



INDUSTRIES INC

Chain & Industrial Manufactured Solutions



**Sugar Mill  
Chain Products**

# SUGAR MILL CHAINS INTRODUCTION

Connexus Inc., one of the leading suppliers of steel chain in North America has added a complete line of **Sugar Mill Chains** to our existing program, which includes: Steel Bushed Conveyor Chains, Welded Steel Chains, Drop-Forged Chains, Combination Chains.

Based on extensive past experience and proven success with our products in heavy duty applications and harsh environments in Sawmills, Pulp and Paper Mills, OSB and Hardboard Plants, and in cooperation with major sugar producers in South America, we have developed the chains that have the highest performance, strength and longevity in the most severe applications in the Sugar Mills:

- Cane Feed and Washing Table Chains
- Main Cane Carrier Chains
- Outboard Roller Cane Carrier Chains
- Intermediate Carrier Chains
- Intermediate Carrier Chains
- Sugar Elevator Chains



**The highest performance, quality and durability of Connexus Chains is a direct result of;**

## 1. Selection of Construction Material

Connexus chains are always manufactured from the highest quality materials, best suited for each application: alloy steels, low or medium carbon steels for parts that require specific heat-treatment process, cast materials (steel, malleable iron, promal) for corrosion and abrasion resistance and stainless steel for highly corrosive environments.

## 2. Optimum Heat Treatment of components

Components of our chain including pins, bushings, rollers, side-bars or complete links are hardened to required specifications (through hardened, case hardened, induction heat-treated or selectively induction heat-treated) with stringent quality control to ensure maximum performance.

## 3. Construction of the chain and quality control

- All manufactured steel or stainless steel chains have locating shoulders in pins and bushings to prevent rotation and ensure maximum chain life.
- Precision punched side bars and tight press fits of pins and bushings ensure pitch accuracy and greater fatigue resistance, resulting in smooth operation, low noise, maximum wear resistance and longer chain life.
- Quality control of all components ensures excellent resistance to high shock loads and maximum chain performance.



## 4. Connexus chains conform to highest international standards: ISO, ANSI and others

All conveyor chains are manufactured under the procedures set out by ISO 9001, including the installation of any type of attachments required.



[www.connexusindustries.com](http://www.connexusindustries.com)

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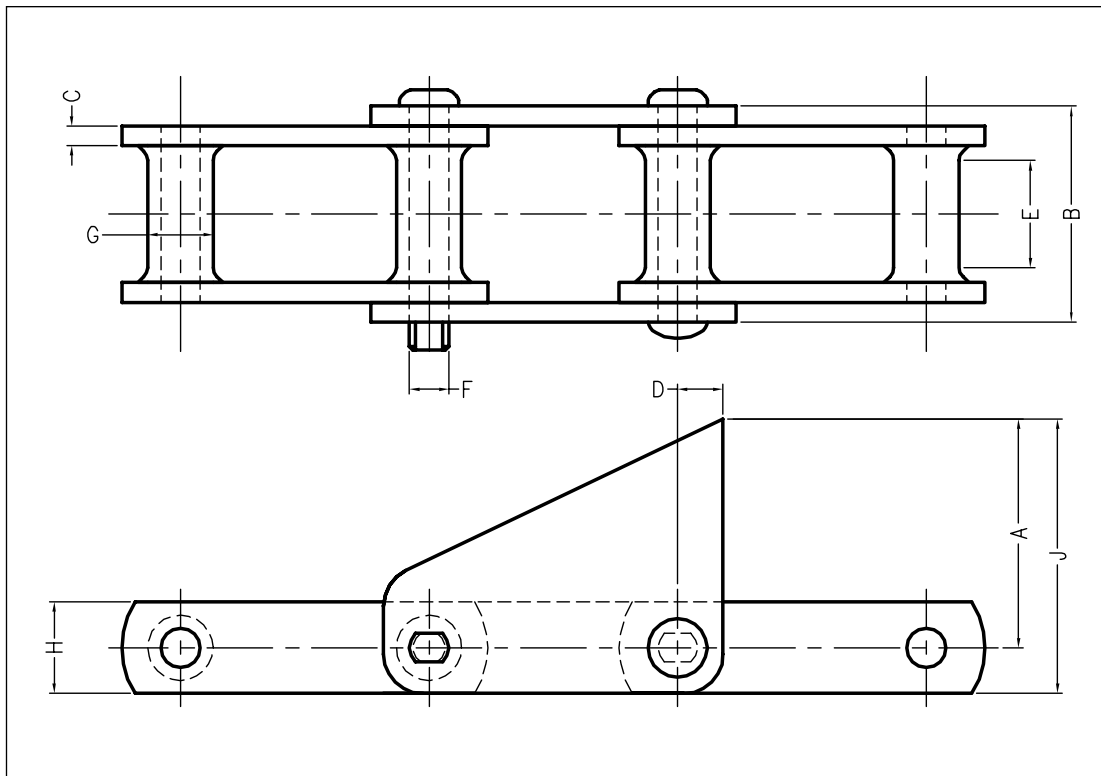
# CANE FEED & WASHING TABLE CHAINS

Chains in Cane Feed and Washing Table conveyors are exposed to a highly corrosive, abrasive environment and heavy shock loads. Connexus offers several different options to meet these requirements:

## Combination Chains

These chains have cast link and heat-treated steel side bars and rivets, offering excellent abrasion resistance in moderate speed applications. Specially designed elliptical barrel (with extra material added to the leading face) eliminates severe grinding contact with sprocket tooth face, thus extending the life of the chain.

These chains are available with most standard attachments..



### S1 ATTACHMENT

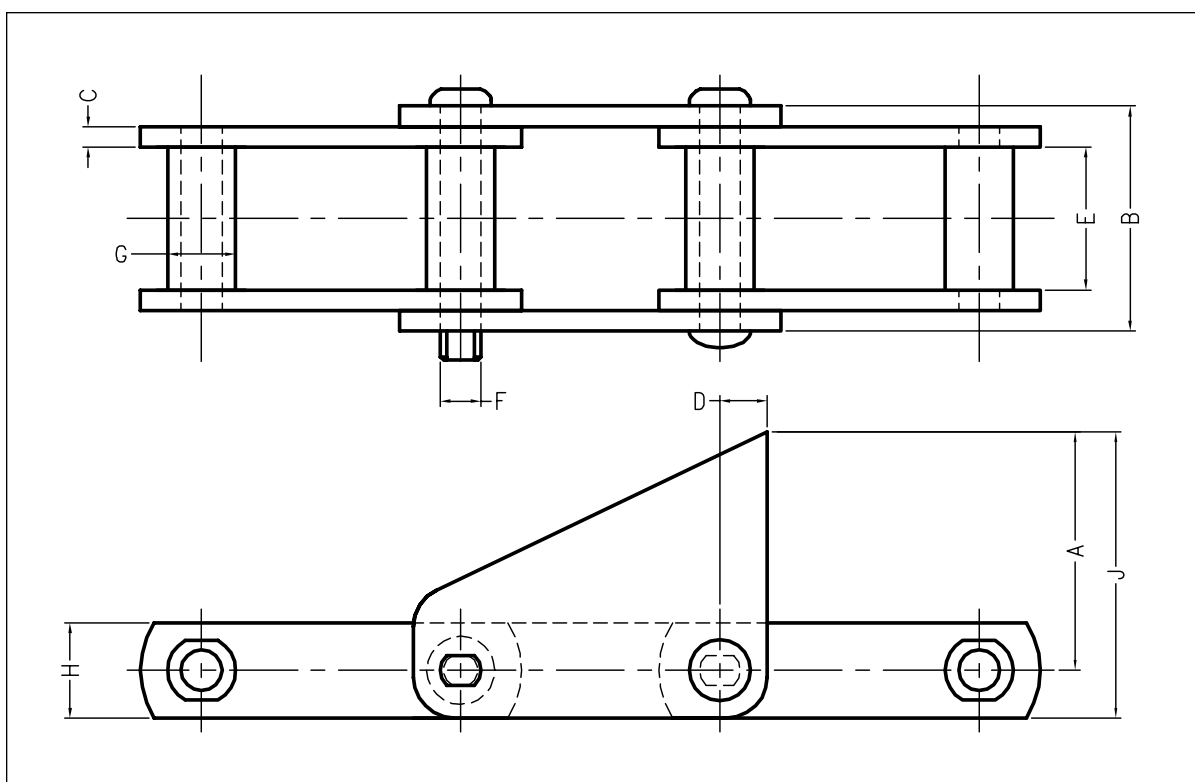
CONNEXUS CHAIN NO	PITCH	MAXIMUM WORK LOAD	AVERAGE ULTIMATE STRENGTH	PIN DIAMETER F	SIDEBAR DEPTH H	SPROCKET FACE E	BARREL DIAMETER G	A	J	SIDEBAR THICKNESS C	OAW B
C131	3.07	3880	32,400	0.62	1.50	1.13	1.25	3.25	4.00	0.38	2.81
C102B	4.00	5400	32,400	0.62	1.50	1.75	1.00	3.75	4.50	0.38	3.75
C111	4.76	6,000	36,000	0.75	1.75	2.25	1.44	4.38	5.25	.038	4.18
C110	6.00	5380	32,400	0.62	1.50	1.75	1.25	4.25	5.00	0.38	3.69
C132	6.05	11,250	67,500	1.00	2.00	2.88	1.72	5.00	6.00	0.50	5.44

Tabular dimensions and design are subject to change. Verification is recommended as Connexus is continuously improving it's products.  
Dimensions are in inches, loads in lbs.



## Engineered Steel Rollerless Chain

For extremely gritty and abrasive applications with higher loads, Connexus can offer Engineered Steel Chains. Pins and bushings are made of alloy steel and side bars from carbon steel. They are all precision machined and heat-treated to ensure maximum strength and wear resistance. These chains are available in cottered or riveted construction and can be supplied with most standard attachments.



### S1 ATTACHMENT

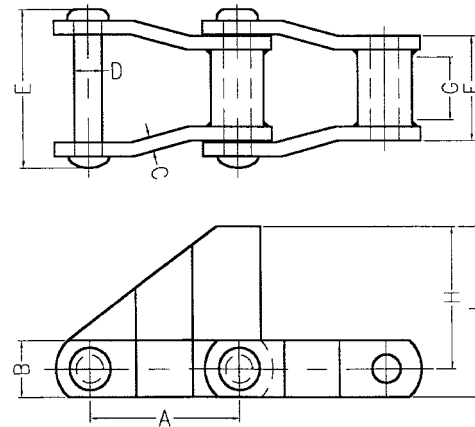
CONNEXUS CHAIN NO	PITCH	MAXIMUM WORK LOAD	AVERAGE ULTIMATE STRENGTH	PIN DIAMETER F	SIDEBAR DEPTH H	SPROCKET FACE E	BARREL DIAMETER G	A	J	SIDEBAR THICKNESS C	OAW B
SS188	2.609	2750	25,000	0.50	1.50	1.06	0.88	2.62	3.56	0.25	2.12
SS131	3.07	4,500	40,000	0.62	1.50	1.13	1.25	3.25	4.00	0.38	2.88
SS102B	4.00	6,300	40,000	0.62	1.50	1.75	1.00	3.75	4.50	0.38	3.72
SS111	4.76	8,500	50,000	0.75	1.75	2.25	1.44	4.38	5.25	0.38	4.19
SS110	6.00	6,300	40,000	0.62	1.50	1.75	1.25	4.25	5.00	0.38	3.69

# CANE FEED & WASHING TABLE CHAINS

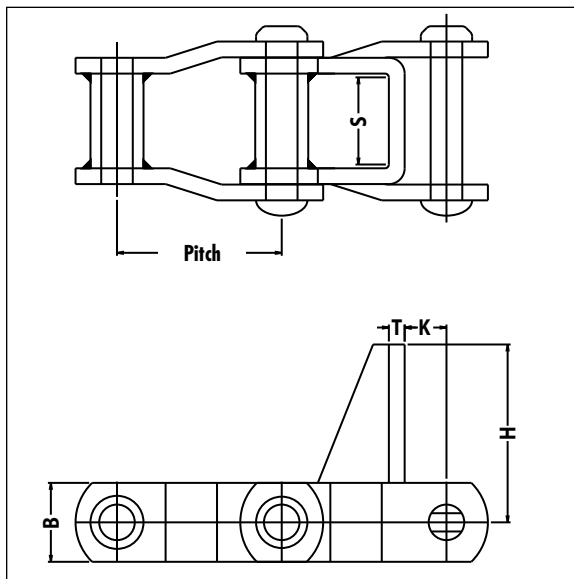
## Welded Steel Chains

Welded steel mill chains are recommended in applications where greater strength and shock load resistance are required. Fully heat-treated links and barrels and tight press fits make these chains wear and fatigue resistant. They fit on the same sprockets as comparable cast or combination chains and provide low maintenance. Most attachments can be welded or repaired in the field. These chains are available with most standard attachments.

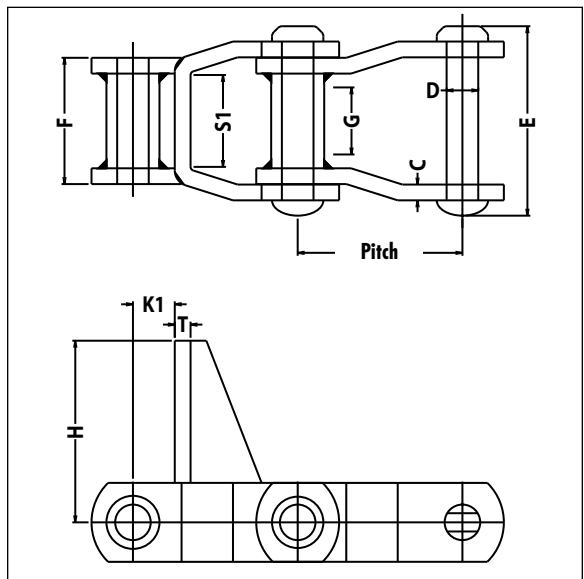
### S1 ATTACHMENT



CONNEXUS CHAIN NO	PITCH A	AVERAGE ULTIMATE STRENGTH	B	C	D	E	F	G	H	J
WH-124	4.000	60,480	1.50	0.38	0.75	4.25	2.82	1.50	3.75	4.50
WH-111	4.760	60,480	1.75	0.38	0.75	4.82	3.28	1.88	4.25	5.00
WH-132	6.050	102,600	2.00	0.50	1.00	6.25	4.22	3.12	5.00	6.00



### H1 ATTACHMENT



### H4 ATTACHMENT

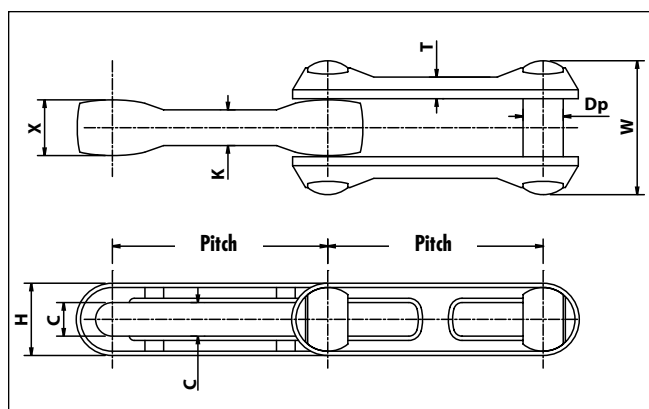
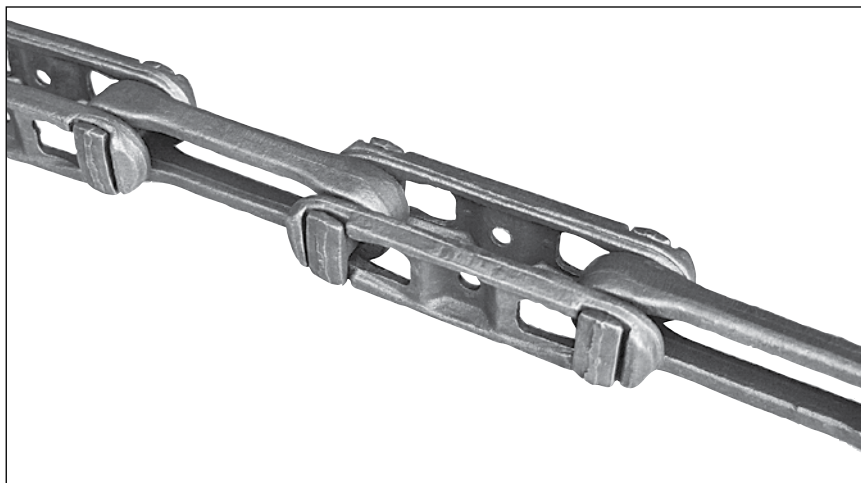
CONNEXUS CHAIN NO	PITCH A	AVERAGE ULTIMATE STRENGTH	B	C	D	E	F	G	H	K	K1	S	S1	T
WH-78	2.609	33,000	1.25	0.25	0.50	3.00	2.00	1.00	4.56	0.50	0.50	1.50	1.50	0.25
WH-82	3.075	36,000	1.25	0.25	0.56	3.12	2.25	1.37	4.62	0.50	0.62	1.86	1.75	.025

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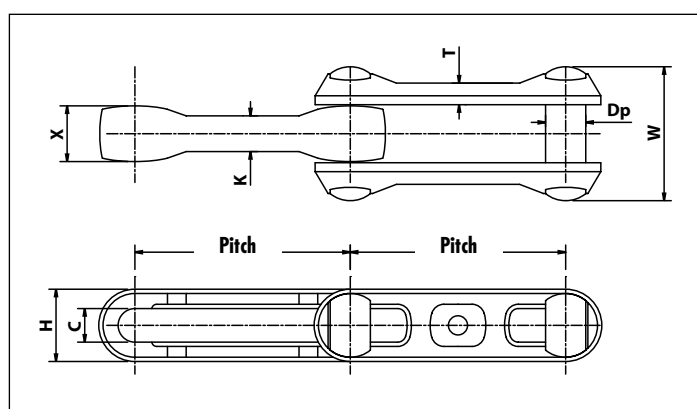
# CANE FEED & WASHING TABLE CHAINS

## Rivetless Drop Forged Chains

These chains have high strength, simple construction and do not require any tools for assembly. The open design between pin and center link prevent the conveying material from packing the joints. All parts are heat-treated and “T” pins ensure positive locking action in the sidebars. When the chain is worn, the pin can be reversed to restore the original pitch and the complete chain can be turned over to provide a new sliding surface.



**REGULAR TYPE**



**X TYPE**

CONNEXUS CHAIN NO	PITCH	H	DP	W	X	K	T	C	AVG ULT STRENGTH (LBS)	WORKING LOAD LBS	WEIGHT LB/FT
X-348	3.015	1.09	0.500	1.750	0.750	0.520	0.410	0.562	40,000	2,000	1.9
X-458	4.031	1.44	0.625	2.188	1.020	0.660	0.480	0.688	57,000	4,000	3.1
468HT	4.031	1.88	0.750	3.310	1.625	1.162	0.450	0.875	88,000	5,800	7.8
678HT	6.031	2.00	0.875	3.030	1.312	0.840	0.720	1.000	125,000	17,850	6.5
X-678	6.031	2.00	0.875	3.030	1.312	0.840	0.720	1.000	175,500	25,000	12.5
698HT	6.031	2.52	1.125	3.875	1.562	1.000	0.625	1.250	175,500	25,000	10.3
998HT	9.031	3.00	1.375	4.875	1.938	1.031	1.250	1.500	250,000	35,000	16.3

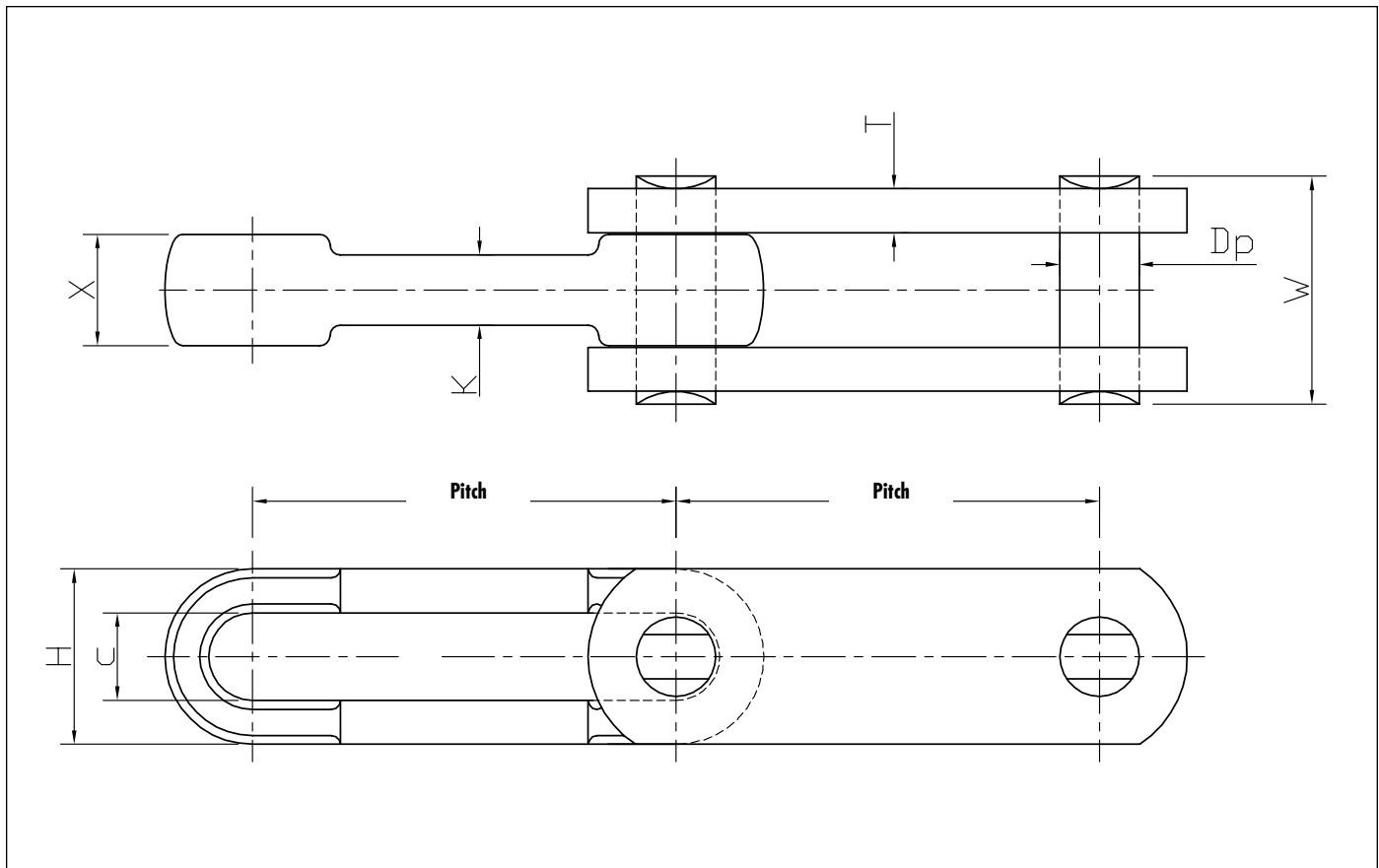
- Standard chain alloy steel through hardened: pins 340-415 BHN, Inner Links and Side Links 331-388
- Also available as HS series from High Strength Alloy Steel material with increased hardness and Ultimate Strength. Contact Connexus for details.

Tabular dimensions and design are subject to change. Verification is recommended as Connexus is continuously improving it's products. Dimensions are in inches, loads in lbs.

# CANE FEED & WASHING TABLE CHAINS

## Steel Barloop Chains

“S” Series chains have through hardened steel side bars, through hardened and induction heat treated alloy steel pins and high strength alloy steel thru-hardened center links for greater abrasion and wear resistance. Also available option with induction hardened edges on the side bars. These chains fit on the Regular Drop Forged Chain sprockets.



## S TYPE

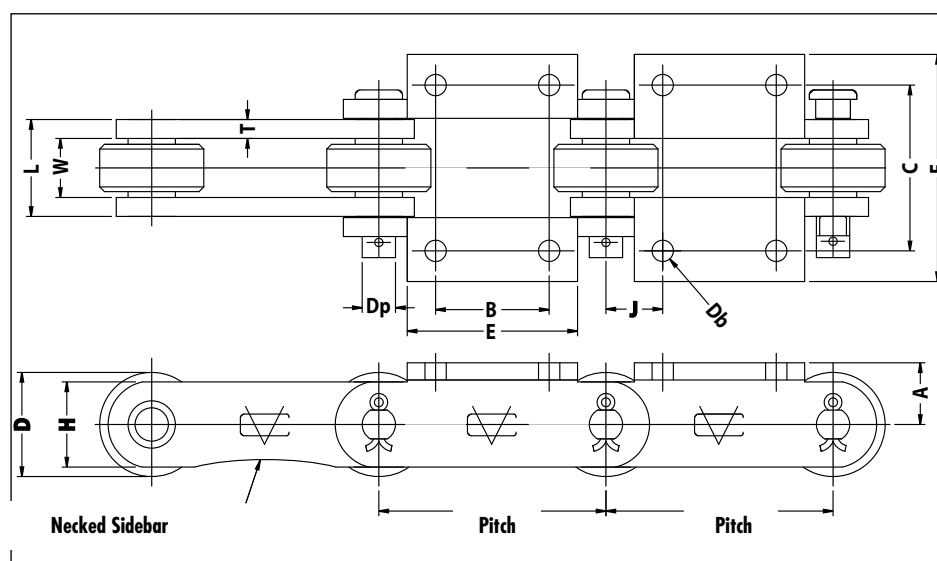
CONNEXUS CHAIN NO	PITCH	H	Dp	W	X	K	T	C	AVG ULT STRENGTH (LBS)	WORKING LOAD LBS/FT	WEIGHT LBS/FT
S-468	4.031	1.88	0.750	2.938	1.625	1.125	0.375	0.875	88,000	6,700	7.9
S-678	6.031	2.00	0.875	2.750	1.312	0.813	0.500	1.000	125,000	7,700	8.6
S-698	6.031	2.69	1.125	3.250	1.562	1.000	0.500	1.250	175,500	25,000	11.7
S-998	9.031	2.52	1.125	3.250	1.562	1.000	0.625	1.250	175,500	25,000	12.1

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# MAIN CANE CARRIER CHAINS

Connexus Cane Carrier Chains are manufactured from high quality steel and heat-treated to ensure optimum characteristics of strength, corrosion and wear resistance. They are interchangeable in all respects with corresponding high quality products supplied to the Sugar Cane Industry. The main characteristics are: heat-treated side bars, alloy steel pins through hardened and induction heat treated for maximum corrosion and wear resistance, carburized bushing and rollers and tight press fits for maximum fatigue resistance. For highly corrosive applications we can supply the following options: heat treated stainless steel pins and bushings, **CRO** chains with hard chrome plated: pins, bushings and rollers I.D or **LR** chains with lube rivets and bushings



\*Available with necked side bar at the bottom

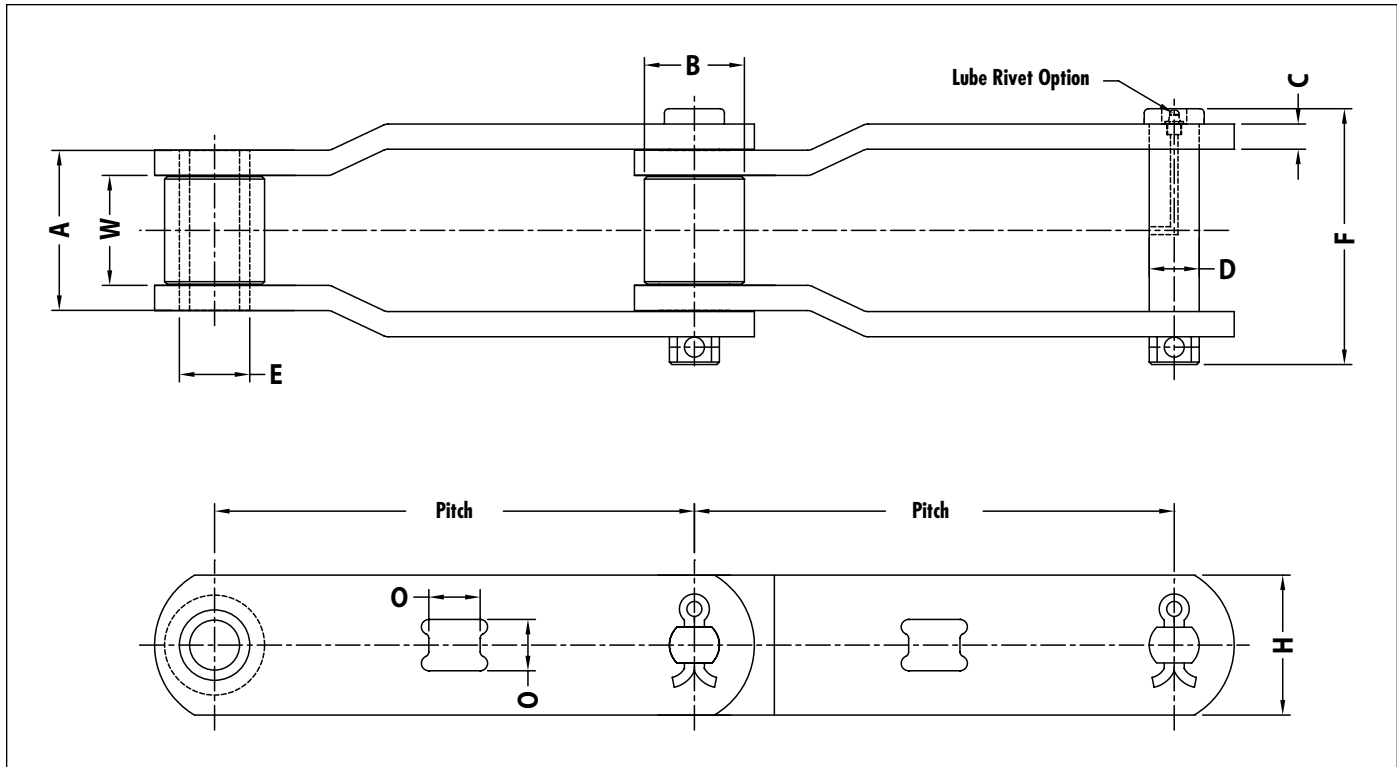
+ Bolt Diameter - hole size 1/16" larger

CONNEXUS CHAIN NO	PITCH	AVERAGE ULTIMATE STRENGTH	MAX WORK LOAD	Dp	W	H	T	D	A	B	E	J	Db +	C	F	WT LB/FT
VC2124	6	65,000	6,050	0.75	1.56	2.00	0.38	2.75	1.63	3.00	4.50	1.50	0.50	4.38	5.88	11.80
VC9061	6	85,000	6,350	0.75	1.50	2.25	0.38	2.75	1.63	3.00	4.50	1.50	0.50	4.38	6.50	15.00
VC2178	6	60,000	6,350	0.88	1.56	2.00	0.38	2.75	1.63	3.00	4.50	1.50	0.50	4.38	5.63	15.30
VC1796	6	100,000	7,500	0.88	1.56	2.25	0.38	2.75	1.63	3.00	4.50	1.50	0.50	4.38	6.50	17.50
VC1797	6	100,000	7,500	0.88	1.56	2.25	0.38	3.00	1.63	3.00	4.50	1.50	0.50	4.38	6.50	18.00
VC2198A	6	100,000	7,800	0.88	1.56	2.25	0.50	2.75	1.63	3.00	4.50	1.50	0.50	4.38	6.50	18.20
VC105C*	6	100,000	7,800	0.88	1.51	2.25	0.50	3.19	1.87	3.00	4.50	1.50	0.50	4.38	5.91	18.90
VC113C*	6	108,000	8,300	0.88	1.51	2.56	0.50	3.19	1.79	3.00	4.50	1.50	0.50	4.38	5.91	18.90
VC9063	6	140,000	8,300	0.94	1.56	2.38	0.44	3.00	1.75	3.00	4.50	1.50	0.50	4.38	6.50	18.00
VC9065	6	160,000	9,300	1.06	1.50	2.38	0.50	3.00	1.68	3.00	4.50	1.50	0.50	4.38	6.63	20.20
VC9066	6	160,000	13,000	1.06	2.50	2.38	0.50	3.00	1.68	3.00	4.50	1.50	0.50	5.38	7.63	27.30
VC2800A	8	100,000	9,800	1.00	1.81	2.75	0.50	3.50	2.19	3.25	5.00	2.38	0.63	5.19	7.20	26.00
VC2801	8	112,000	11,900	1.00	2.61	2.75	0.38	3.50	2.38	3.25	5.75	2.38	0.63	6.00	7.38	30.00
VC116C*	8	132,000	12,800	1.00	1.81	3.00	0.50	4.00	2.20	3.25	5.28	2.38	0.63	5.25	7.80	27.20
VC2804	8	150,000	24,300	1.50	3.64	3.50	0.50	4.25	2.75	3.25	5.75	2.38	0.63	7.62	9.34	47.00

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Dimensions are in inches, loads in lbs.

# OUTBOARD ROLLER CANE CARRIER CHAINS

Connexus offers 9” and 12” pitch replacement chain for most standard Outboard Roller Apron Conveyors. Chains are supplied with standard M-14 attachment holes and they are interchangeable in all respects with corresponding high quality products supplied to the Sugar Cane Industry. The main characteristics are: heat-treated side bars with precision punched M-14 attachment holes, alloy steel pins through hardened and induction heat treated for maximum corrosion and wear resistance and carburized bushing and rollers and tight press fits for maximum fatigue resistance.



## M14 ATTACHMENT

Rollerless Chain

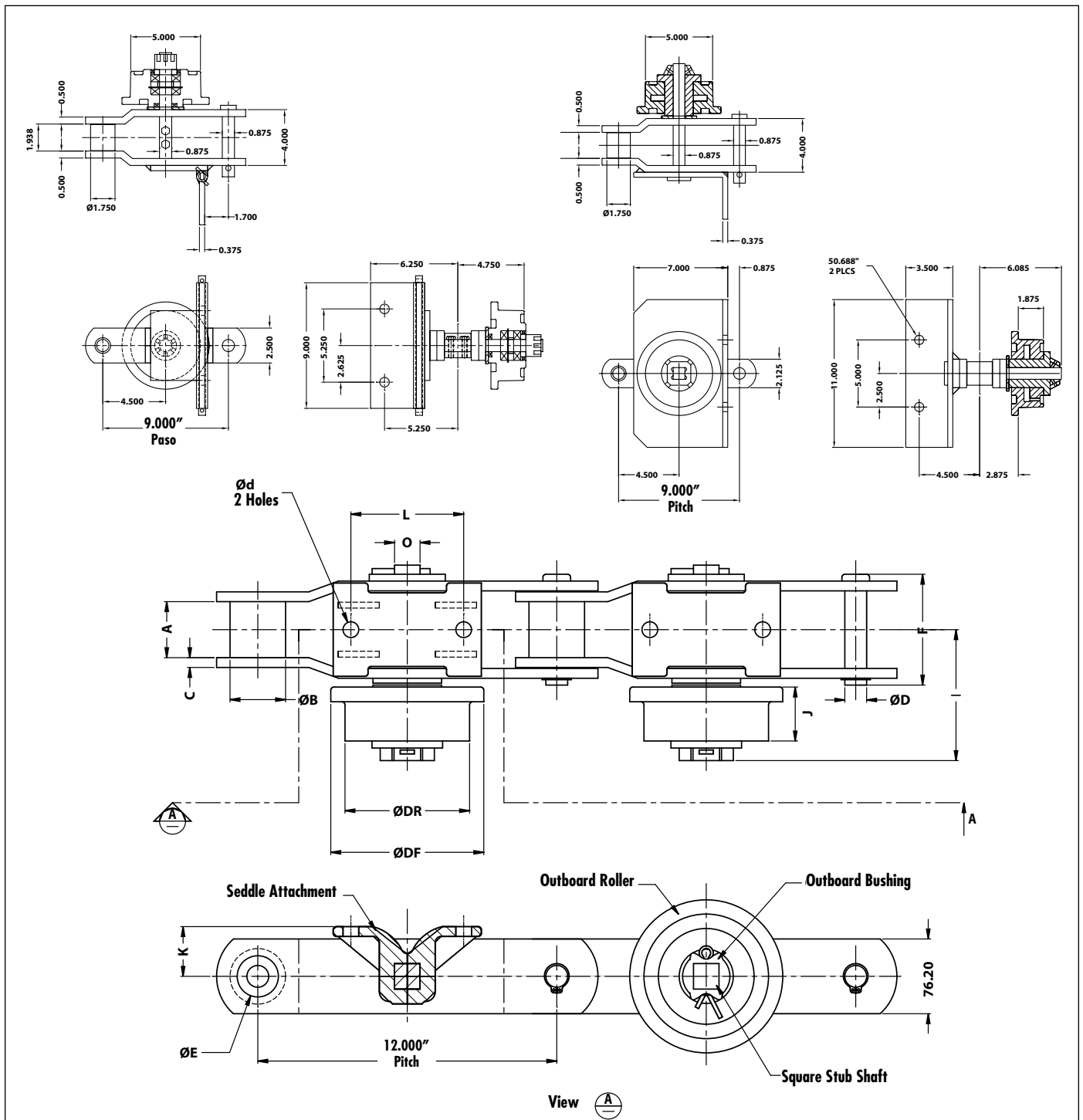
LR - Lube Rivet option available for all sizes (lube holes in bushings as well)a

CONNEXUS CHAIN NO	PITCH	AVERAGE ULTIMATE STRENGTH	MAXIMUM WORK LOAD	D	W	C	A	H	E	B	O	F	WEIGHT LBS/FT
VC2405-M14	9.00	105,000	9,000	0.88	1.94	0.50	2.94	2.13	1.25	1.75	0.88	4.72	9.70
VC2397-M14	12.00	95,000	9,000	0.88	2.19	0.38	2.94	2.50	1.25	1.75	0.88	4.72	9.50
VC2358-M14	9.00	105,000	9,000	0.88	1.94	0.50	2.94	2.50	1.25	1.75	0.88	4.72	10.00
VC1706-M14	12.00	137,200	14,000	1.00	3.00	0.50	4.00	2.50	1.50	2.25	0.88	6.09	13.90
VC1707-M14	12.00	137,200	14,000	1.00	3.00	0.50	4.00	2.50	1.50	2.25	1.00	6.09	13.90
VC2614-M14	12.00	171,000	17,500	1.25	2.75	0.63	4.00	3.50	1.75	2.50	1.25	6.19	23.50
VC12220-M14	12.00	250,000	22,500	1.50	2.78	0.63	4.03	4.00	2.13	3.13	1.25	6.36	31.00
VC1223-M14	12.00	300,000	30,500	1.50	4.13	0.63	5.38	4.00	2.13	3.50	1.25	7.70	35.80
VC2648-M14	12.00	350,000	35,000	1.63	3.63	0.75	5.38	4.00	3.25	3.25	1.25	7.75	35.90
VC5648-M14*	12.00	335,000	33,750	1.88	3.63	0.75	5.13	4.00	3.25	N/A	1.25	7.75	42.50

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# OUTBOARD ROLLER CANE CARRIER CHAINS

Connexus also offer these chains complete with installed Outboard Rollers and Saddle Attachments or different type of attachments on the chain for particular applications. Outboard Roller assembly with hardened bushing and square stub shaft is easy to remove for inspection and replacement. Rollers are available as ductile iron or cast steel and bushings are alloy steel precision machined and they are heat treated for maximum wear resistance. Rollers are also supplied with grease fittings for regular easy lubrication of the assembly. Saddle attachments are cast steel or fabricated from carbon steel plate and they are designed to evenly distribute the load on both strands of chain on the conveyor



## BAGASSE CARRIER CHAINS

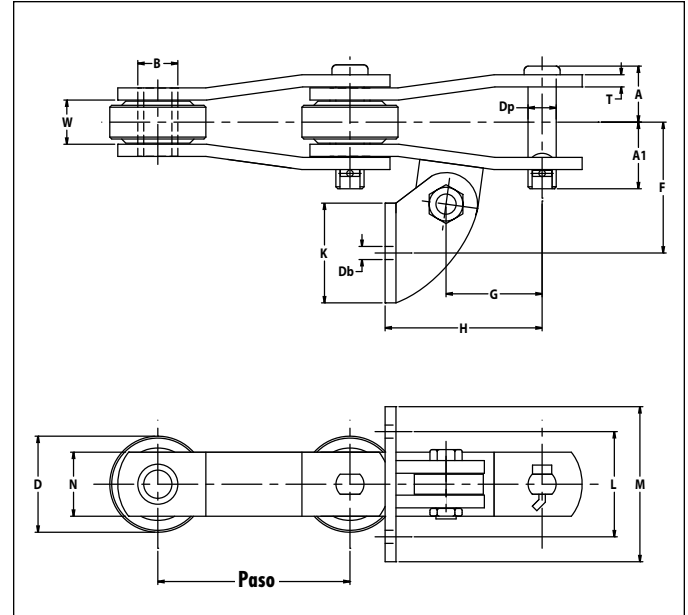
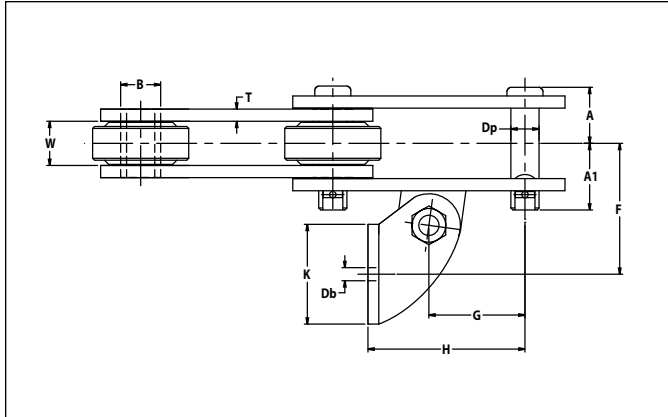
Connexus offers several sizes of straight and offset side bar construction chain for this application with different capacity ranges to meet all bagasse conveying requirements.

Our chains are manufactured from high quality steel and heat-treated to ensure optimum characteristics of strength, corrosion and wear resistance. They are interchangeable in all respects with corresponding high quality products supplied to the Sugar Cane Industry. The main characteristics are: heat-treated side bars, alloy steel pins through hardened and induction heat treated for maximum corrosion and wear resistance, carburized bushing and rollers and tight press fits for maximum fatigue resistance. For highly corrosive applications we can supply the following options: heat treated stainless steel pins and bushings, CRO chains with hard chrome plated: pins, bushings and rollers I.D or LR chains with lube rivets and bushings.

All chains have A-42 or similar attachments fitted in the side bar and fully welded inside and all around for extra strength. Standard 2C flight wing attachments or similar are made of cast steel and special fabricated attachments are available on request.



# BAGASSE CARRIER CHAINS



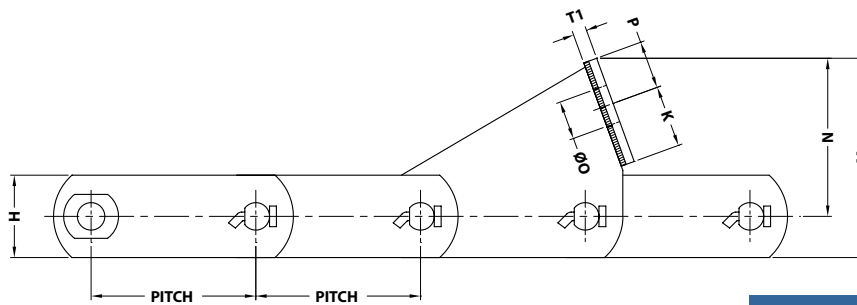
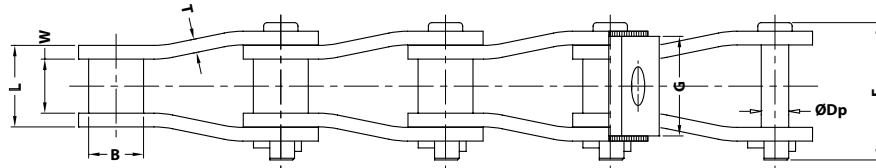
- + Bolt diameter - (hole size 1/16" larger)
- Dimensions shown with standard A-42 and Wing Attachments
- Other Attachments available: A42L, A43, etc.
- Standard wing attachments: 2C, 2D, 22C, etc.
- Other special attachments and wings available upon request

CONNEXUS CHAIN NO	PITCH P	AVERAGE ULTIMATE STRENGTH	MAX WORK LOAD	CHAIN STYLE	Dp	W	T	D	B	K	Db+	G	H	F	N	L	M	WGT LB/FT
VC0401	4.00	45,000	4,000	1	0.63	1.31	0.38	2.00	0.94	1.50	0.31	2.00	3.00	3.75	1.63	3.06	4.56	10.0
VC1604	6.00	20,000	2,700	2	0.50	1.06	0.25	3.00	0.72	2.00	0.50	3.00	5.63	3.12	1.50	3.50	5.00	11.1
VC3135	6.00	55,000	5,250	2	0.75	1.25	0.38	3.50	1.13	2.00	0.50	3.00	5.63	3.44	2.00	3.50	5.00	12.2
SS1131	6.00	65,000	6,050	1	0.75	1.56	0.38	3.00	1.13	2.00	0.50	3.00	5.63	3.65	2.00	3.50	5.00	12.7
VC9060	6.00	60,000	6,350	1&2	0.75	1.50	0.38	2.75	1.13	2.00	0.50	3.00	5.63	3.50	2.00	3.25	5.00	11.9
VC9061	6.00	85,000	6,350	1&2	0.75	1.50	0.38	2.75	1.13	2.00	0.50	3.00	5.63	3.50	2.25	3.25	5.00	11.9
VC1796	6.00	100,000	7,800	1&2	0.88	1.50	0.38	2.75	1.25	2.00	0.50	3.00	5.63	3.50	2.25	3.25	5.00	12.2
VC1797	6.00	100,000	7,800	1&2	0.88	1.50	0.38	3.00	1.25	2.00	0.50	3.00	5.63	3.50	2.25	3.25	5.00	13.3
VC2184	6.00	85,000	6,500	2	0.88	1.38	0.38	3.00	1.25	2.00	0.50	3.00	5.63	3.62	2.00	3.50	5.00	13.5
VC2185	6.00	85,000	6,500	2	0.88	1.38	0.38	3.50	1.25	2.00	0.50	3.00	5.63	3.62	2.00	3.50	5.00	14.6
VC3184	6.00	85,000	6,500	2	0.88	1.38	0.38	3.00	1.25	2.00	0.50	3.00	5.63	3.62	2.38	3.50	5.00	13.5
VC9184	6.00	140,000	8,300	2	0.94	1.50	0.50	3.00	1.25	2.00	0.50	3.00	5.63	3.88	2.50	3.50	5.00	15.2
VC9185	6.00	140,000	8,300	2	0.94	1.50	0.50	3.50	1.25	2.00	0.50	3.00	5.63	3.88	2.50	3.50	5.00	18.0
VC9063	6.00	140,000	8,300	1&2	0.94	1.50	0.44	3.00	1.25	2.00	0.50	3.00	5.63	3.94	2.38	3.50	5.00	15.0
VC9065	6.00	160,000	9,300	1&2	1.06	1.50	0.50	3.00	1.50	2.00	0.50	3.00	5.63	3.62	2.38	3.50	5.00	17.9
VC2800A	8.00	150,000	11,900	2	1.00	1.81	0.38	3.50	1.50	2.00	0.50	4.00	6.63	4.75	2.88	3.50	5.00	31.8
VC8184	8.00	185,000	11,900	2	1.00	1.81	0.50	3.50	1.50	2.00	0.50	4.00	6.63	4.22	2.75	3.50	5.00	34.9

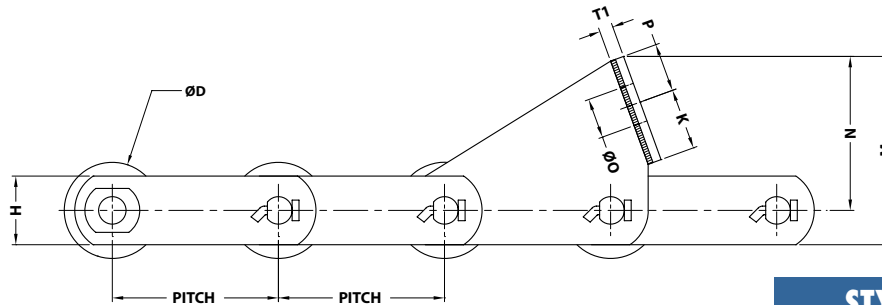
Tabular dimensions and design are subject to change. Verification is recommended as Connexus is continuously improving it's products.  
Dimensions are in inches, loads in lbs.

## INTERMEDIATE CONVEYOR DONNELLY

Our Donnelly chains are manufactured from high quality steel and heat-treated to ensure optimum characteristics of strength, corrosion and wear resistance. They are interchangeable in all respects with corresponding high quality products supplied to the Sugar Cane Industry. The main characteristics are: heat-treated side bars, alloy steel pins through hardened and induction heat treated for maximum corrosion and wear resistance, carburized bushing and rollers and tight press fits for maximum fatigue resistance. For highly corrosive applications we can supply the following options: chains with sealed joints, heat treated stainless steel pins and bushings, CRO chains with hard chrome plated: pins, bushings and rollers I.D. Standard FG attachments are shown in the table below. Some other available attachments are shown on the next page.



**STYLE 1 - ROLLERLESS CHAIN**

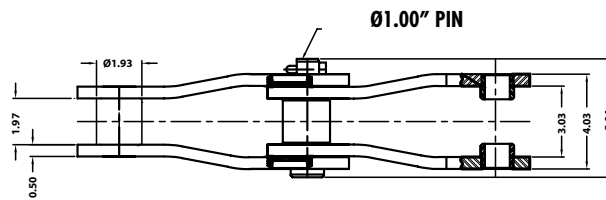
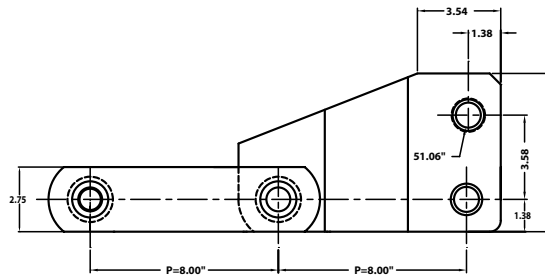


**STYLE 2 - ROLLER CHAIN**

CONNEXUS CHAIN NO	PITCH P	AVERAGE ULTIMATE STRENGTH	MAX WORK LOAD	CHAIN STYLE	Dp	W	T	L	H	B	D	F	G	N	M	T1	P	K	O	WGT LBS/FT
VC5002-FG35	6.05	132,000	10,400	1	1.00	2.00	0.50	3.00	2.50	2.00	n/a	5.00	4.09	5.56	6.81	0.50	1.73	2.16	1.41	21.00
VC5004-FG35	6.05	132,000	10,400	1	1.00	1.97	0.50	2.97	2.75	1.93	n/a	5.00	4.72	5.19	6.77	0.63	1.81	2.12	1.26	20.00
VC5004-FG37	6.05	132,000	10,400	1	1.00	1.97	0.50	2.97	2.75	1.93	n/a	5.00	4.72	5.47	6.85	0.75	2.00	2.00	1.41	20.00
VC5025-FG36	6.00	133,000	10,400	1	1.00	1.97	0.50	2.97	3.00	2.00	n/a	5.00	3.62	5.75	7.26	0.50	1.75	2.25	1.41	24.30
VC5203-FG34	6.05	132,000	10,400	2	1.00	1.91	0.50	2.91	2.50	2.00	3.50	4.88	3.56	5.44	6.69	0.50	1.77	2.23	1.45	22.30

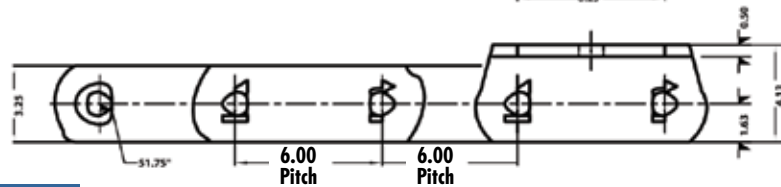
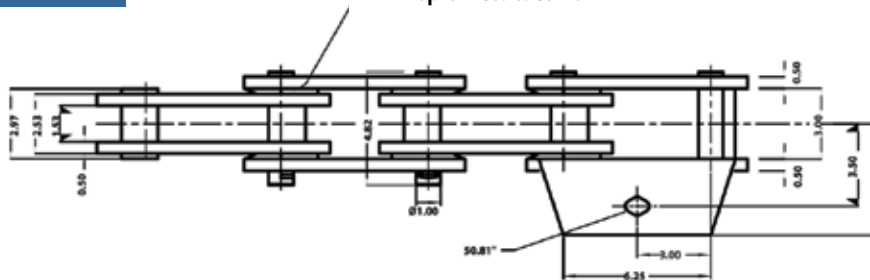
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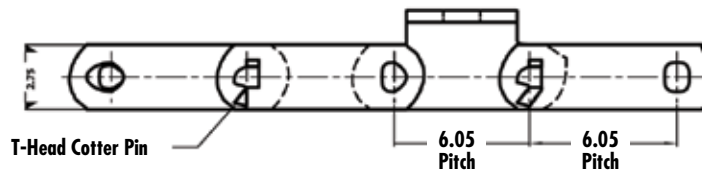
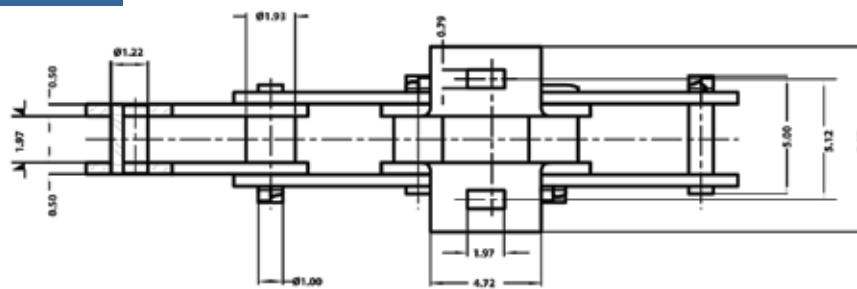


**VC8002-BH**

Option "Sealed Joints"



**VC9957SJA-1**

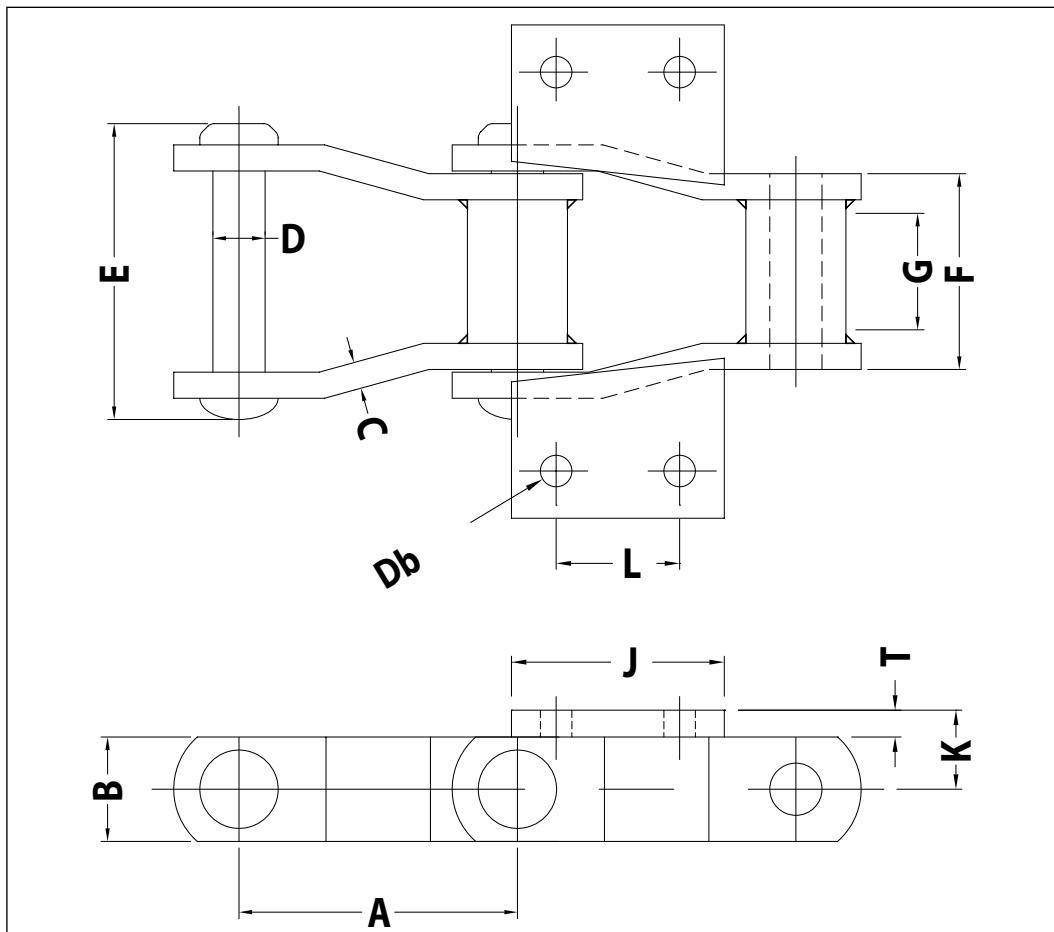


**VC5004SBED45**

# SUGAR ELEVATOR CHAINS

- Combinations Chains
- Engineered Steel Rollerless Chains
- Welded Steel Chains

All these chains are supplied with K-2 attachments suitable for standard elevator buckets.



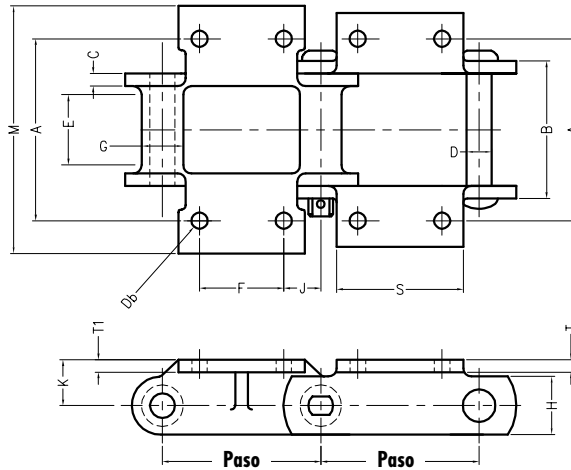
## WELDED STEEL CHAIN

+ Bolt diameter - (hole size 1/16" larger)

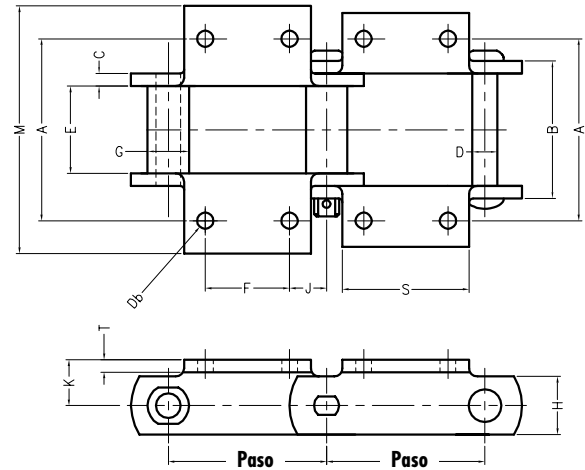
CONNEXUS CHAIN NO	PITCH A	AVERAGE ULTIMATE STRENGTH	B	C	D	E	F	G	K	T	J	L	M	Db+
WH-124	4.000	60,480	1.50	0.38	0.75	4.25	2.82	1.50	1.13	0.38	3.00	1.94	5.25	0.38
WH-111	4.760	60,480	1.75	0.38	0.75	4.82	3.28	1.88	1.25	0.38	3.50	2.31	6.25	0.50
WH-132	6.050	102,600	2.00	0.50	1.00	6.25	4.22	3.12	1.50	0.50	4.19	2.75	7.50	0.50

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Dimensions are in inches, loads in lbs.

# SUGAR ELEVATOR CHAINS



**COMBINATION CHAIN**



**ENGINEERED STEEL CHAIN**

These chains are recommended for abrasive applications or at the elevators with higher load requirements. Pins and bushings are made of alloy steel and side bars from carbon steel. They are all precision machined and heat-treated to ensure maximum strength and wear resistance. These chains are available in cottered or riveted construction. They fit on the same sprockets as the equivalent Combination Chains and attachment dimensions are the same.

## ENGINEERED STEEL CHAIN

+ Bolt diameter - (hole size 1/16" larger)

CONNEXUS CHAIN NO	PITCH A	AVERAGE ULTIMATE STRENGTH	MAX WORK LOAD	B	C	D	E	G	H	K	T	M	A	Db+	F	S
SS188	2.609	25,000	2,750	2.12	0.25	0.50	1.06	0.88	1.50	0.81	0.25	5.13	4.19	0.38	1.25	2.13
SS131	3.075	40,000	4,500	2.88	0.38	0.62	1.13	1.25	1.50	1.00	0.38	5.56	4.12	0.50	1.50	2.50
SS102B	4.00	40,000	6,300	3.72	0.38	0.62	1.75	1.00	1.50	1.00	0.38	6.41	5.31	0.38	1.75	2.62
SS111	4.76	50,000	8,500	4.19	0.38	0.75	2.25	1.44	1.75	1.50	0.38	7.50	6.25	0.50	2.31	3.62
SS110	6.00	40,000	6,300	3.69	0.38	0.62	1.75	1.25	1.50	1.00	0.38	6.38	5.31	0.38	1.75	2.88

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Dimensions are in inches, loads in lbs.

These chains have cast link and heat-treated steel side bars and rivets, offering excellent abrasion resistance in moderate speed applications. Specially designed elliptical barrel (with extra material added to the leading face) eliminates severe grinding contact with sprocket tooth face, thus extending the life of the chain.

## COMBINATION CHAIN

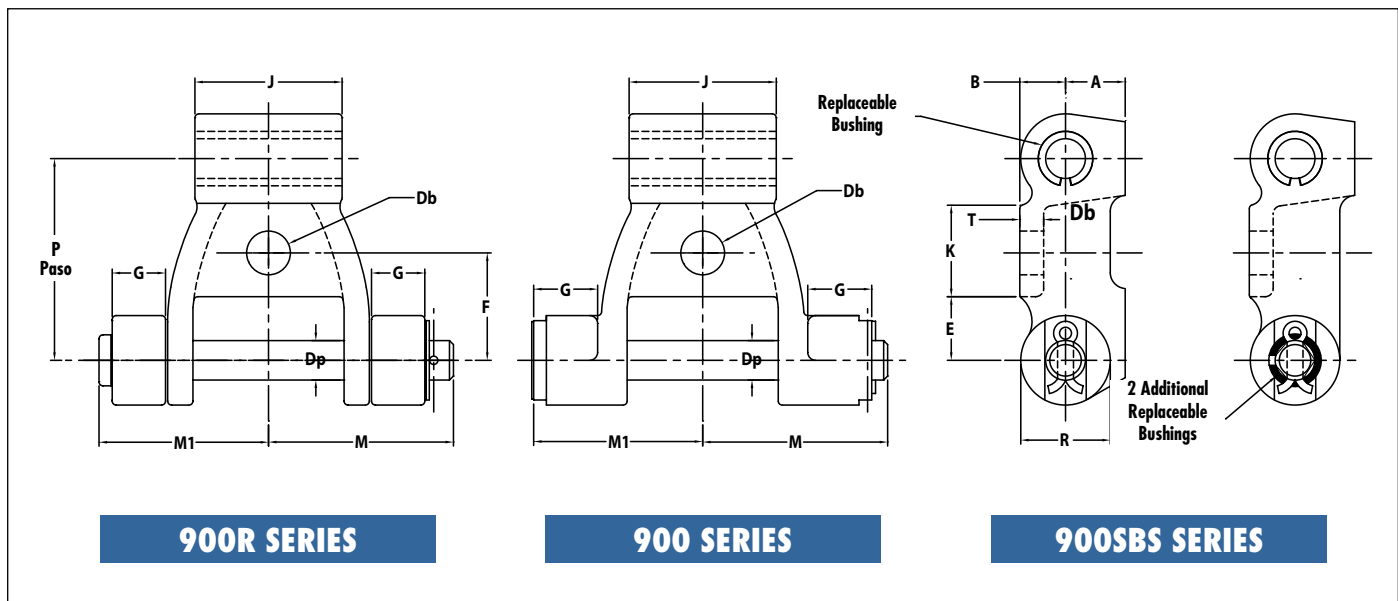
+ Bolt diameter - (hole size 1/16" larger)

CONNEXUS CHAIN NO	PITCH A	AVERAGE ULTIMATE STRENGTH	MAX WORK LOAD	B	C	D	E	G	H	K	T	T1	M	A	Db+	F	S
C102B	4.000	32,400	5,400	2.81	0.38	0.62	1.75	1.00	1.50	1.00	0.38	0.22	6.75	5.31	0.38	1.75	2.88
C111	4.760	36,000	6,000	4.18	0.38	0.75	2.25	1.44	1.75	1.13	0.38	0.31	7.50	6.25	0.50	2.31	3.50
C132	6.050	67,500	11,250	5.44	0.50	1.00	2.88	1.72	2.00	1.25	0.50	0.38	9.36	7.50	0.50	2.75	4.00

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## INTERMEDIATE CARRIER CHAINS

- 900 Series Pintle Chain with special cast links (promal), hardened steel bushings keyed into the barrel and “T” head heat-treated pins locked in the links cast lugs.
- SS907-E51 chain with all stainless steel parts: heat-treated 400 series stainless steel or 304SS stainless steel. Contact Connexus for best selection of materials for your application.
- SS907-E51SBS chain is with 2 additional replaceable bushings in side bars and with all stainless steel parts: heat-treated 400 series stainless steel or 304SS stainless steel.
- 900R series chain has outboard rollers to engage the double sprocket teeth to minimize the scrubbing action. It has heat-treated stainless steel pins, bushings and rollers.
- All wearing parts in these chains are easily replaceable. These chains are interchangeable in all respects with corresponding high quality products supplied to the Sugar Cane Industry.



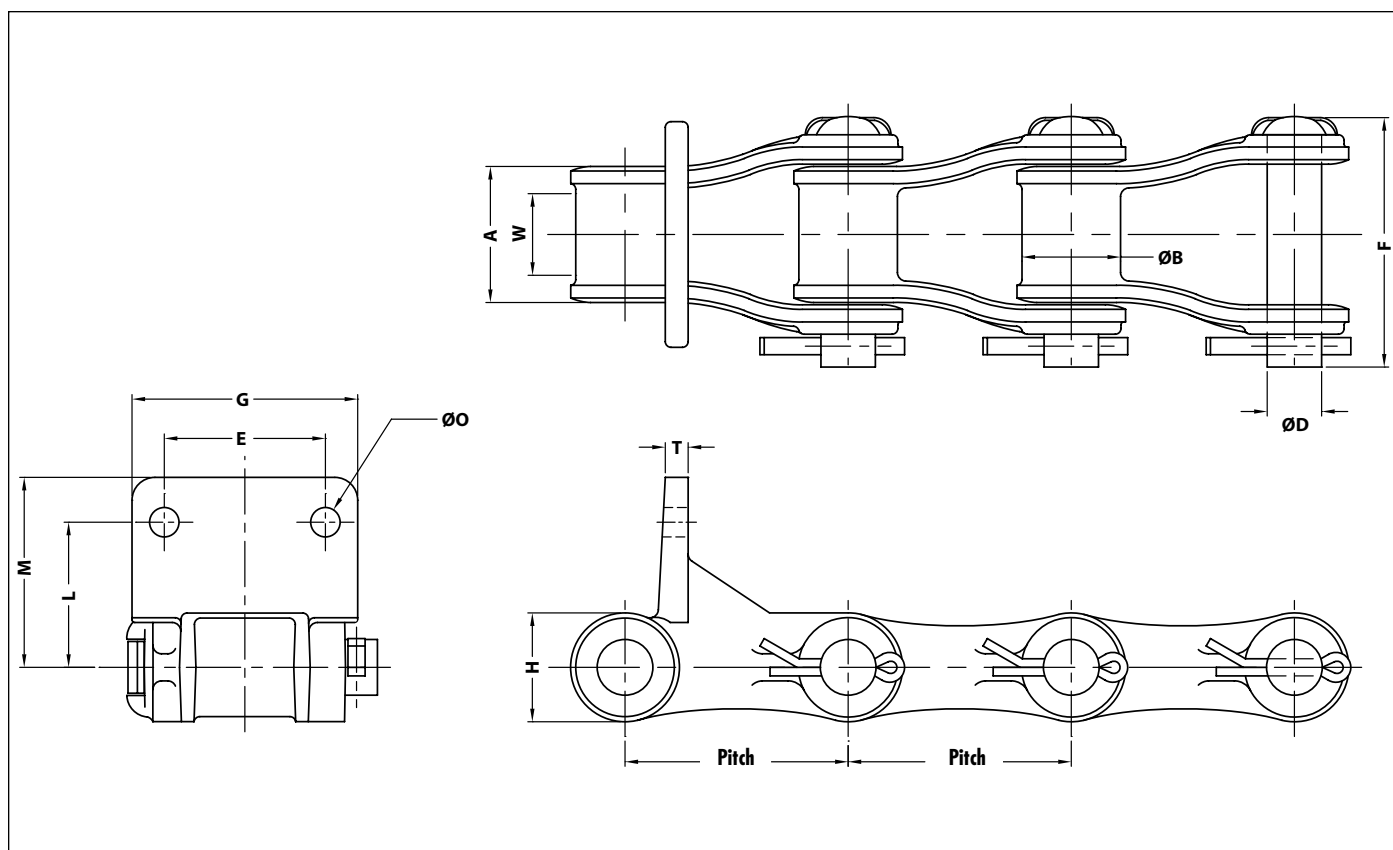
CONNEXUS CHAIN NO	PITCH P	AVERAGE ULTIMATE STRENGTH	MAX WORK LOAD	Dp	R	K	M1	M	A	B	F	Db	G	E	K	T	WGT LBS/FT
907-E51	3.170	32,5000	5,000	0.63	1.44	2.31	2.69	2.94	1.66	0.72	1.69	0.69	1.12	0.69	1.31	0.36	12.2
SS907-E51	3.107	32,500	5,000	0.63	1.44	2.31	2.69	2.94	1.66	0.72	1.69	0.69	1.12	0.69	1.31	0.36	12.2
R907-E51	3.170	32,500	5,000	0.63	1.40	2.31	2.94	3.06	1.66	0.72	1.69	0.69	1.06	0.69	1.31	0.36	12.2

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Dimensions are in inches, loads in lbs.

## ASH REMOVAL CHAINS

Connexus stainless steel combination and welded steel chains suitable for highly corrosive environments. Normally chains are supplied as a combination of stainless steel parts: heat-treated 400 series stainless steel or 304SS stainless steel. Contact Connexus for best selection of materials for your application.

Welded steel construction chains are used for higher load applications. We also have available VC4103SS-B series chain with replaceable stainless steel or special plastic bushing in the barrel.

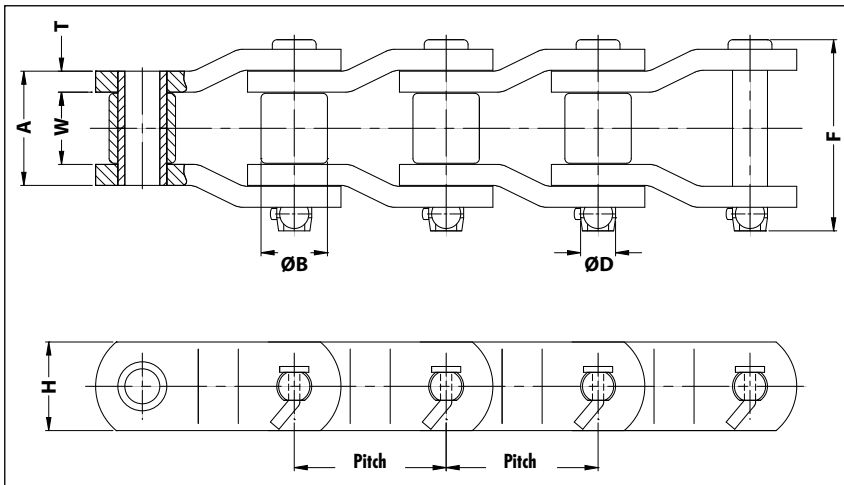


CONNEXUS CHAIN NO	PITCH	AVERAGE ULTIMATE STRENGTH	MAX WORK LOAD	W	A	H	D	B	T	L	M	O+	E	G	WGT LBS/FT
VC488HD-F29	2.609	24,000	2,350	0.94	1.69	1.50	0.63	1.25	0.38	1.97	2.58	0.31	2.03	2.92	6.30
VC4103SS-F29	3.075	27,500	4,250	1.13	1.88	1.50	0.75	1.36	0.41	2.00	2.63	0.41	2.22	3.11	9.60
VC4103SS-F30	3.075	27,500	4,250	1.13	1.88	1.50	0.75	1.36	0.41	2.00	2.63	0.53	2.22	3.11	9.60
WH9103-F29*	3.075	60,000	6,000	1.31	2.28	1.50	0.75	1.25	0.38	2.00	2.63	0.41	2.22	3.12	11.30
WH9103-F30*	3.075	60,000	6,000	1.31	2.28	1.50	0.75	1.25	0.38	2.00	2.63	0.56	2.22	3.12	11.30

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Dimensions are in inches, loads in lbs.

# HEAVY DUTY DRIVE CHAINS

Connexus Engineering Class Offset Side Bar Drive Chains are suitable for heavy duty power transmission applications. All parts are made from high quality steel with heat treatment to ensure the longest life and exceptional performance. Pins and bushings have Press Fits in the side bars for better fatigue and wear resistance. Pins are thru hardened and induction heat treated for best combination of strength, toughness and wear.



Chain and attachments are welded construction

CONNEXUS CHAIN NO	PITCH	AVERAGE ULTIMATE STRENGTH	MAX WORK LOAD	D	W	T	A	H	B	F	WEIGHT LBS/FT
VC3180	2.250	63,000	4,800	0.69	1.38	0.28	2.00	2.13	1.41	3.28	9.60
VC520	2.563	24,000	2,700	0.50	1.00	0.25	1.56	1.25	1.13	2.69	4.50
VC1578	2.609	20,000	2,300	0.44	1.06	0.19	1.44	1.00	0.88	2.41	2.30
LXS882	2.609	26,000	2,500	0.44	1.06	0.25	1.63	1.13	0.88	2.67	3.80
VC50	3.067	110,000	6,100	0.75	1.56	0.38	2.31	2.25	1.62	3.94	13.20
VC1030	3.075	28,000	4,650	0.63	1.44	0.31	2.06	1.50	1.25	3.50	6.80
VC1031	3.075	48,000	4,650	0.63	1.44	0.31	2.06	1.50	1.25	3.50	6.80
VC3075	3.075	75,000	5,100	0.65	1.50	0.38	2.25	1.75	1.25	3.85	8.60
VC238	3.500	140,000	7,700	0.88	1.50	0.50	2.50	2.25	1.75	4.50	16.00
VC1248	4.063	140,000	9,000	0.88	1.88	0.50	2.94	2.25	1.75	4.88	15.70
VC1245	4.073	170,000	10,050	0.94	1.94	0.56	3.06	2.38	1.78	5.13	18.70
R0635	4.500	220,000	12,300	1.13	2.00	0.56	3.13	3.13	2.25	5.44	22.00
VC5031	5.000	260,000	17,500	1.25	2.75	0.63	4.00	3.50	2.50	6.31	36.00
VC1315	5.000	330,000	20,000	1.38	2.50	0.75	4.06	3.50	2.50	6.63	37.00
VC4824	6.000	287,000	23,700	1.50	2.94	0.75	4.50	4.00	3.00	7.25	45.00
VC6555	6.500	412,000	30,600	1.75	3.19	0.88	5.00	3.50	3.50	7.97	77.90
VC7080*	7.000	606,000	37,150	2.13	3.25	0.88	5.00	6.00	4.50	8.03	89.60

\* Straight sidebar chain

\* For offset drive chains “ narrow end “ should always face small sprocket on the tight side regardless if it is Step-Up or Step-Down Drive

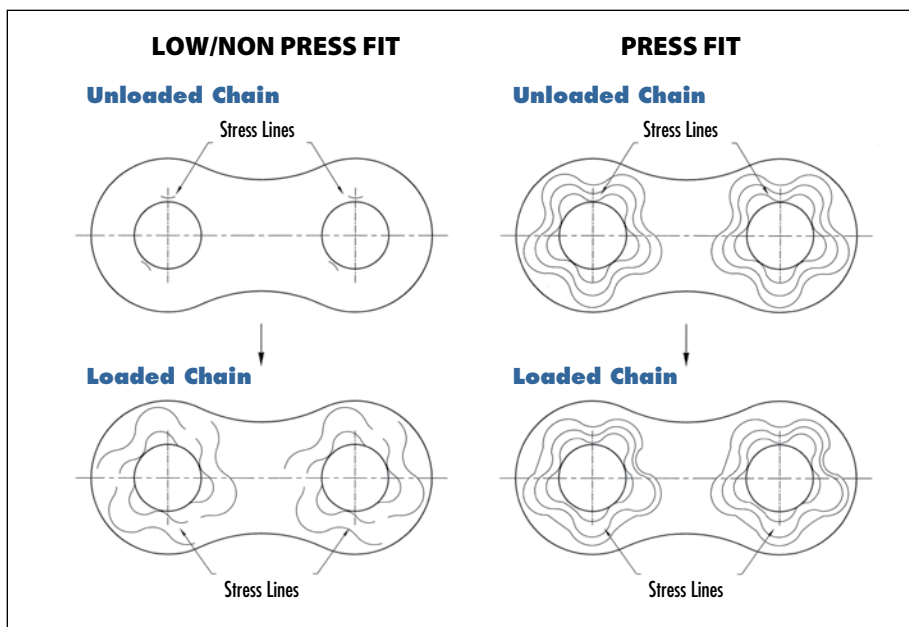
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## CROSS REFERENCE CHART

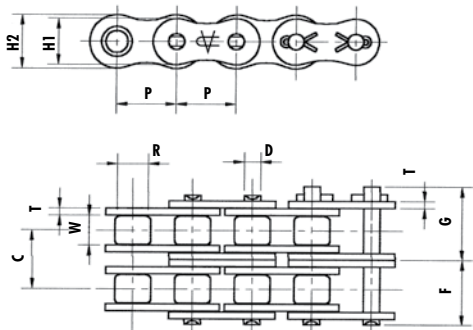
Portable tool suitable for use in the field during the drive chain assembly and disassembly. Depending on the chain size they equipped with suitable hydraulic cylinder to provide sufficient force to push the pin in and maintain optimum press fit for maximum fatigue resistance and longer chain life.”

### PIN-BUSHING PRESS FIT



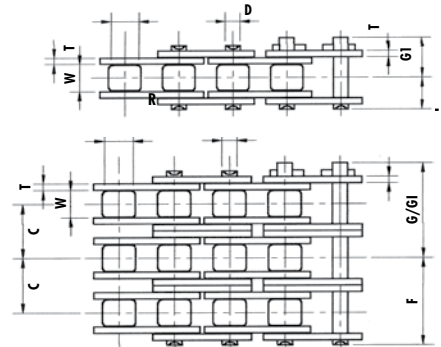
PITCH	CONNEXUS CHAIN NO	DRIVE CHAIN CROSS REFERENCE							
2.250	VC3180		3180						
2.563	VC520		A520						
2.609	LXS882	EXS882	R588	R0588	US882	MXS882	-	ROA882	JS882
3.067	VC50	3067X	AX1568	R0568	US3011	MXS3011	SS568H	ROA2512	JS3011 O
3.075	VC1030	ROA40	1030					ROA40	
3.075	VC1031	EXS402	R1033	R03	US1031	MXS1031	SS40	ROA1031	JS1031
3.075	VC3075	API3P	R1037	R03H	1190SXX	MXS3075	SS40H	ROA40 Hyper	JS3075
3.500	VC238	E238R	RX238	R01616	US3514	MXS3514	SS1616A	ROA2814	JS3514
4.063	VC1248	API4P	R1244	R04	US1242	MXS1242	SS1244	ROA1242	JS4014
4.073	VC1245	E4073	RX1245	R01245	US1245	MXS1245	SS1245	ROA3315	JS1245A
4.500	R0635	4500A	R0635	R0635	450SXX	MXS4522	SS635H	ROA3618	IS4522
5.000	VC5031	EXS5027	RX1207	R01602AA	US5028A	MXS5031	SS6022P	ROA4020	JS5031
5.000	VC1315	1605AAA	RO1315	US5542	US5035	MXS5035	SS5022	ROA5035	1605AAA
6.000	VC4824		RO1306		US6043	MXS6042	SS6043	ROA4824	JS6042
6.500	VC6555		X1311		US6566	MXS6565		RO6555	JS6555
7.000	VC7080*		A1309		US7080			RO7080	

# TRANSMISSION ROLLER CHAINS



Chains supplied in Riveted or Cottered construction.  
Also available: Standard Heavy Duty, SH, EX and EXH series chains.

Refer to our on line catalogue or contact Connexus for more details.



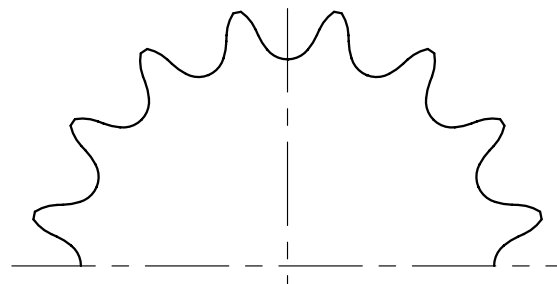
CXS ANSI #	PITCH	ROLLER WIDTH	ROLLER DIAMETER	LINK PLATES			PIN				TRANSVERSE	AVERAGE	APPROX WEIGHT LBS/FT
				HEIGHT		THICKNESS	DIAMETER		LENGTHS		PITCH	ULTIMATE	
	P	W	R	H1	H2	T	D	F	G	G1	C	STRENGTH	
25	0.250	0.125	0.130	0.197	0.228	0.03	0.091	0.150	0.189	- - -	-	990	0.094
25-2								0.277	0.316	- - -	0.252	1,980	0.175
25-3								0.402	0.441	- - -	0.252	2,970	0.269
35	0.375	0.188	0.200	0.299	0.354	0.047	0.141	0.228	0.276	0.299	- - -	2,310	0.222
35-2								0.425	0.472	0.500	0.398	4,620	0.464
35-3								0.626	0.730	0.685	0.398	6,930	0.704
41	0.500	0.250	0.306	0.335	0.382	0.047	0.141	0.260	0.313	0.335	- - -	2,640	0.275
40								0.323	0.368	0.394	-	4,070	0.456
40-2								0.602	0.669	0.693	0.567	8,140	0.799
40-3								0.892	0.937	0.967	0.567	12,120	1.189
50	0.625	0.375	0.400	0.512	0.583	0.079	0.190	0.398	0.459	0.496	-	6,820	0.678
50-2								0.756	0.815	0.831	0.713	13,640	1.370
50-3								1.114	1.167	1.189	0.713	20,460	2.049
60	0.750	0.500	0.469	0.610	0.689	0.094	0.234	0.492	0.557	0.606	-	9,680	0.967
60-2								0.945	1.004	1.059	0.898	19,360	2.035
60-3								1.392	1.455	1.482	0.898	29,040	3.073
80	1.000	0.625	0.625	0.803	0.941	0.122	0.313	0.634	0.699	0.740	-	17,160	1.612
80-2								1.205	1.268	1.323	1.154	34,320	3.533
80-3								1.783	1.850	1.890	1.154	51,480	5.240
100	1.250	0.750	0.750	0.976	1.185	0.154	0.375	0.791	-	0.909	-	26,007	2.512
100-2								1.496	-	1.614	1.409	52,015	5.038
100-3								2.200	-	2.319	1.409	78,020	7.524
120	1.500	1.000	0.875	1.181	1.378	0.185	0.437	0.992	-	1.126	-	34,100	4.150
120-2								1.886	-	2.020	1.787	68,200	8.230
120-3								2.780	-	2.913	1.787	102,300	12.290
140	1.750	1.000	1.000	1.425	1.654	0.220	0.500	1.075	-	- - -	-	47,300	5.032
140-2								2.037	-	- - -	1.925	94,600	9.962
140-3								-	- - -	1.925	141,900	14.752	
160	2.000	1.250	1.125	1.630	1.890	0.252	0.562	1.281	-	1.467	-	60,500	6.770
160-2								2.430	-	2.618	2.303	121,000	13.430
160-3								3.585	-	3.770	2.303	181,500	20.130
180	2.250	1.406	1.406	1.842	2.134	0.280	0.687	1.402	- - -	1.642	-	81,610	9.220
180-2								2.697	- - -	2.937	2.591	163,200	18.326
180-3								3.992	- - -	4.232	2.591	244,800	27.426
200	2.500	1.562	1.562	2.047	2.374	0.315	0.781	1.531	- - -	1.811	-	105,900	11.312
200-2								2.941	- - -	3.22	2.819	211,500	22.470
200-3								4.35	- - -	4.63	2.819	317,400	33.622
240	3.000	1.875	1.875	2.457	2.850	0.374	0.937	1.858	- - -	2.157	-	152,200	16.509
240-2								3.587	- - -	3.886	3.457	304,200	32.817
240-3								5.315	- - -	5.614	3.457	456,400	49.125

Tabular dimensions and design are subject to change. Verification is recommended as Connexus is continuously improving it's products.  
Dimensions are in inches, loads in lbs.

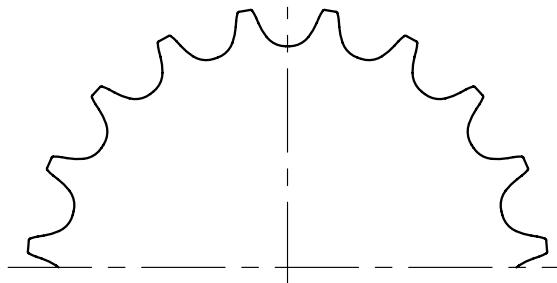
**All Connexus conveyor and roller chain sprockets are designed for specific chain type and application to ensure optimum performance of chain and maximum sprocket and chain life.**

They have teeth designed and manufactured according to ANSI (American Standards Institute) and conform to the tooth form as it is specified in the standard for particular chain type:

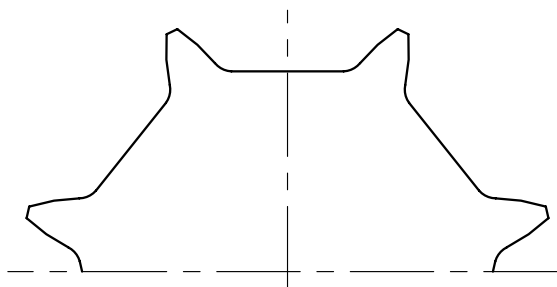
- Precision Transmission and Double Pitch Transmission Chain and Sprockets B29.100-2002
- Steel Roller Type Conveyor Chains and Sprockets B29.15M-1997
- Welded Steel Mill and Drag Chains and Sprockets B29.200-2001
- Steel Bushed Rollerless Chains and Sprockets B29.12M-1997



**DRIVE CHAIN**



**CONVEYOR CHAIN**



**BAR LINK CHAIN**

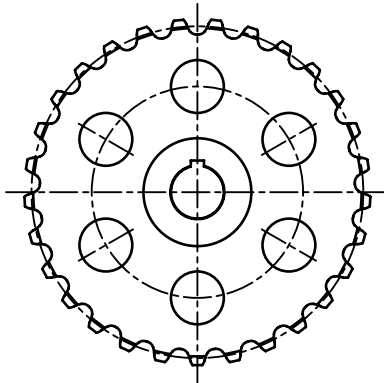
**All Connexus sprockets are made of quality steel suitable for particular application:**

- C1040/45 carbon steel plate, QT Plate (100 – 400 BHN Through Hardened), Cast Grey Iron (hardened teeth or deep chilled rim 360 BHN – 3/16" deep) and - Other Special Materials: Stainless Steel, NM- Non-Metallic (Nylon, UHMW, Polyurethane, etc.), BR - Brass or Bronze Material, etc.

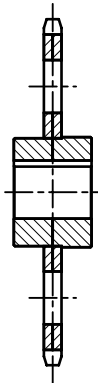
# SPROCKETS

## CONVEYOR CHAIN SPROCKETS

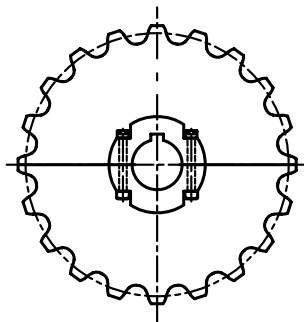
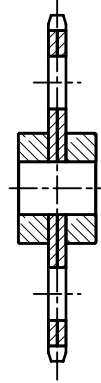
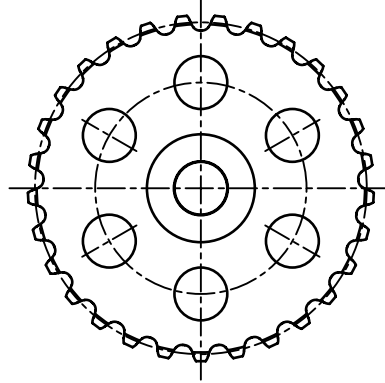
- Cast Sprockets (grey iron, hardened teeth or deep chilled rim)
- Steel Sprockets (flame cut or precision machined with through hardened or induction or induction hardened teeth)
- Solid sprockets available as “A” plates or with “B” or “C” hub with finished bore key and 1 or 2 setscrews
- Split or replaceable tooth sprockets are available for easy installation



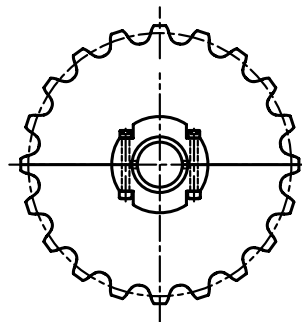
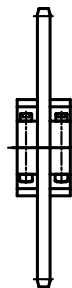
**SOLID SPROCKET DRIVE**



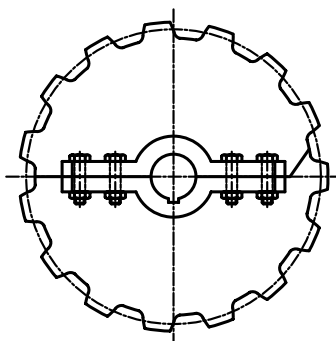
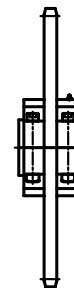
**SOLID SPROCKET IDLER**



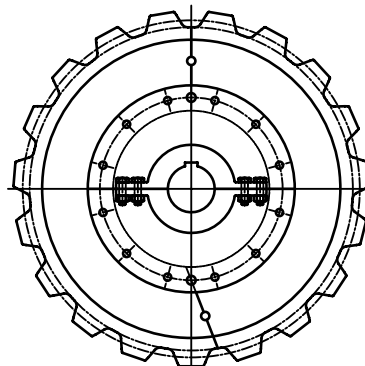
**SPLIT SPROCKET -DRIVE (ROUND HUB)**



**SPLIT SPROCKET -IDLER (ROUND HUB)-BUSHING OPTIONAL**



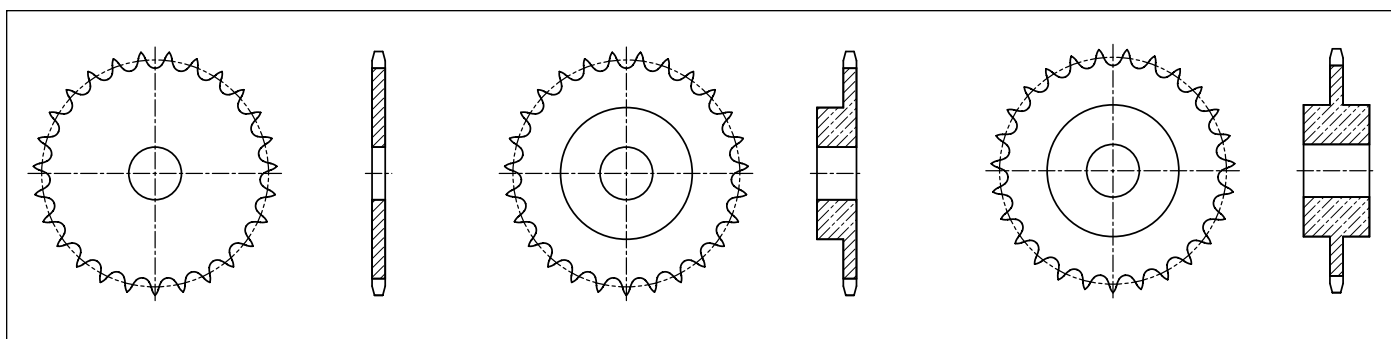
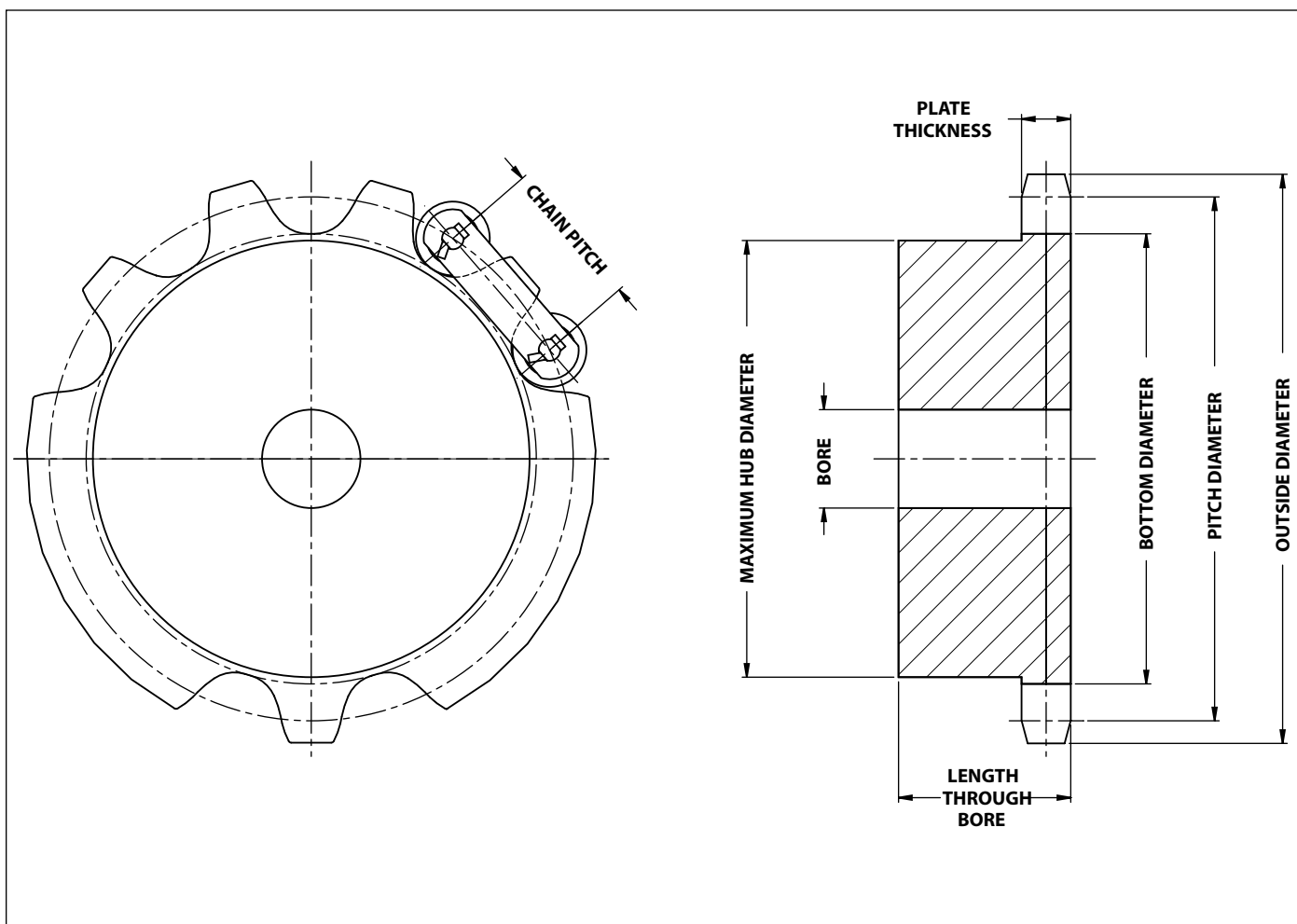
**SPLIT SPROCKET -DRIVE**



**SPLIT SPROCKET WITH REPLACEABLE SEGMENTS**



Required dimensions for quote: Chain type and Chain pitch, Sprocket Outside Diameter , Pitch Diameter , Hub Style (A, B, C), Hub Outside Diameter and length through the bore, bore size, key dimensions and set screws, any other special requirements.

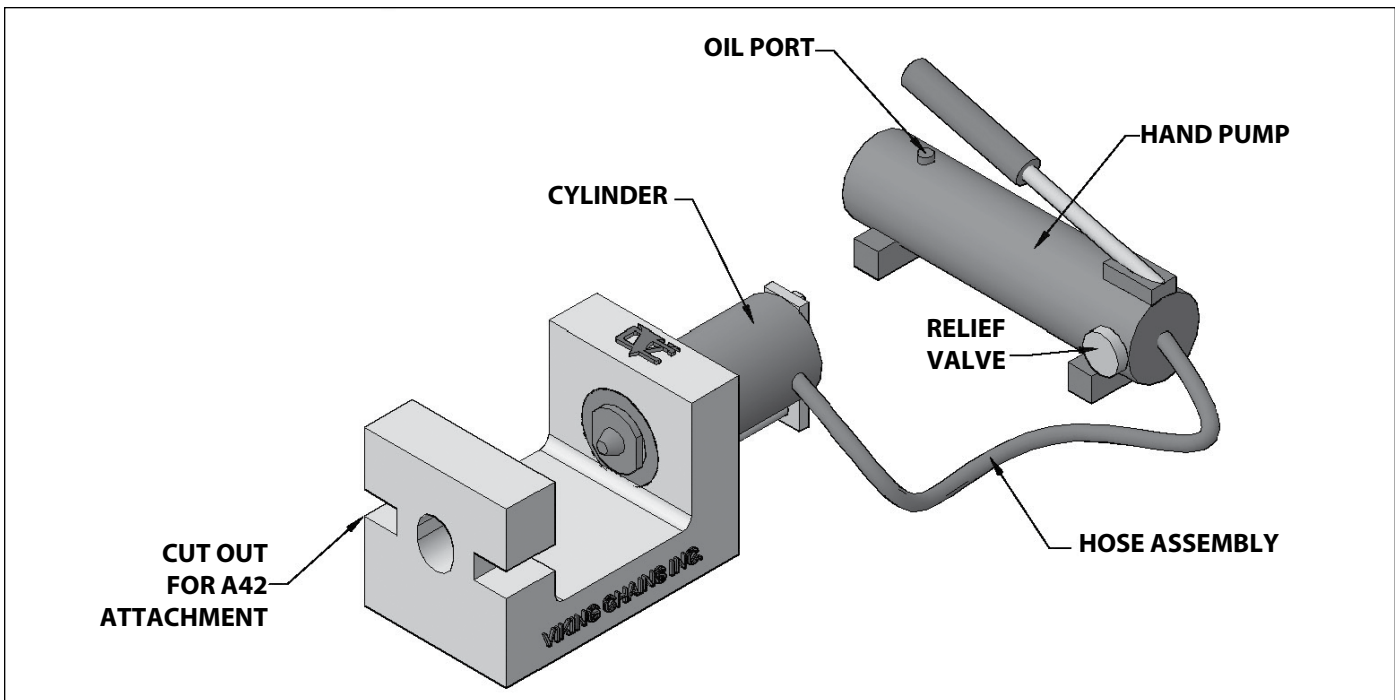


**TYPE A**

**TYPE B**

**TYPE C**

## CHAIN ASSEMBLE TOOL

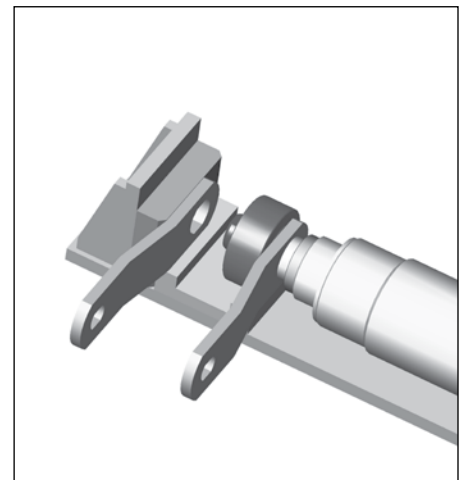
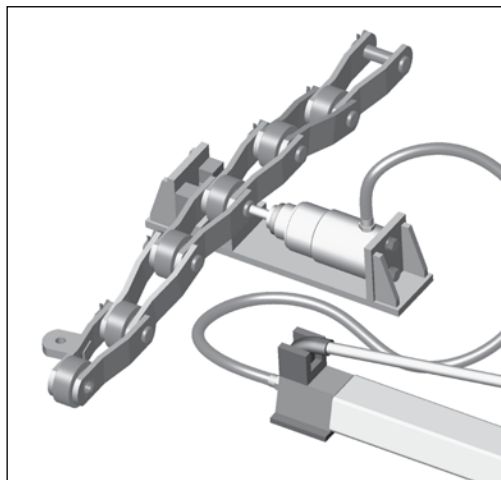


### PORTABLE CHAIN TOOL

These tools are lighter weight suitable for use in the field during chain assembly and disassembly. Depending on the chain size they are equipped with 15-25T hydraulic cylinder to provide sufficient force to push the pin in or out and maintain optimum press fit or to break the chain easily. One tool can be used for one or group of chains with same or similar dimensions and attachments and it is supplied with Press In and Out tips for each chain size. As an option we can supply hand or foot operated hand pump and hose assembly.

### PARTS REPLACEMENT CHAIN TOOL

This tool is designed for use in shop for chain repair and replacement of large number of wear parts: pins, bushings and rollers. It is equipped with 50T hydraulic cylinder and with additional adapter sets it is suitable for most common sugar mill chains. As an option we can supply hand or foot operated hand pump and hose assembly.

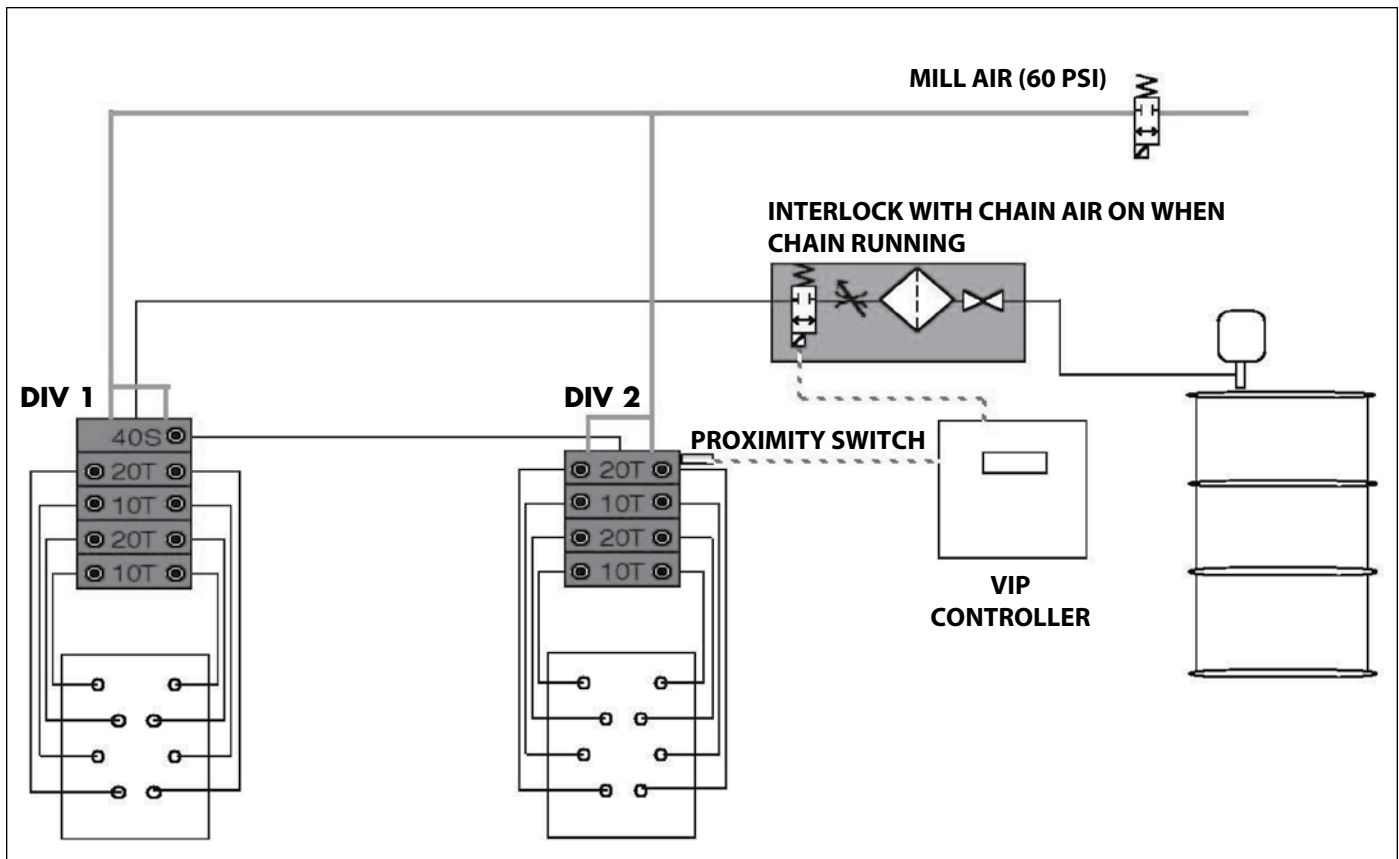


### Rivets, Sidebars, Bushings and Rollers are available from Connexus

While rebuilding worn chain is widely practiced in the Sugar Mill Industry, consultation with the chain manufacturer or their representative is recommended prior to ordering replacement components.

Details such as; elongation, condition of sidebar holes, bushing wear and compatibility of different manufacturer's components need to be clarified for a successful rebuild.





## LUBRICATION SYSTEM

Connexus Lubrication System is an automated, chain lubrication system that provides lubricant placement right at the wearing parts to reduce the wear and minimize corrosion and provide longer chain life ( in many cases more than double the chain life). It is designed to apply a very fine spray of oil, constantly, or in required intervals to maintain a light film of oil between wear parts without the oil waste.

System consist of : pump (electric, or air operated), the air / oil divider valve, the applicator and PLC or stand alone controls.

The " Air / Oil" divider valve has the ability to meter the oil and place it in an air stream. It is the air that actually moves the oil down the line, spreading the oil out along the total length of the line and creating a very fine, constant spray of oil. This spray is placed at the wearing parts of the chain by means of the applicator running inside the chain. Each applicator is design for each specific chain.

System is very easy to install and integrate into existing conveyor control system.

Please contact Connexus for lube system application and selection.



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