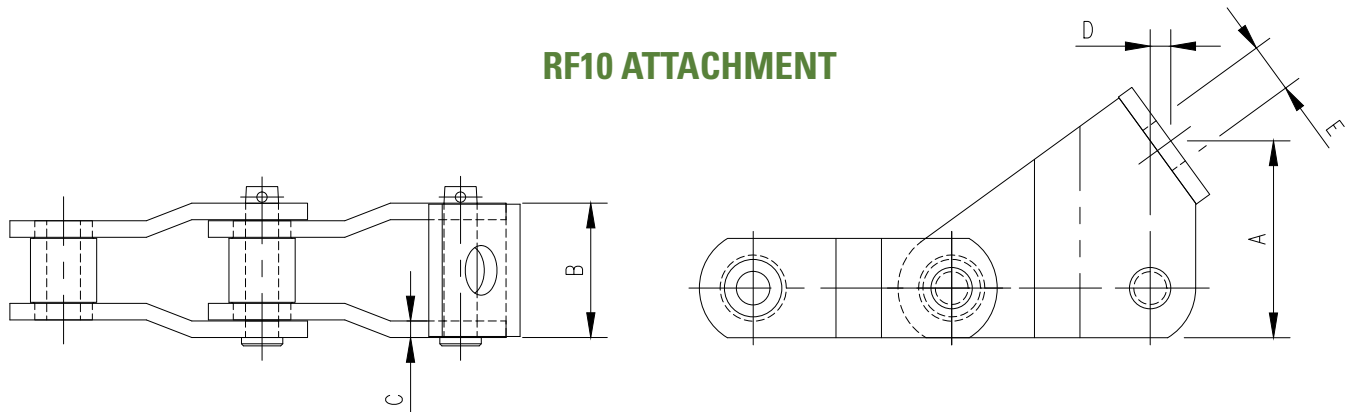
Hardened Steel Bushed Chains (HSB)



CHAIN DIMENSIONS

Chain No.	Average Pitch Inches	Approx. Links in 10 Feet	Average Weight Per Ft. Lbs.	Average Ultimate Strength in Lbs.	Rated Working Load in Lbs. ⚡	Sidebars			Inside Sidebars	Overall Width		Pins		Bushings	
						Thk.	Height			⌀ to Cotter End	⌀ to Head or Rivet End	Dia.		Outside Dia.	
HSB5002	6.000	20	19.0	129,200	10,480	½	3	M.C.H.T.	2	2 17/32	2 9/32	1	ALY. H.T.	2	ALY. C.H.

RF10 ATTACHMENT



RF10

Chain No.	A	B	C	D	E	Weight Per Ft. Lbs. ▲
HSB5002	5 15/16	4 1/16	½	5/8	1 ½	34.1

ABBREVIATIONS OF MATERIAL AND TREATMENT

M.C.H.T.Medium Carbon, Heat Treated
ALY.H.T.Alloy Steel, Heat Treated
ALY.I.H.Alloy Steel, Induction Hardened
L.C.C.H.Low Carbon, Case Hardened
ALY.C.H.Alloy Steel, Case Hardened

★ See page A-12 for Service Factor, Table 9, and page A-13 for Speed Factor, Tables 10 and 11 in Webster master #400 catalog.

▲ Weights of attachments coupled every pitch.

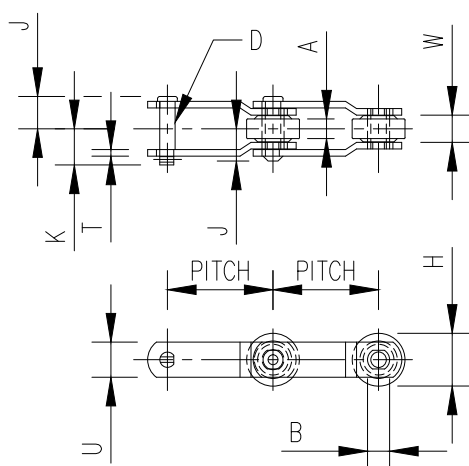


Steel Bushed Roller (SBR)

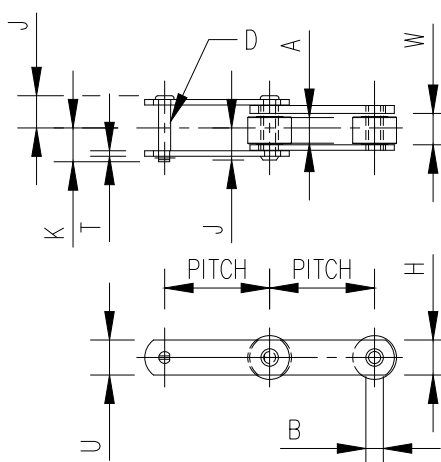
Steel bushed roller (SBR) chains are manufactured with heat treated rollers, hardened bushings, hardened pins and steel sidebars. The roller type construction provides a lower operating friction which helps increase chain life and reduces

conveyor design requirements. SBR chains are available in a wide variety of sizes, configurations and designs and can be used in tough industrial applications. SBR chains come with a variety of standard attachments for immediate delivery.

STYLE 2



STYLE 3



CHAIN DIMENSIONS

Chain No.	Chain Style	Average Pitch Inches	Approx. Links in 10 Feet	Average Weight Per Ft. Lbs.	Average Ultimate Strength in Lbs.	Rated Working Load in Lbs. 🌟	Sidebars			
							Thk.	Height	Material	Inside Sidebars
										W
S1113	3	4.040	30	7.9	28,000	4,240	⁵ / ₁₆	1 ½	M.C.	1 ⁵ / ₁₆
S1131	3	6.000	20	13.5	50,000	6,230	³ / ₈	2	M.C.	1 ⁵ / ₈
ZA2184+	2	6.000	20	12.4	85,000	6,500	³ / ₈	2	M.C.H.T.	1 ³ / ₈
ZA9184	2	6.000	20	17.2	125,000	8,400	¹ / ₂	2 ½	M.C.H.T.	1 ⁹ / ₁₆
ZA9185	2	6.000	20	19.5	125,000	8,400	¹ / ₂	2 ½	M.C.H.T.	1 ⁹ / ₁₆
SS996	3	6.000	20	12.2	73,000	5,900	³ / ₈	2	M.C.H.T.	1 ½
ZA2178A	3	6.000	20	13.4	85,000	7,080	³ / ₈	2 ¼	M.C.H.T.	1 ⁹ / ₁₆
ZA2198	3	6.000	20	15.6	100,000	7,850	¹ / ₂	2 ¼	M.C.H.T.	1 ⁹ / ₁₆
ZA2800	3	8.000	15	26.0	125,000	9,840	¹ / ₂	2 ¾	M.C.H.T.	1 ¹³ / ₁₆
RS1238	5	12.000	10	9.4	56,000	9,200	³ / ₈	2 ½	M.C.	2 ¼
1706	5	12.000	10	13.7	120,000	14,000	¹ / ₂	2 ½	M.C.H.T.	3
S2614	5	12.000	10	24.0	162,000	17,500	⁵ / ₈	3 ½	M.C.H.T.	2 ¾
S2648	5	12.000	10	33.0	200,000	29,600	⁵ / ₈	4	M.C.H.T.	4
S12350	5	12.000	10	34.0	260,000	27,500	⁵ / ₈	4	M.C.H.T.	4

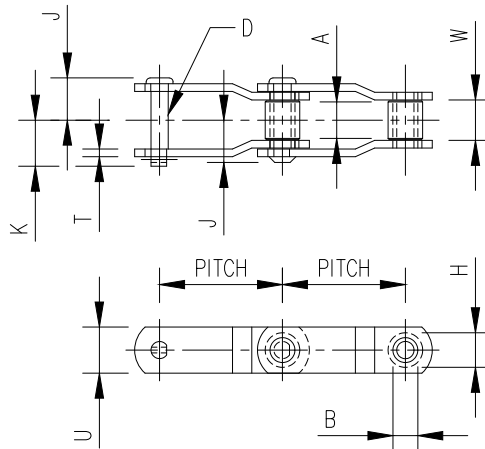
★ See page A-12 for Speed Factor, Table 9, and page A-13 for Service Factor, Tables 10 and 11 in Webster master #400 catalog.



SUGAR MILL CHAINS

Steel Bushed Roller (SBR)

STYLE 5



ABBREVIATIONS OF MATERIAL AND TREATMENT

M.C.H.T.Medium Carbon, Heat Treated
 ALY.H.T.Alloy Steel, Heat Treated
 ALY.I.H.Alloy Steel, Induction Hardened
 L.C.C.H.Low Carbon, Case Hardened
 ALY.C.H.Alloy Steel, Case Hardened

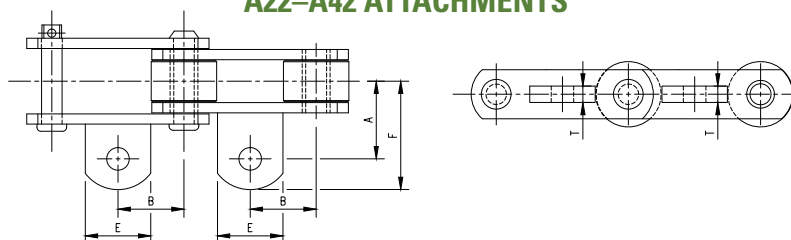
CHAIN DIMENSIONS

Chain No.	Overall Width		Pins		Bushings		Rollers			Attachment
	⌀ to Cotter End	⌀ to Head or Rivet End	Dia.	Material	Outside Dia.	Material	Tread Dia.	Tread Width	Material	
	K	J								
S1113	1 ²³ / ₃₂	1 ¹⁷ / ₃₂	⁵ / ₈	ALY. H.T.	⁷ / ₈	ALY. C.H.	2	1 ³ / ₁₆	L.C.C.H.	A22
S1131	2 ³ / ₃₂	1 ²⁷ / ₃₂	³ / ₄	ALY. H.T.	1 ¹ / ₈	ALY. C.H.	3	1 ⁷ / ₁₆	L.C.C.H.	A42
ZA2184+	2 ³ / ₃₂	1 ³ / ₄	⁷ / ₈	ALY. I.H.	1 ¹ / ₄	ALY. C.H.	3	1 ¹ / ₈	L.C.C.H.	A42
ZA9184	2 ¹ / ₄	2 ¹ / ₁₆	¹⁵ / ₁₆	ALY. I.H.	1 ¹ / ₄	ALY. C.H.	3	1 ¹ / ₄	L.C.C.H.	A42
ZA9185	2 ¹ / ₄	2 ¹ / ₁₆	¹⁵ / ₁₆	ALY. I.H.	1 ¹ / ₄	ALY. C.H.	3 ¹ / ₂	1 ¹ / ₄	L.C.C.H.	A42
SS996	2 ¹ / ₃₂	1 ²⁵ / ₃₂	³ / ₄	ALY. I.H.	1 ¹ / ₈	ALY. C.H.	2 ³ / ₄	1 ³ / ₈	L.C.C.H.	K2
ZA2178A	2 ¹ / ₁₆	1 ¹³ / ₁₆	⁷ / ₈	ALY. I.H.	1 ¹ / ₄	ALY. C.H.	2 ³ / ₄	1 ³ / ₁₆	L.C.C.H.	K2
ZA2198	2 ⁵ / ₁₆	2 ³ / ₃₂	⁷ / ₈	ALY. I.H.	1 ¹ / ₄	L.C.C.H.	2 ³ / ₄	1 ¹ / ₄	L.C.C.H.	K2
ZA2800	2 ⁷ / ₁₆	2 ³ / ₁₆	1	ALY. I.H.	1 ¹ / ₂	L.C.C.H.	3 ¹ / ₂	1 ⁷ / ₁₆	L.C.C.H.	K2
RS1238	2 ¹⁵ / ₃₂	2 ¹³ / ₁₆	⁷ / ₈	ALY. H.T.	1 ¹ / ₄	ALY. C.H.	1 ⁷ / ₈	2 ¹ / ₈	L.C.C.H.	M14
1706	3	2 ²⁷ / ₃₂	1	ALY. I.H.	1 ³ / ₄	ALY. C.H.	2 ¹ / ₄	2 ⁷ / ₈	M.C.H.T.	M14
S2614	3 ⁹ / ₃₂	2 ³¹ / ₃₂	1 ¹ / ₄	ALY. I.H.	1 ³ / ₄	ALY. C.H.	2 ¹ / ₂	2 ⁵ / ₈	L.C.C.H.	M14
S2648	3 ²⁹ / ₃₂	3 ¹⁹ / ₃₂	1 ⁵ / ₈	ALY. I.H.	2 ¹ / ₂	ALY. C.H.	3 ¹ / ₂	3 ⁷ / ₈	ALY. H.T.	M14
S12350	4 ³ / ₃₂	3 ²¹ / ₃₂	1 ¹ / ₂	ALY. I.H.	2 ³ / ₁₆	ALY. C.H.	3 ¹ / ₂	3 ⁷ / ₈	ALY. H.T.	M14



Common Steel Bushed Roller (SBR)—Attachments

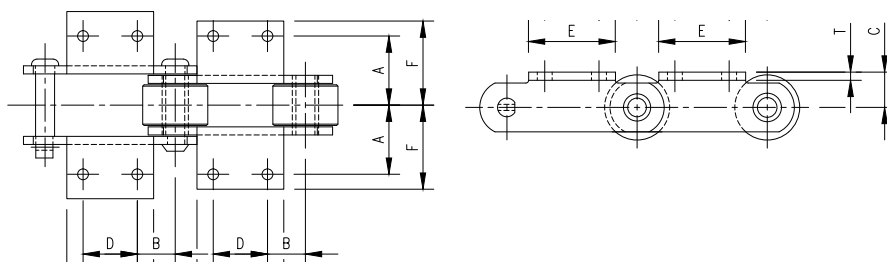
A22–A42 ATTACHMENTS



A22–A42

Chain No.	A	B	E	F	T	Weight Per Ft. Lbs.	Bolt Size
S1113	2 3/8	2 1/64	2	3 5/16	1/2	9.7	5/8
S1131	2 19/32	3	2	3 19/32	5/8	14.8	5/8
ZA2184+	2 5/8	3	2	3 11/16	5/8	13.8	5/8
ZA9184	3	3 3/4	2	4 1/32	5/8	18.6	5/8
ZA9185	3	3 3/4	2	4 1/32	5/8	18.6	5/8

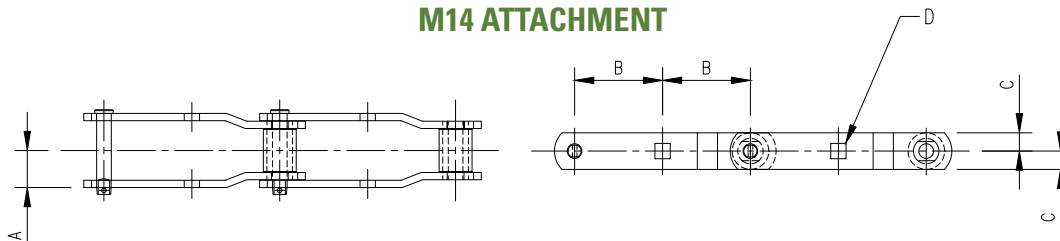
K2 ATTACHMENT



K2

Chain No.	A	B	C	D	E	F	T	Weight Per Ft. Lbs.	Bolt Size
SS996	2 3/16	1 1/2	1 5/8	3	4 1/8	3 5/32	3/8	16.3	1/2
ZA2178A	2 3/16	1 1/2	1 5/8	3	4 3/8	3 5/32	3/8	17.1	1/2
ZA2198	2 3/16	1 1/2	1 5/8	3	4 1/4	2 13/16	1/2	18.2	1/2
ZA2800	2 19/32	1 3/4	2 3/16	4 1/2	6	3 11/16	1/2	33.3	5/8

M14 ATTACHMENT



M14

Chain No.	A	B	C	SQ. Shaft Size D	Weight Per Ft. Lbs.
RS1238	1 29/32	6	1 1/4	1	9.4
1706	2 17/32	6	1 1/4	1	13.7
S2614	2 21/32	6	1 3/4	1 1/4	24.0
S2648	3 17/32	6	2	1 1/4	33.0
S12350	3 7/32	6	2	1 1/4	33.0

△ Weights of attachments coupled every pitch.

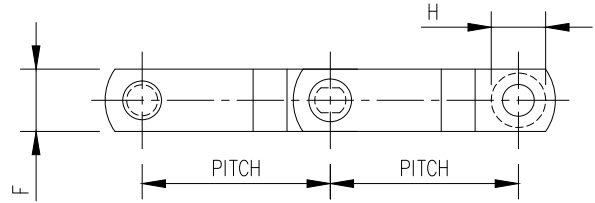
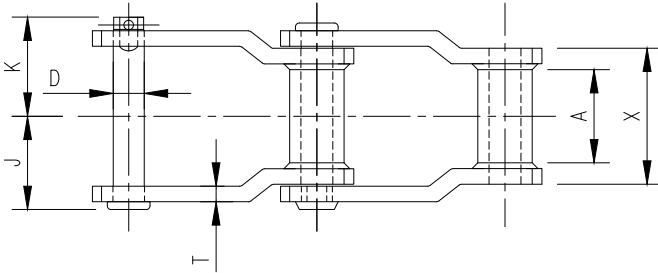


SUGAR MILL CHAINS

Welded Steel Chains

Welded steel mill chains are manufactured with heat treated pins, steel sidebars and steel barrels. Mill chains are furnished in various configurations of pitch, construction and heat treatment to suit each operating environment.

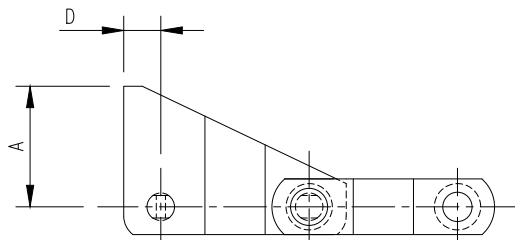
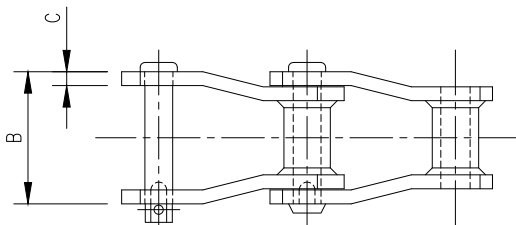
Their simple, yet rugged construction makes them ideal for the forest products, grain, ethanol and recycling industries. Mill chains are readily available from stock with custom and standard attachments.



CHAIN DIMENSIONS

Chain No.	Average Pitch Inches	Approx. Links in 10 Feet	Average Weight Per Ft. Lbs.	Average Ultimate Strength in Lbs.	Rated Working Load in Lbs. ⚡	Sidebars			Length of Bearing	Overall Width		Pins		Barrels		Max. Spkt. Width
						Thk.	Height	Material		⌀ to Cotter End	⌀ to Head or Rivet End	Dia.	Material	Outside Dia.	Material	
WH78	2.609	46	4.0	30,000	3,500	¼	1 ⅞	M.C.H.T.	2	1 19/32	1 7/16	½	ALY. H.T.	⅞	M.C.H.T.	1 ½
WH82	3.075	39	4.8	36,000	4,400	¼	1 ¼	M.C.H.T.	2 ¼	1 23/32	1 19/32	9/16	ALY. H.T.	1 1/16	M.C.H.T.	1 ¼
WH124	4.000	30	8.3	69,000	7,200	¾	1 ½	M.C.H.T.	2 ¾	2 9/32	2 ½	¾	ALY. H.T.	1 ¼	M.C.H.T.	1 ½
WHX124	4.000	30	8.3	69,000	7,200	¾	1 ½	M.C.H.T.	2 ¾	2 9/32	2 ½	¾	ALY. I.H.	1 ¼	M.C.H.T.	1 ½
WH111+	4.760	26	9.5	77,000	8,850	¾	1 ¾	M.C.H.T.	3 ¾	2 19/32	2 ½	¾	ALY. H.T.	1 ¼	M.C.H.T.	2
WH106	6.000	20	7.0	69,000	7,200	¾	1 ½	M.C.H.T.	2 ¾	2 9/32	2 ½	¾	ALY. H.T.	1 ¼	M.C.H.T.	1 ½
WHX106	6.000	20	7.0	69,000	7,200	¾	1 ½	M.C.H.T.	2 ¾	2 9/32	2 ½	¾	ALY. I.H.	1 ¼	M.C.H.T.	1 ½
WH132	6.050	20	14.2	115,000	15,300	½	2	M.C.H.T.	4 ¾	3 7/32	3 1/16	1	ALY. H.T.	1 ¾	M.C.H.T.	2 ¾
WHX132	6.050	20	14.2	115,000	15,300	½	2	M.C.H.T.	4 ¾	3 7/32	3 1/16	1	ALY. I.H.	1 ¾	M.C.H.T.	2 ¾
WH150	6.050	20	16.8	116,000	15,300	½	2 ½	M.C.H.T.	4 ¾	3 7/32	3 1/16	1	ALY. H.T.	1 ¾	M.C.H.T.	2 ¾
WHX150	6.050	20	16.8	116,000	15,300	½	2 ½	M.C.H.T.	4 ¾	3 7/32	3 1/16	1	ALY. I.H.	1 ¾	M.C.H.T.	2 ¾
WH157	6.050	20	20.6	161,000	18,200	¾	2 ½	M.C.H.T.	4 ¾	3 9/16	3 ¾	1 ½	ALY. H.T.	1 ¾	M.C.H.T.	2 ¾
WHX157	6.050	20	20.6	161,000	18,200	¾	2 ½	M.C.H.T.	4 ¾	3 9/16	3 ¾	1 ½	ALY. I.H.	1 ¾	M.C.H.T.	2 ¾
WHX155	6.050	20	19.0	145,000	17,750	9/16	2 ½	M.C.H.T.	4 ½	3 ½	3 ¾	1 ½	ALY. I.H.	1 ¾	M.C.H.T.	2 ¾
WHX159	6.125	20	26.5	230,000	20,250	¾	3	M.C.H.T.	4 ¾	3 9/16	3 9/16	1 ¼	ALY. I.H.	2	M.C.H.T.	2 ¾

S1 ATTACHMENT



S1

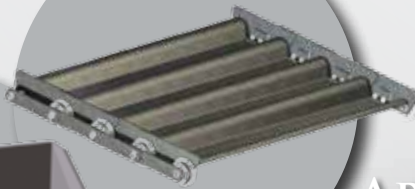
Chain No.	A	B	C	D	Weight Per Ft. Lbs. ▲
WH124	3 ¼	3 ⅞	¾	1	21.8
WHX124	3 ¼	3 ⅞	¾	1	21.8
WH132	5	5 ½	½	1 ⅞	28.5
WHX132	5	5 ½	½	1 ⅞	28.5
WH150	5 ¼	5 ½	½	1 ⅞	34.3
WHX150	5 ¼	5 ½	½	1 ⅞	34.3
WH157	3 ¾	6	¾	1 ⅞	36.2
WHX157	3 ¾	6	¾	1 ⅞	36.2

ABBREVIATIONS OF MATERIAL AND TREATMENT

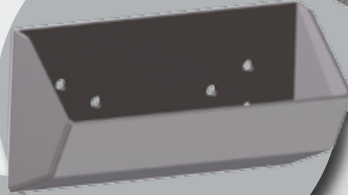
M.C.H.T.Medium Carbon, Heat Treated
 ALY.H.T.Alloy Steel, Heat Treated
 ALY.I.H.Alloy Steel, Induction Hardened
 L.C.C.H.Low Carbon, Case Hardened
 ALY.C.H.Alloy Steel, Case Hardened

★ See page A-12 for Speed Factor, Table 9, and page A-13 for Service Factor, Tables 10 and 11 in Webster master #400 catalog.

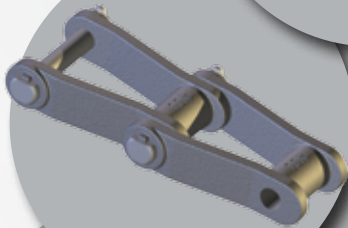
▲ Weights of attachments coupled every pitch.



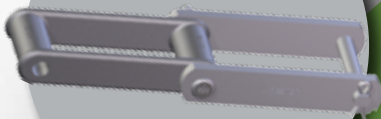
APRON CONVEYORS



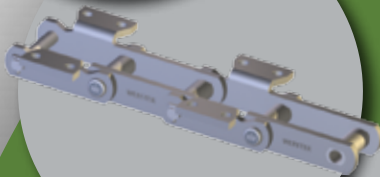
BUCKETS



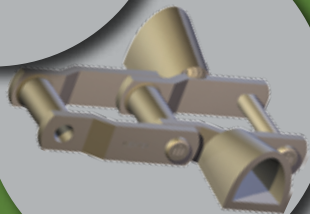
CAST CHAINS



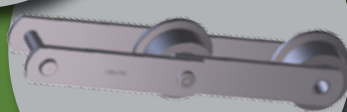
COMBINATION CHAINS



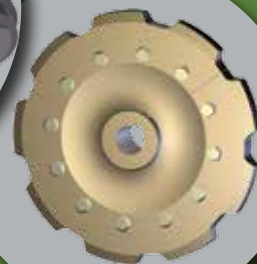
HSB CHAINS



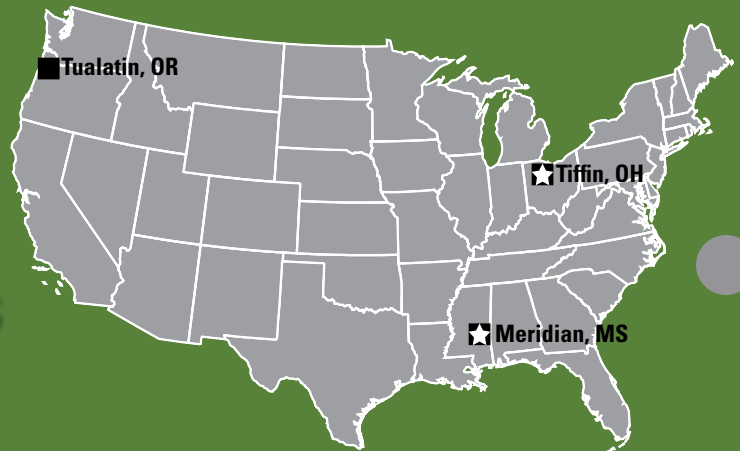
MILL CHAINS



SBR CHAINS



SPROCKETS



SOUTHERN
FOREST PRODUCTS
ASSOCIATION

