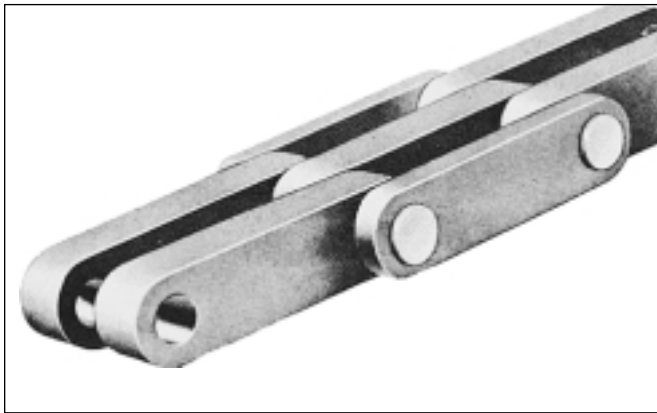


# Bar and Pin Chains



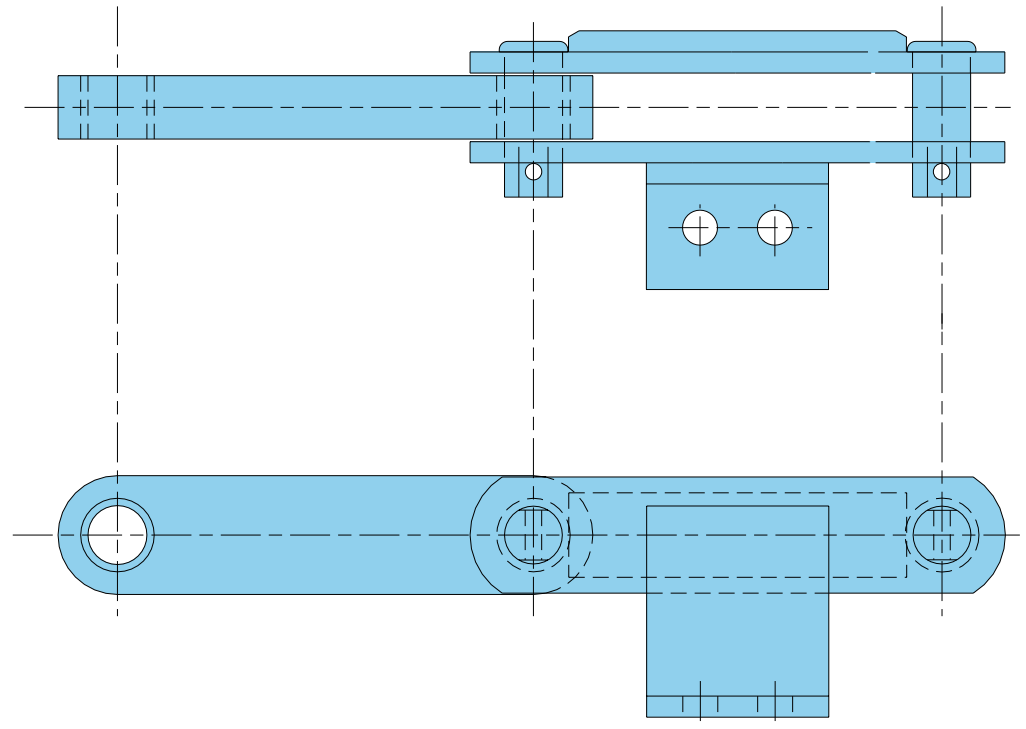
## Bar and Pin Chains

Bar and pin chains are used in a variety of applications, from conveyors to tension linkages. They are utilized for economical installations where the speed is relatively slow and/or the lifting of enormous load is required.

Bar and pin chains consist of plain link bars assembled on, and bearing directly against, the chain pin. This type of chain does not utilize bushings or rollers.

A few standard styles are illustrated. The bar and pin chains are normally manufactured on a made-to-order basis. Our engineering and design services provide maximum flexibility, allowing us to create the right chain with the right attachments for your application.

**Bar and Pin Type Scraper Reclaimer Chain with A-2 Attachment**

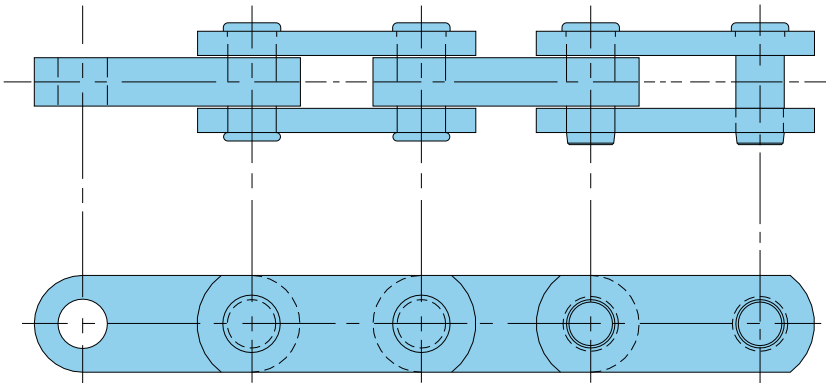


## Draw Bench Chains

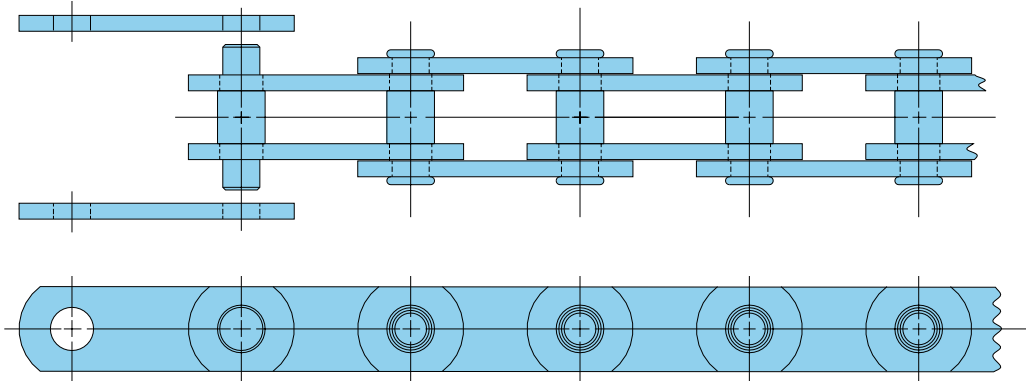
The primary metals and steel industries rely on draw bench chain to meet their specific metal drawing requirements. Union manufactures a wide range of sizes, materials, and ultimate strength ratings up to 1,000,000 pounds.

Union Draw Bench Chains are manufactured on a made-to-order basis. Our engineers work closely with you to select and design the draw bench chain that meets the requirements of your specific application.

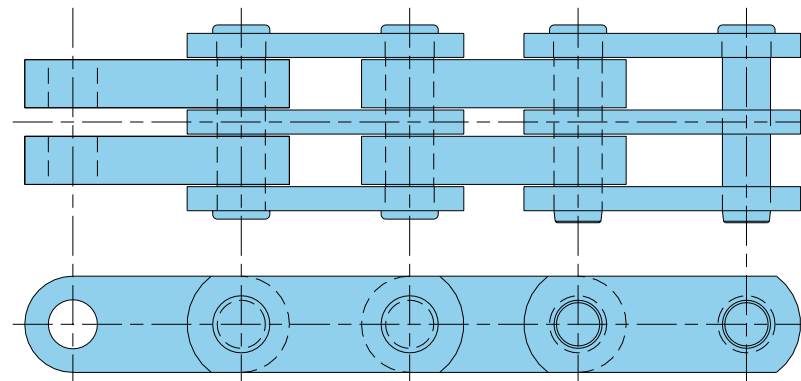
### Style 1



### Style 2



### Style 3





## Double Flex Chains

Double Flex Chain rotates on two planes, making it an ideal choice for a wide variety of applications. The pin bearing surfaces and selected sliding surfaces are induction hardened for extended wear life.

The Double Flex Chain offers a large sliding area to decrease shear on the chain and the sliding surface because design allows maximum flexibility for both horizontal and vertical movement.

This versatility allows compact layouts and economical cost. The mechanically designed cupped shape of the outer link plates of DF-3500 and DF-3910 eases side flex movement and protects rivet ends. This feature also prevents pin wear at the ends. DF-3498 offers flexibility with straight outer link plates.

The drawings shown are examples of just a few double flex chain styles. Many additional styles and configurations are available on a made-to-order basis. Sprockets are also available — split, solid, or bronze bushed.

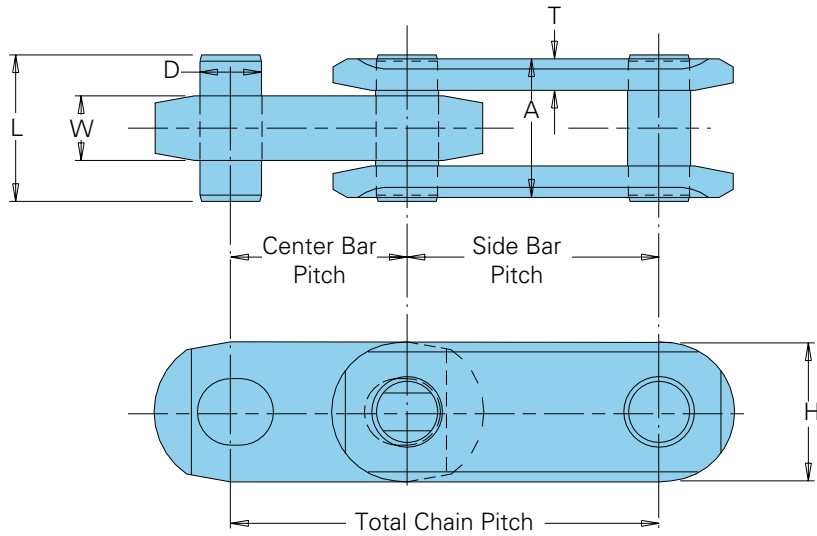


**Table 1 — Double Flex Chain**

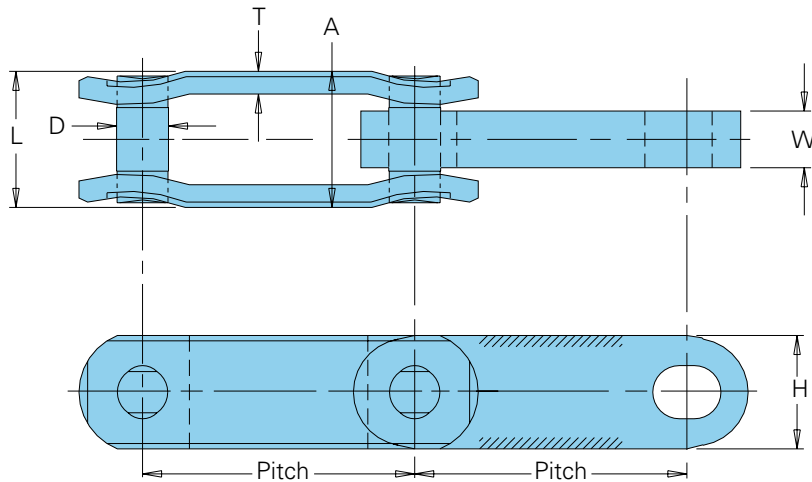
Ratio of Chain Speed (FPM) to Conveyor Length (ft.)	Maximum Allowable Working Load (lbs.)
0.1–0.6	4,000
1.0	3,400
1.5	2,900
2.0	2,600
2.5	2,300
3.0	2,100
3.0–15.0	2,100

For ratios less than 0.1 or more than 15.0, consult Union for suggested working load.

**DF-3498**



**DF-3500 and DF-3910**



Note: Hatching shows induction hardened area.

**Double Flex Chain**

All dimensions are in inches unless otherwise indicated.

Chain Number	Pitch	Chain Width		Link Plate		Pin		Minimum Flex Radius	Average Tensile Stgth.(lbs.)	Maximum Allowable Work Load <sup>1</sup> (lbs.)	Approx. Weight (lbs./ft.)
		Overall	Inside Link								
		A	W	T	H	D	L				
DF-3498	1.750 2.500	1.45	.64	.31	1.40	.63	1.45	18.00	50,000	4,000	3.9
DF-3500	2.500 3.000	1.50	.63	.25	1.25	.57	1.46	20.00	48,000	4,000	3.3
DF-3910	3.000 3.000	1.50	.63	.25	1.25	.57	1.46	22.00	48,000	4,000	3.3

■ Indicates this chain is normally stocked. All others are made-to-order.

<sup>1</sup>Working load for speed length ratio V/S up to 0.6., where V = chain speed (ft./min.) and S = conveyor length (ft.). For other speed length ratios, see Table 1.

To locate compatible sprockets for your chain, refer to the Product Cross-Reference in Section D.

Note: Dimensions are subject to change. Contact Union Chain to obtain certified prints for design and construction.