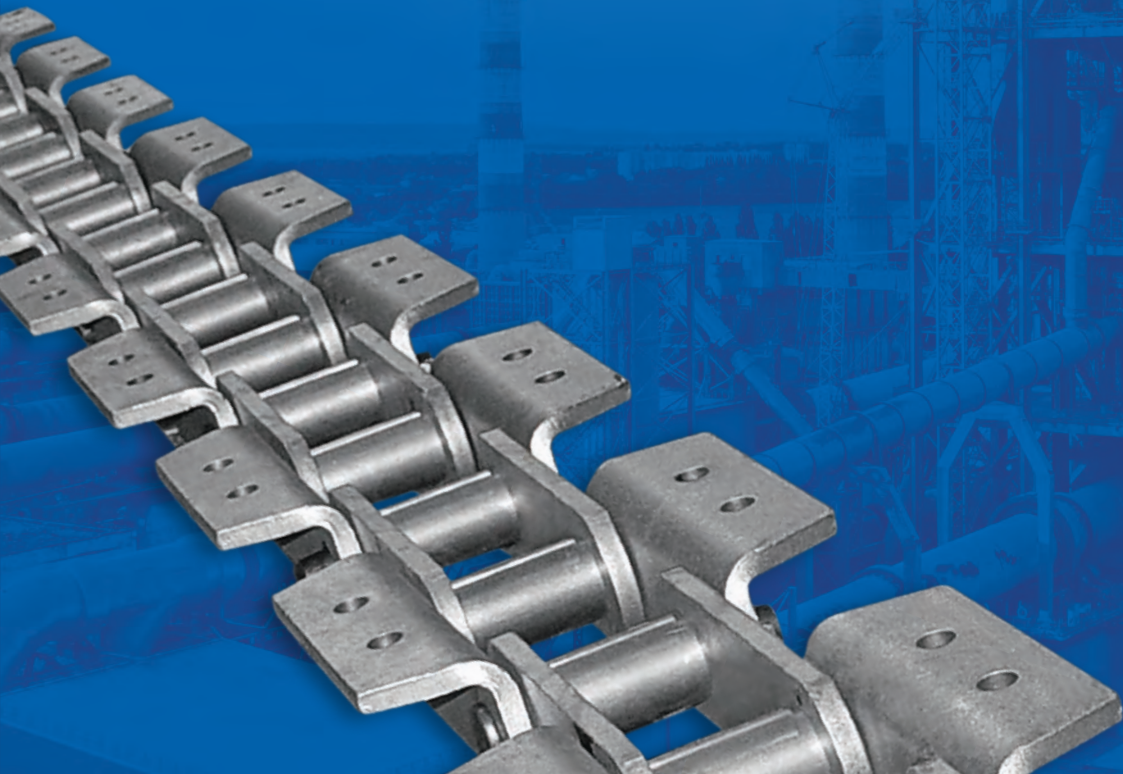


RENOLD

Cement & Aggregates

- Strong, long-lasting engineered and roller chains for critical applications
- Innovative, problem-solving products, designed and built to perform and last
- Specializing in engineered solutions catered to unique environments



Solutions for Cement Mills

For over than 130 years, Renold Jeffrey has led the cement and aggregate industry needs with long-lasting, high-performance chains.

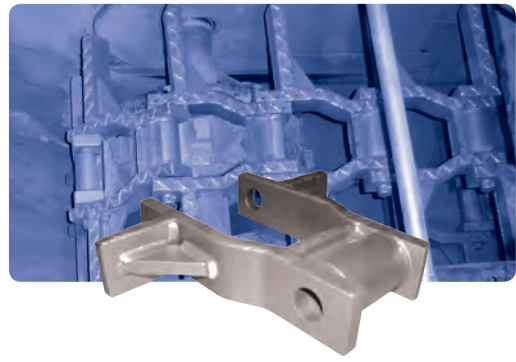
Our experienced engineers understand your requirements. Our manufacturing operations deliver quickly. Our customer service team is ready to handle your specifications, quote and order.



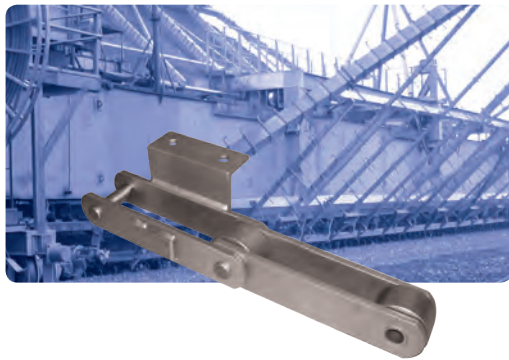
Bucket Elevator Chain



Heavy-Duty Sprockets and Traction Wheels



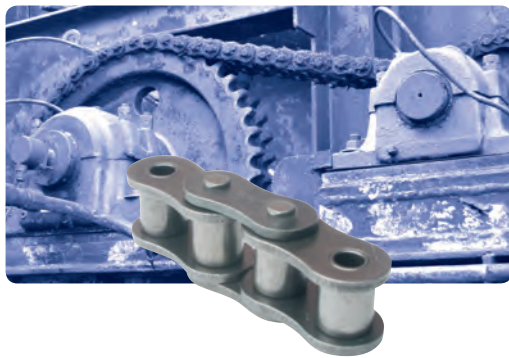
Welded Steel Drag Chains



Reclaimer Chains



Apron/Pan Conveyor Chains



Roller Chains

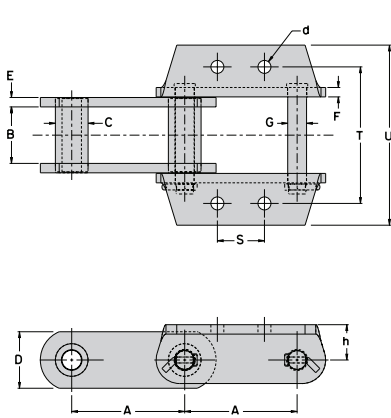


Drive Chains

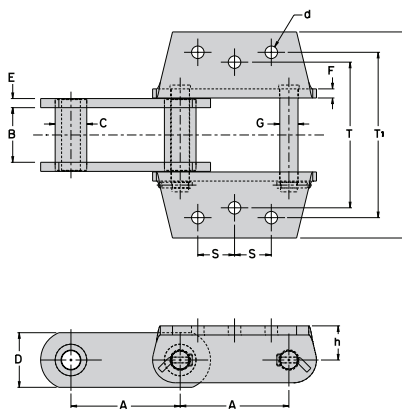


Bucket Elevator Chains

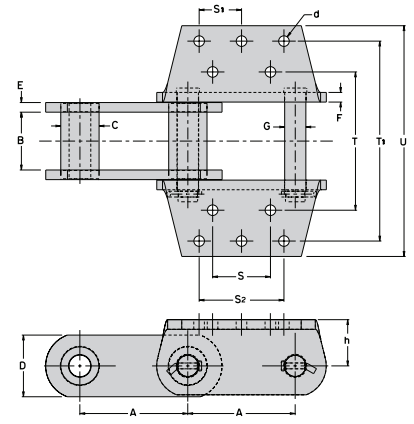
Renold Jeffrey Bucket Elevator Chains are built to last. All components are manufactured from high-quality proprietary steels for maximum wear life and toughness. Pins are through hardened and then induction hardened for maximum wear resistance. Bushing are carburized to optimized depths to resist wear, but remain resistant to high loading. Through hardened sidebars provide optimal strength and toughness. Exceptional plate hole quality and full round pin-and-bushing design provide optimal press fits and maximum fatigue resistance.



K-2 Attachment



K-3 Attachment



K-5 Attachment

Dimensions are in inches unless otherwise indicated.

Chain No.	Pitch	Inside Width	Knuckle Bushing Dia.	Sidebar		Pin Dia.	Attachment	T	T ₁	U	d	h	s	s ₁	s ₂	Rated Working Load	Ultimate Strength
				Width	Thick												
	A	B	C	D	E/F	G										Lbs.	Lbs.
6138	6.000	2.625	1.438	2.000	0.375	0.750	K2	6.250	—	7.750	0.531	—	2.313	—	—	8,800	83,000
6856-M	6.000	3.000	1.750	3.000	0.500	1.000	K2	6.312	—	8.500	—	—	2.250	—	—	14,000	100,000
6102	4.000	2.219	1.000	1.500	0.375	0.625	K2	5.313	—	6.500	0.375	—	1.750	—	—	5,600	40,000
							K3	4.760	5.310	7.120	0.400	1.000	1.750	—	—		
6188	2.609	1.062	0.875	1.125	0.250	0.500	K2	4.188	—	5.125	0.313	—	1.250	—	—	2,340	26,000
							K3	3.750	4.120	5.180	0.40/0.34*	0.810	1.250	—	—		
6110	6.000	2.125	1.250	1.750	0.375	0.625	K2	5.313	—	6.375	0.375	—	1.750	—	—	5,500	63,500
6111	4.760	2.625	1.438	2.000	0.375	0.750	K2	6.250	—	7.750	0.500	—	2.313	—	—	8,850	50,000
6150	6.050	3.313	1.750	2.500	0.500	1.000	K2	7.500	—	9.563	0.500	—	2.750	—	—	15,000	124,000
							K3	11.500	7.500	13.680	0.531	1.880	2.750	—	—		
6956-PB	6.000	3.000	1.750	3.000	0.500	1.000	K2	7.250	—	9.560	0.688	1.875	2.500	—	—	14,000	144,500
6867-R	6.000	6.000	1.750	3.250	0.500	1.000	K5	7.000	12.000	14.000	0.563	2.500	3.500	3.500	—	14,000	170,000
6869-R	6.000	3.720	2.375	4.000	0.625	1.250	K5	9.000	13.000	15.000	0.688	3.000	2.750	4.500	—	22,000	267,000
6864-R	7.000	3.720	2.375	4.000	0.625	1.250	K5	9.000	13.000	15.000	0.688	3.000	3.750	2.750	5.500	22,000	267,000
6684	7.000	3.750	2.500	4.000	0.625	1.375	K5	9.000	13.000	15.000	0.688	3.000	3.750	2.750	5.500	24,000	270,000
6958-PB	6.000	3.000	1.987	3.250	0.625	1.125	K5	7.000	12.000	13.757	0.563	2.500	3.500	3.500	—	17,000	181,800

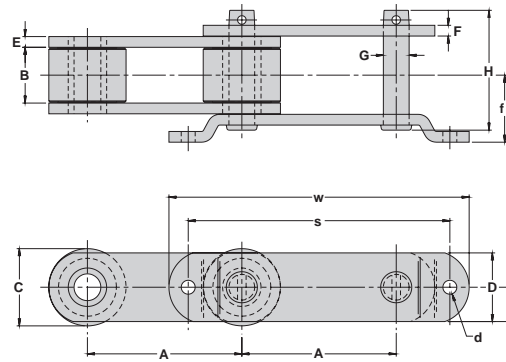
*Center hole diameter is listed first



Super Capacity Bucket Elevator Chains

Super Capacity Bucket Elevator Chains are designed and engineered for maximum fatigue resistance and wear life — the features you need to keep you production running continuously. Component parts are carefully crafted to provide long-lasting operation. Pins and bushings are alloy steel and case hardened for ultimate wear resistance. Sidebars are also hardened to provide increased chain strength.

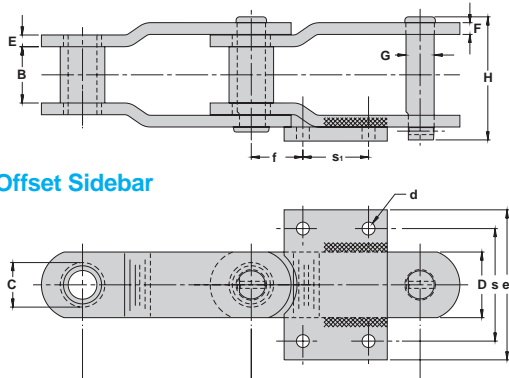
G-100



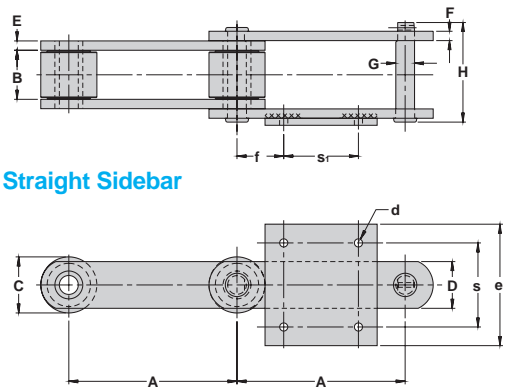
Dimensions are in inches unless otherwise indicated.

Chain No.	Pitch	Inside Width	Roller Dia.	Sidebar		Pin Dia.	G	H	d	f	h	s	w	Rated Working Load	Ultimate Strength
				Width	Thick										
	A	B	C	D	E/F									Lbs.	Lbs.
3252-PR	9.00	2.63	3.000	2.50	0.500	1.000	5.422	0.688	3.359	1.25	14.00	16.50	12,650	116,000	
4035-PB	9.00	3.16	3.500	3.00	0.500	1.125	6.016	0.688	3.593	1.50	14.00	16.00	16,400	131,700	
4065	9.00	3.06	4.250	3.50	0.625	1.250	6.484	0.688	3.938	1.75	14.00	16.50	17,500	215,000	
4037-PB	9.00	3.25	4.500	4.00	0.625	1.500	7.000	0.810	3.910	2.00	15.25	17.50	23,500	253,000	

G-9



Offset Sidebar



Straight Sidebar

Dimensions are in inches unless otherwise indicated.

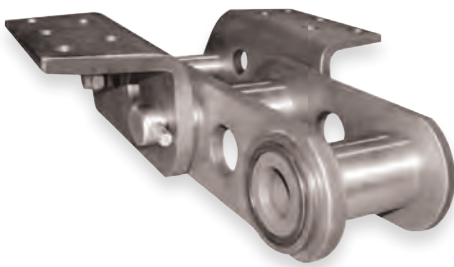
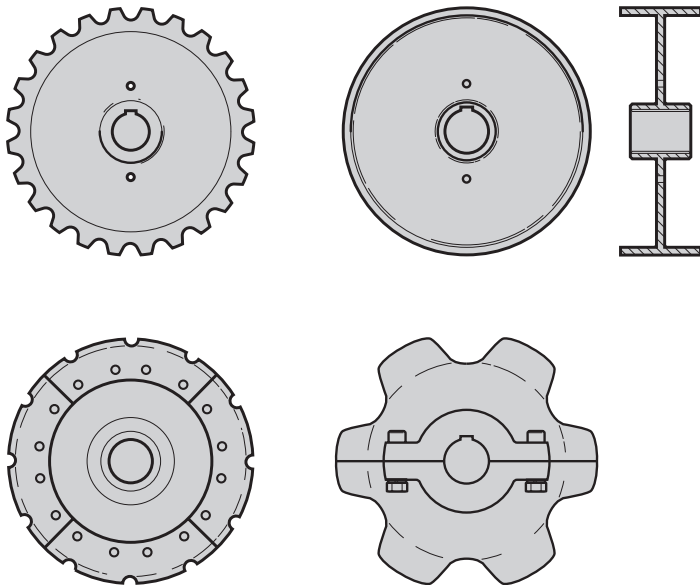
Chain No.	Pitch	Inside Width	Roller/ Bushing Dia.	Sidebar		Pin Dia.	G	H	d	e	f	s	s ₁	Rated Working Load	Ultimate Strength
				Width	Thick										
	A	B	C	D	E/F									Lbs.	Lbs.
6859-R*	9.00	2.50	1.750	2.50	0.500	1.000	5.390	0.66	6.00	3.250	4.00	3.50	12,000	130,000	
6881-AR*	9.00	3.00	2.380	3.50	0.625	1.500	6.563	0.66	8.00	2.750	5.50	3.50	24,500	260,000	
6889-PB*	9.00	2.75	2.750	4.00	0.625	1.623	6.188	0.69	7.50	2.500	6.00	4.00	26,000	260,000	
3252-PR	9.00	2.63	3.000	2.50	0.500	1.000	5.422	0.44	6.50	2.500	4.50	4.00	12,650	116,000	
4065	9.00	3.06	4.250	3.50	0.630	1.250	6.484	0.69	8.00	2.750	6.00	3.50	19,000	215,000	

*Denotes offset sidebar and stud bushing



Heavy-Duty Sprockets and Traction Wheels

Renold's replaceable sprockets and traction wheels are specially designed for the realities of high-stress, heavy-duty service. All Jeffrey Engineered chain sprockets are steel carved and flame hardened for long service life. Worn tooth and rim sections are easier to replace, reducing expensive downtime and simplifying maintenance.



Elite Level: Upgrades and Solutions

Sealed Joint Chains

Jeffrey Sealed Joint Chains lock in lube and lock out dirt and debris. Available in nearly all of our elevator chains, this innovative solution dramatically increases wear life, reducing downtime and maintenance costs.

Special Mechanically Treated Pins

Extremely abrasive conditions can result in extreme joint wear and premature chain elongation. In those conditions service life can be increased using specially treated pins with an abrasion resistant service that can dramatically reduce excessive joint wear.

Maximum Service Life

For the best overall results for the toughest and most extreme conditions, combine the sealed joint design with the special mechanically treated pins. This design will provide the maximum service life, no matter how tough an application is, so you can overcome concerns and downtime and maximize productivity.

Stainless Steel

Jeffrey's special heat treated stainless steel solutions alleviate severe conditions that can result in premature joint wear, tight joints, dry cavitation or extreme conditions where catastrophic corrosion will cause chain failure.

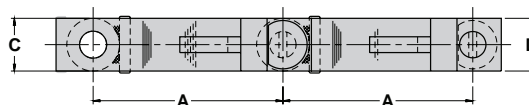
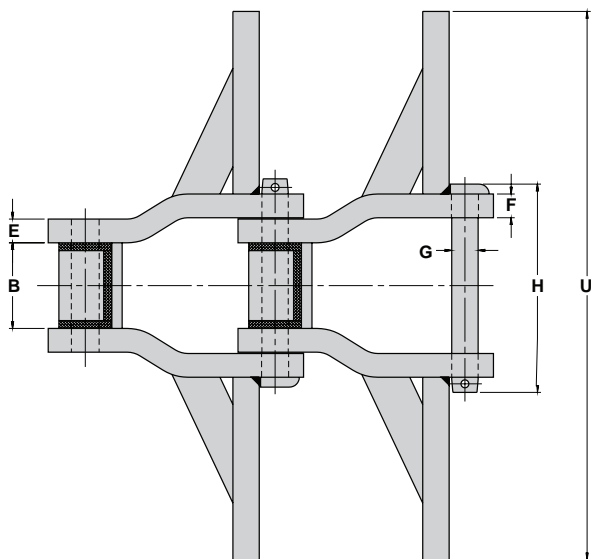
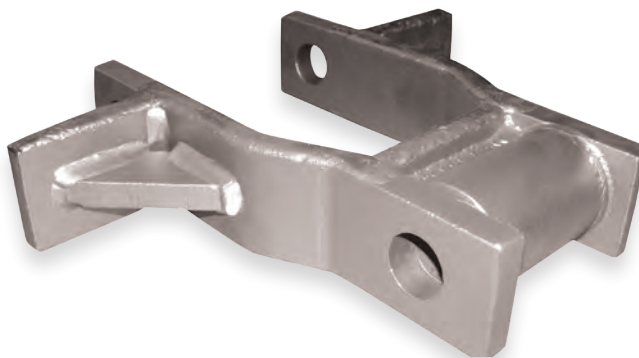
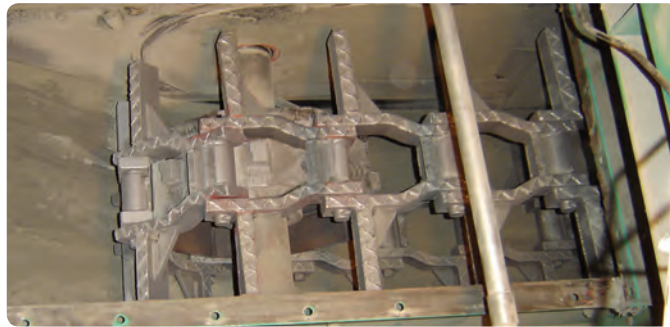


Welded Steel Drag Chains

Our Hard Face (HF) Welded Steel Drag Chains are designed to last. In place of a standard, cast chain Jeffrey HF welded steel chains are durable, fabricated chains providing better longevity in your toughest applications. Every chain has induction-hardened, press-fit pins and positive locking to allow greater pin loading and to prevent pin movement at elevated temperatures. And all chain parts are heat treated to add toughness, durability, and longer wear life.

HF chains have hard-face sidebars, faceplates, and wings on both sides. This is recommended for the demanding conditions at cement plants. However, chains can be supplied without hard facing, if requested.

Heavy (H) and HHF chains can run in material temperatures up to 1,000° F.



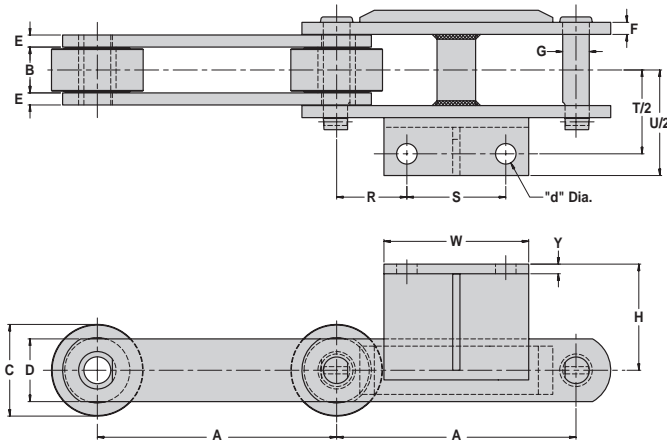
Dimensions are in inches unless otherwise indicated.

Chain No.	Base Chain Weight Lbs./Ft.	Pitch A	Inside Width B	Barrel C	Sidebar		Pin Dia. G	H	U	Rated Working Load Lbs.	Ultimate Strength Lbs.
					Width D	Thick E/F					
WS5157-H	23	6.05	3.000	1.75	2.50	0.625	1.125	6.875	8-21	18,200	180,000
WS6067-HHF	27	9.00	3.625	2.50	2.50	0.750	1.250	8.018	10-24	24,300	230,000
WS5121-HHF	35	9.00	3.630	2.50	2.50	1.125	1.250	9.873	10-30	18,800	275,000
WS6121-HHF	36	9.00	3.630	2.50	2.50	1.125	1.250	9.875	10-30	27,600	275,000

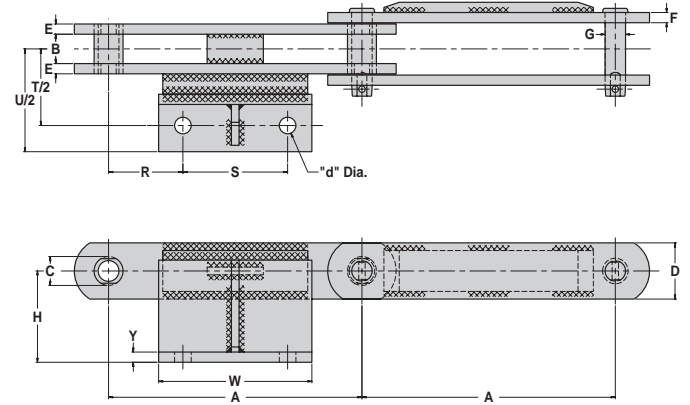


Reclaimer Chains

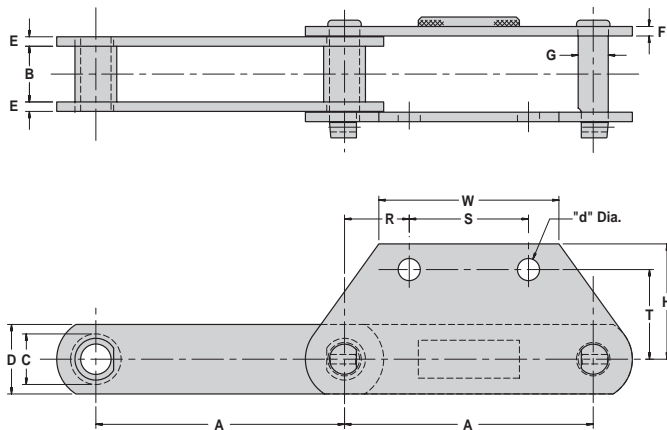
We provide quality chains fit to your reclaimers needs. Our standard chains are more readily available though retrofit OEM designs using standard materials are common as well.



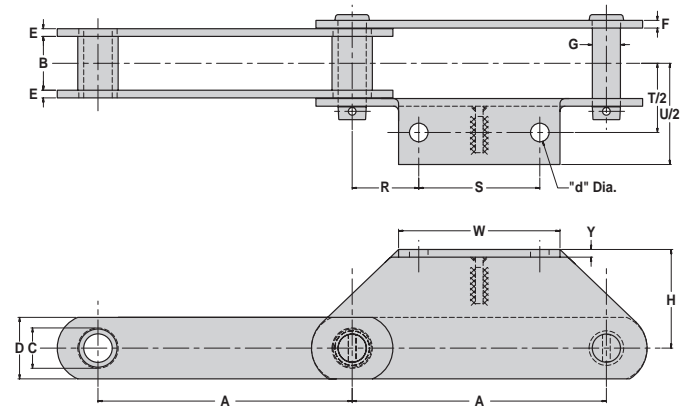
2398-PB



4213-PB



6185-PB



3239-PB

Dimensions are in inches unless otherwise indicated.

Chain No.	Pitch		C	D	E	F	G	H	R	S	d Hole	T	T/2	U/2	W	Y
	A	B														
2389-PB	12.401	2.375	4.75	3.25	0.625	0.625	1.375	5.5	3.64	5.125	1.062	—	4.34	5.47	7.5	0.5
4213-PB	12.401	1.438	1.42	2.75	0.5	0.5	1	4.47	3.64	5.125	0.812	—	3.75	5.03	7.5	0.5
6185-PB	12.401	3.438	2.75	4	0.5	0.375	1.625	4.875	3.348	5.703	1	3.531	—	—	9.625	0.5
3239-PB	12.401	2.625	1.969	3	0.375	0.375	1.37	4.812	3.248	5.906	0.781	—	3.375	4.938	7.875	0.375

Available with/without wear bar

Available with/without spacer

Note: Reclaimer chains are normally manufactured on a made-to-order basis. A few standard styles are shown above. Dimensions are subject to change. Contact Renold to obtain certified prints for design and construction.

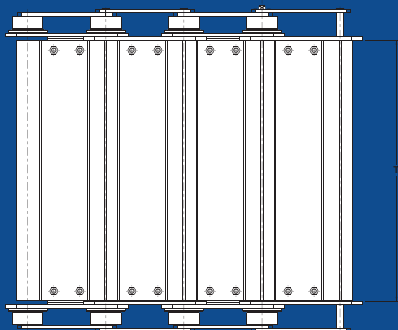


Apron/Pan Conveyor Chains

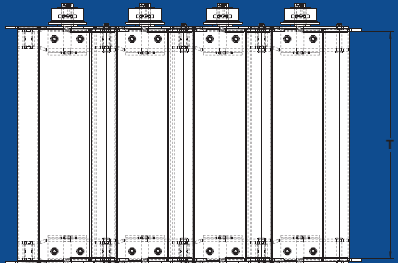
Jeffrey Apron/Pan Conveyors are ideal for moving product horizontally and up inclines. They are extensively used to handle bulk materials such as cement/clinker, ore, sand, gravel, stone, coal, foundry/castings, industrial refuse and a variety of similar materials for light, medium, and heavy duty applications.

We offer a complete range of inboard and outboard roller styles, each built from high-grade, heat treated materials for maximum wear resistance in abrasive conditions. Self lubricating, oil-sealed, and specialty bearings are available to meet your customers' needs.

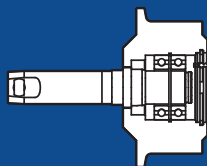
Types of Apron Conveyors



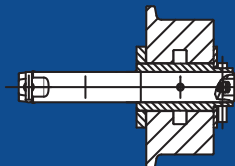
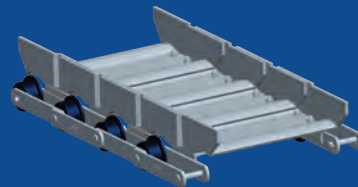
Inboard Roller Apron



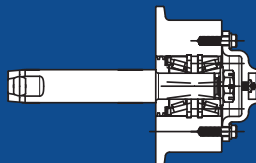
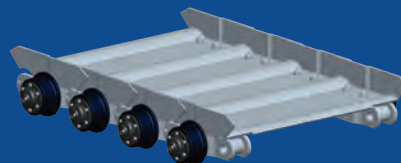
Outboard Roller Apron



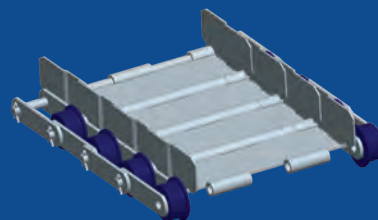
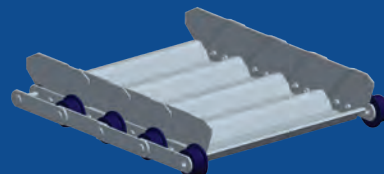
Roller Bearing Style



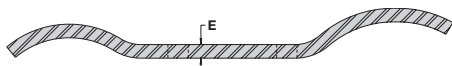
Standard Bushed Outboard Style



Heavy Duty Tapered Bearing Style

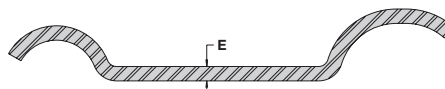


Types of Pan Flights



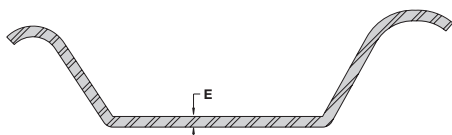
Style A

Fastened above centerline of chain

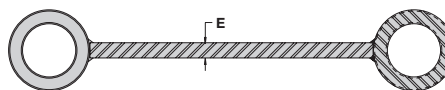


Style A-1

Fastened on centerline of chain

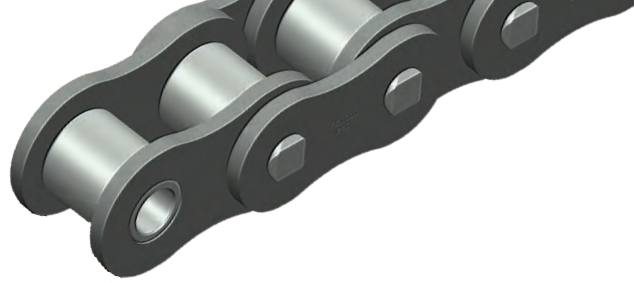


Deep Pan Style



Piano Hinge Style

Fastened with thru rod



Blue^{RENOLD}

Premier Wear and Fatigue Resistance for Standard Chain

- Longer working life
 - Better resistance to shock loadings
 - End-softened pin and spin rivet make cutting easy
- ANSI: 25 to 240 • BS: 06B to 40B • Single, Double, Triple

Synergy^{RENOLD}

Performs up to six times longer than leading competitor chains.

- Highly fatigue and wear resistant
 - Guaranteed to last 4 times longer than leading competitor chains
 - Built to perform
- ANSI: 35 to 160 • BS: 06B to 24B • Single, Double, Triple

Hydro-Service^{RENOLD}

Wet, Humid, Saltwater Applications – No Problem!

- Engineered to perform in wet and washdown environments
 - Mechanically applied coating- will not chip, flake or peel
 - Same strength and working load as Renold Carbon Steel chain
- ANSI: 35 to 160 • BS: 06B to 24B • Single, Double, Triple

Sovereign^{RENOLD}

Designed for Dusty Environments

- Sets the benchmark for abrasion resistance
 - Up to 3 times longer wear life than standard chain in harsh environments
 - Excellent reliability giving reduced maintenance costs
- ANSI: 40 to 80 • BS: 08B to 16B • Single, Double



Standard Roller Chain Dimensions

Dimensions are in inches unless otherwise indicated.

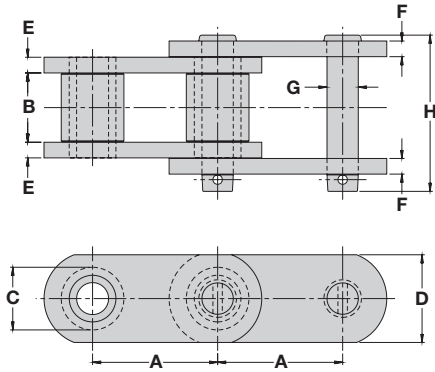
Chain No.	Pitch	Inside Width Min	Roller Dia. Max	Plate Height Max	Inner Plate Thick Max	Outer Plate Thick Max	Pin Diam Max	Pin Length Max	Conn Link Extra Max	Tensile Strength Min	Rated Working Load	Weight
	A	B	C	D	E	F	G	H	J	Lbs.	Lbs.	Lbs./Ft
35	0.375	0.184	0.200	0.356	0.049	0.049	0.141	0.472	0.043	1,760	480	0.24
40	0.500	0.309	0.312	0.475	0.061	0.061	0.157	0.646	0.055	3,125	810	0.40
50	0.625	0.370	0.400	0.594	0.080	0.080	0.200	0.803	0.043	4,880	1,400	0.67
60	0.750	0.495	0.469	0.713	0.094	0.094	0.235	0.996	0.043	7,030	1,950	0.99
80	1.000	0.620	0.625	0.950	0.128	0.128	0.313	1.287	0.118	12,500	3,300	1.86
100	1.250	0.744	0.750	1.188	0.160	0.160	0.376	1.563	0.165	19,530	5,060	2.82
120	1.500	0.993	0.875	1.425	0.189	0.189	0.437	1.941	0.209	28,125	6,800	3.83
140	1.750	0.993	1.000	1.663	0.221	0.221	0.500	2.083	0.205	38,280	9,000	5.24
160	2.000	1.242	1.125	1.900	0.250	0.250	0.563	2.484	0.256	50,000	11,900	6.99
180	2.250	1.397	1.406	2.139	0.281	0.281	0.688	2.782	0.311	63,280	13,000	9.34
200	2.500	1.490	1.562	2.377	0.320	0.320	0.781	3.028	0.354	78,125	16,000	11.59
240	3.000	1.864	1.875	2.852	0.375	0.375	0.938	3.719	0.414	112,500	22,000	16.75

*Denotes offset sidebar and stud bushing

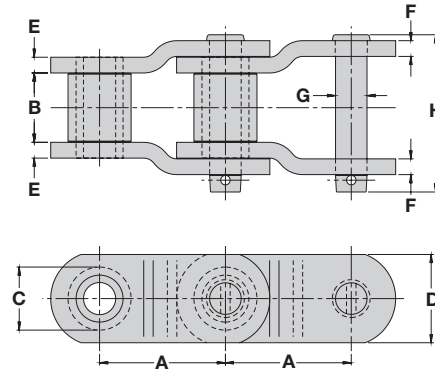
Jeffrey

Drive Chain

Renold Jeffrey Engineered Drive Chains run some of the most demanding applications in the world. These hard-working chains are found in construction, mining, and power transmission equipment. You'll find our drive chains on power shovels, cranes, elevators, debarking/mixing drums, machine tools and many other applications. The reason is simple. These chains are built to perform in environments where roller chain is not suitable.



Style S (Straight Sidebar)



Style O (Offset Sidebar)

Engineering Class Drive Chain

Dimensions are in inches unless otherwise indicated.

Chain No.	Sidebar Style	Pitch	Inner Width Max	Roller/Bushing Dia. Max	Plate Height Max	Inner Plate Thick Max	Outer Plate Thick Max	Pin Diam Max	Pin Length Max	Rated Working Load	Ultimate Strength	Weight
		A	B	C	D	E	F	G	H	Lbs.	Lbs.	Lbs.
2570	O	2.500	1.500	1.250	1.750	0.310	0.310	0.625	3.360	4,650	71,000	8.7
882	O	2.609	1.125	0.875	1.125	0.250	0.250	0.438	2.560	2,500	26,000	3.60
3011	O	3.067	1.563	1.625	2.250	0.375	0.375	0.750	3.750	6,100	113,000	13.10
1031	O	3.075	1.500	1.250	1.625	0.313	0.313	0.625	3.360	4,650	48,000	7.00
3075	O	3.075	1.500	1.250	1.750	0.375	0.375	0.650	3.660	5,100	73,000	9.00
3514	O	3.500	1.500	1.750	2.250	0.500	0.500	0.875	4.325	7,700	140,000	17.30
4414	O	4.000	2.750	2.250	2.750	0.500	0.500	1.250	5.890	16,000	116,000	25.00
4014	O	4.063	1.938	1.750	2.250	0.500	0.500	0.875	4.703	9,000	140,000	15.40
1245	O	4.073	1.940	1.781	2.375	0.563	0.563	0.940	5.060	10,000	170,000	18.70
4522	O	4.500	2.063	2.250	3.000	0.560	0.560	1.100	5.310	12,300	220,000	25.00
5031	O	5.000	2.750	2.500	3.500	0.625	0.625	1.250	6.234	17,500	280,000	33.72
6042	O	6.000	3.000	3.000	4.000	0.750	0.750	1.500	7.190	23,700	420,000	46.80
6056	S	6.000	3.250	3.500	5.000	0.875	0.875	1.750	7.940	30,000	550,000	72.00
6555	O	6.500	3.250	3.500	5.000	0.875	0.875	1.748	7.938	30,500	600,000	66.00
7055	O	7.000	3.250	3.500	5.000	0.875	0.875	1.750	8.000	30,500	600,000	65.00
7080	S	7.000	3.250	4.500	6.000	0.875	0.875	2.120	8.060	48,000	800,000	66.00

Better Fatigue Strength

All chain parts are designed to provide maximum fatigue and wear life. We use high-quality, proprietary steels. Plates are through hardened for maximum toughness. Bearing components are optimized for wear resistance while retaining toughness. Every part is manufactured to Renold Jeffrey tolerances for higher performance and quality. Our in-house heat treatment allows us to better control the process and to deliver longer-lasting chains. We build the highest quality into every part.

Rapid Response

Renold Jeffrey maintains large inventories of chains and parts of our standard drive chains so we can respond to your needs. We can also quickly develop custom solutions when required. Count on Renold to deliver the chains you need to keep your operation running at peak capacity.

Jeffrey^{RENOLD}

Engineered Chain Breaker & Assembly Tool

The Jeffrey Chain Breaker & Assembly Tool is the safest and easiest way to remove and replace pins on our Jeffrey Engineered Chain on site and in application. This portable tool eliminates cumbersome methods such as channel locks, hammers and other commonly used undersized tools. Each tool ships with complete instructions and safety decals along with the hand pump and hose used for power.

This tool is designed to be adjustable to several sidebar and pin combinations – giving you the ability to maintain and install chains across your full plant. It also provides a press fit for your pin, ensuring maximum chain wear life in operation. All of this means to reduced downtime due to less maintenance man hours and improved service life.



RENOLD



Cement & Aggregates Chain and Components from Renold

The highest standards for reliability and innovation.

- High-quality chains
- Strong, long-lasting, and dependable
- Powerful solutions for your operation

Renold Chain Americas Headquarters

2307 Maden Drive
Morristown, TN 37813

Tel: (423) 586-1951

Tel: (800) 251-9012

Fax: (423) 581-2399

sales@renoldjeffrey.com
www.renoldjeffrey.com

Renold Canada Ltd.

622 rue de Hull
Ville LaSalle, Quebec H8R 1V9

Tel: (800) 265-9970

Fax: (800) 661-6118

inquiry@renoldcanada.com
www.renoldcanada.com

