



- Strong, long lasting
- High fatigue strength
- Compact design
- Maximum resistance to wear
- The sizes and styles you need

# **RENOLD** Leaf Chain

# When you need a lift, count on Renold Leaf Chain

Renold Leaf Chain is behind some of the biggest names in material handling equipment — including forklift trucks, straddle carriers, and major civil engineering OEMs worldwide.

In fact, Renold Jeffrey is a major supplier to many of the largest forklift truck manufacturers in the world. And no wonder: We're the experts at Leaf Chain manufacturing — packing power, performance, and reliability into a compact design.

## The sizes and styles you need

Choose the size, style, and lacing you need to lift 260,000 pounds or more. You'll find Renold Leaf Chain to be one of the hardest and most reliable workers in your facility.



## The Renold difference: Ultimate reliability

- The key to Renold Leaf Chain reliability is consistency in design and manufacturing processes.
- Optimum ductility and maximum strength are ensured by controlling material specifications from all of our suppliers.
- Manufacturing and assembly techniques are monitored by Statistical Process Control and conform to ISO 9000 (BS 5750).
- Each Renold Leaf Chain is stamped and F97 certified, which provides traceability of product and materials as specified by the international lifting association.

## Safety considerations

- Leaf chain should not be operated at more than 98 feet per minute.
- A safety factor of 7:1 is normal for forklift truck applications, 9:1 for medium shock loading, and 11:1 for heavy shock loading.
- Certificates of proof loading should always be requested for lifting applications.



# Renold ultimate specifications

Renold has spent years in design and development to achieve the optimum product. To make sure we translate specification into performance, we strictly control materials, heat treatment, processes, fits, assembly, lubrication, and proof loading. The proof is in the chain.

## Proof loading

All Renold Leaf Chain is proof loaded after final assembly, complying with the highest international standards.

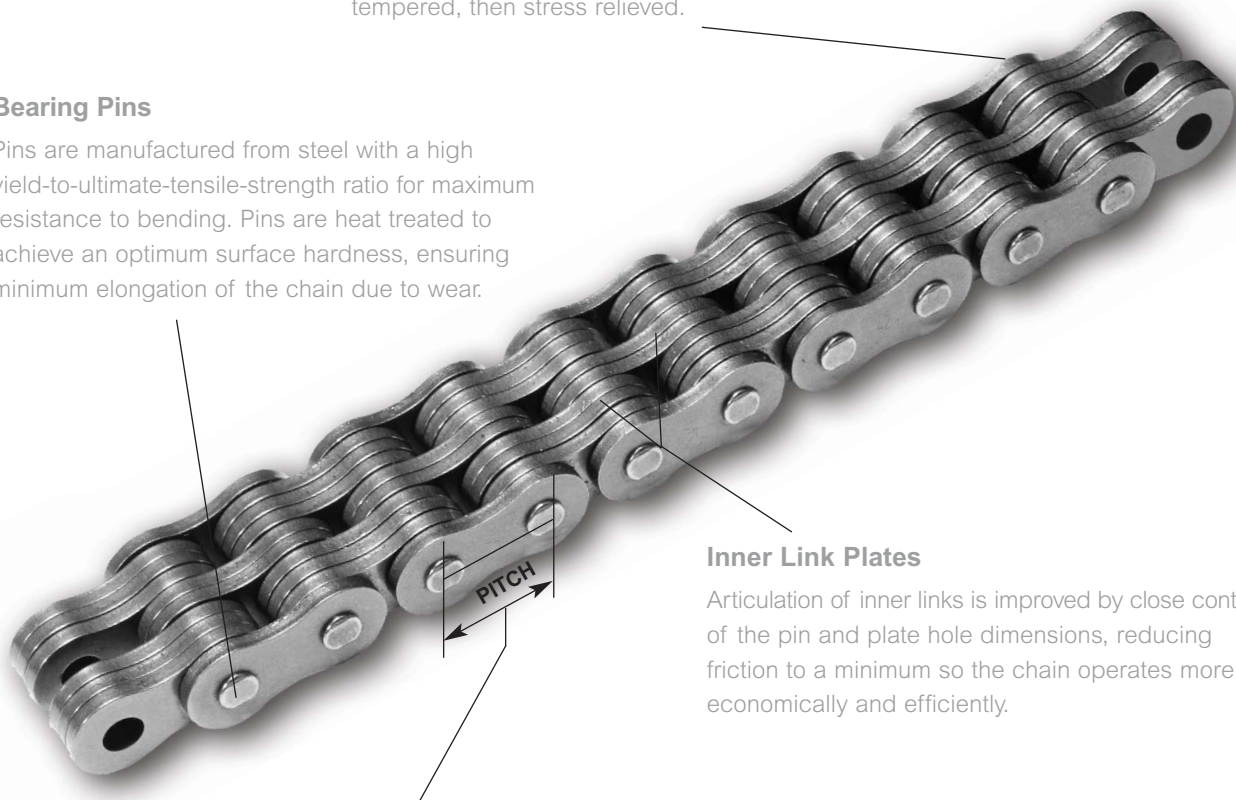
### Leaf Chain Diagram

#### Link Plates

Link plates are manufactured from high tensile alloy steel, which gives optimum ductility while retaining maximum strength. Link plates are hardened and tempered, then stress relieved.

#### Bearing Pins

Pins are manufactured from steel with a high yield-to-ultimate-tensile-strength ratio for maximum resistance to bending. Pins are heat treated to achieve an optimum surface hardness, ensuring minimum elongation of the chain due to wear.

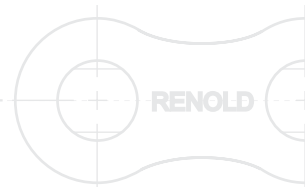
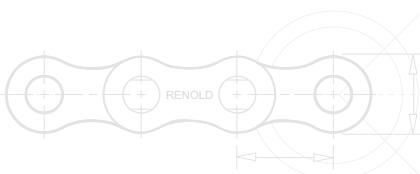


#### Inner Link Plates

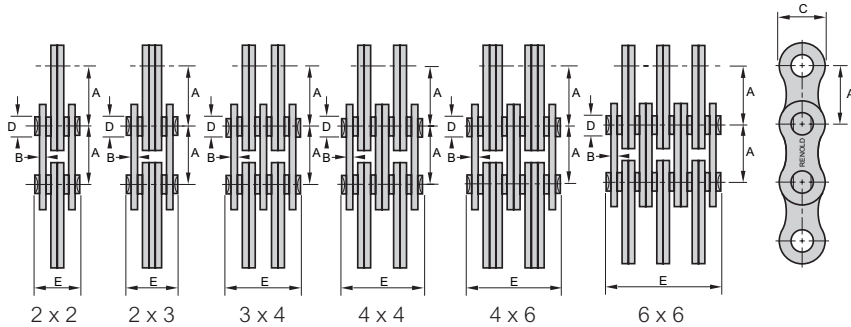
Articulation of inner links is improved by close control of the pin and plate hole dimensions, reducing friction to a minimum so the chain operates more economically and efficiently.

#### Chain Pitch

Pitch accuracy and pin hole diameters are maintained during manufacturing, offering precision performance of the chain over thousands of operations.



# BL Series



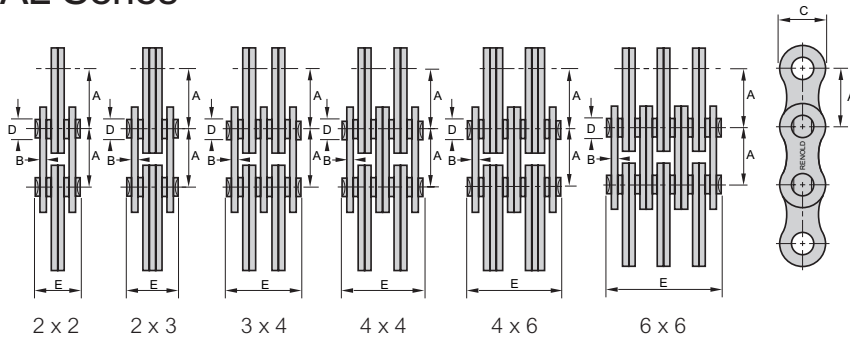
Crafted for moderate- to heavy-duty lifting applications, BL Series conforms to the ANSI B29.8 Leaf Chain Standard. Pins and link plates are made one size larger than the corresponding ANSI chain to allow for operation in moderate to heavy load applications.

## BL Series Leaf Chain

Dimensions are in inches unless otherwise indicated.

Chain No.	Pitch	Lacing	Plate Thickness	Plate Height	Pin Diameter	Pin Length	ANSI Minimum Tensile Strength	Average Chain Weight
	A		B	C	D	E	Lbs	Lbs/Ft
BL422	0.500	2x2	0.081	0.476	0.200	0.429	5,000	0.430
BL423	0.500	2x3	0.081	0.476	0.200	0.516	5,000	0.504
BL434	0.500	3x4	0.081	0.476	0.200	0.685	7,500	0.699
BL444	0.500	4x4	0.081	0.476	0.200	0.768	10,000	0.806
BL446	0.500	4x6	0.081	0.476	0.200	0.913	10,000	0.981
BL466	0.500	6x6	0.081	0.476	0.200	1.102	15,000	1.169
BL523	0.625	2x3	0.097	0.594	0.234	0.587	7,500	0.705
BL534	0.625	3x4	0.097	0.594	0.234	0.799	11,250	0.988
BL544	0.625	4x4	0.097	0.594	0.234	0.882	15,000	1.136
BL546	0.625	4x6	0.097	0.594	0.234	1.067	15,000	1.391
BL566	0.625	6x6	0.097	0.594	0.234	1.280	22,500	1.794
BL623	0.750	2x3	0.127	0.717	0.312	0.787	11,000	1.236
BL634	0.750	3x4	0.127	0.717	0.312	1.035	16,500	1.734
BL644	0.750	3x4	0.127	0.717	0.312	1.165	22,000	1.982
BL646	0.750	4x6	0.127	0.717	0.312	1.437	22,000	2.486
BL666	0.750	6x6	0.127	0.717	0.312	1.740	33,000	2.889
BL822	1.000	2x2	0.160	0.913	0.375	0.791	19,000	1.660
BL823	1.000	2x3	0.160	0.913	0.375	0.953	19,000	1.713
BL834	1.000	3x4	0.160	0.913	0.375	1.283	28,500	2.392
BL844	1.000	4x4	0.160	0.913	0.375	1.449	38,000	2.755
BL846	1.000	4x6	0.160	0.913	0.375	1.736	38,000	3.427
BL866	1.000	6x6	0.160	0.913	0.375	2.102	57,000	4.166
BL1022	1.250	2x2	0.192	1.175	0.437	0.937	26,000	2.284
BL1023	1.250	2x3	0.192	1.175	0.437	1.130	26,000	2.856
BL1034	1.250	3x4	0.192	1.175	0.437	1.520	39,000	4.031
BL1044	1.250	4x4	0.192	1.175	0.437	1.717	52,000	4.569
BL1046	1.250	4x6	0.192	1.175	0.437	2.106	52,000	5.671
BL1066	1.250	6x6	0.192	1.175	0.437	2.496	78,000	6.853
BL1088	1.250	8x8	0.192	1.175	0.437	3.276	104,000	9.272
BL1234	1.500	3x4	0.224	1.409	0.500	1.776	51,000	5.846
BL1244	1.500	4x4	0.224	1.409	0.500	2.004	68,000	7.263
BL1246	1.500	4x6	0.224	1.409	0.500	2.461	68,000	8.332
BL1266	1.500	6x6	0.224	1.409	0.500	2.921	102,000	9.944
BL1288	1.500	8x8	0.224	1.409	0.500	3.835	136,000	12.497
BL1434	1.750	3x4	0.251	1.642	0.562	2.016	64,500	7.391
BL1446	1.750	4x6	0.251	1.642	0.562	2.795	86,000	10.213
BL1634	2.000	2x3	0.283	1.902	0.687	2.303	97,500	9.407
BL1644	2.000	4x4	0.283	1.902	0.687	2.598	130,000	11.691
BL1646	2.000	4x6	0.283	1.902	0.687	3.189	130,000	14.580
BL1666	2.000	6x6	0.283	1.902	0.687	3.780	195,000	17.402
BL1688	2.000	8x8	0.283	1.902	0.687	4.961	260,000	23.181

# AL Series



Made for light-duty applications, AL Series is available from Renold Jeffrey. However, the ANSI organization discontinued it, so it may become more difficult to obtain in the future. Specify BL Series when designing new applications.

## AL Series Leaf Chain

Dimensions are in inches unless otherwise indicated.

Chain No.	Pitch	Lacing	Plate Thickness	Plate Height	Pin Diameter	Pin Length	Renold Minimum Tensile Strength	Average Chain Weight
	A		B	C	D	E	Lbs	Lbs/Ft
AL422	0.500	2x2	0.061	0.382	0.156	0.315	3,822	0.269
AL444	0.500	4x4	0.061	0.382	0.156	0.583	7,643	0.470
AL466	0.500	6x6	0.061	0.382	0.156	0.831	11,465	0.739
AL544	0.625	4x4	0.080	0.504	0.200	0.740	13,038	0.739
AL566	0.625	6x6	0.080	0.504	0.200	1.071	20,232	1.142
AL588	0.625	8x8	0.080	0.504	0.200	1.417	26,077	1.478
AL622	0.750	2x2	0.096	0.602	0.234	0.496	8,992	0.504
AL644	0.750	4x4	0.096	0.602	0.234	0.882	17,984	1.115
AL666	0.750	6x6	0.096	0.602	0.234	1.280	26,976	1.666
AL822	1.000	2x2	0.120	0.795	0.312	0.614	16,410	0.974
AL844	1.000	4x4	0.120	0.795	0.312	1.110	32,596	2.009
AL866	1.000	6x6	0.120	0.795	0.312	1.606	44,960	2.936
AL888	1.000	8x8	0.120	0.795	0.312	2.102	60,696	3.964
AL1044	1.250	4x4	0.158	0.996	0.375	1.441	44,960	3.030
AL1066	1.250	6x6	0.158	0.996	0.375	2.087	67,440	4.522
AL1244	1.500	4x4	0.191	1.209	0.437	1.709	82,726	4.529
AL1266	1.500	6x6	0.191	1.209	0.437	2.500	82,726	6.786



## **RENOLD** Leaf Chain

Renold Jeffrey builds quality  
into every link

- Increased wear resistance means longer life and maintenance savings
- Higher breaking loads provide greater safety factors and increased reliability
- Improved fatigue resistance offers greater durability and cuts replacement costs

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