



*Every Calling is Great, When Greatly Pursued.*

OLIVER WENDELL HOLMES



At the Diamond Chain Company, the calling to design and manufacture the world's highest-performing roller chain is greatly pursued every day by teams of passionate technical experts who have made your success their life's work. It's that intensity of focus that some of the world's greatest inventors trusted to provide the drive chains they needed to transform the world. From the Wright Brothers, to Henry Ford, to the global leaders of our time, Diamond® chain is the roller chain most trusted to perform, when performance matters most.



## THE DIAMOND CHAIN COMPANY

Founded on December 24, 1890, the Diamond Chain Company is one of the most experienced roller chain manufacturers in the world. Driven by the principles of unrivaled experience, unsurpassed quality, and unparalleled performance – the diamond was adopted as the company trademark as it symbolized perfection and acts as a constant reminder of the company's core values.

Today, the Diamond Chain Company sets the standard for high performance roller chain with industry leading wear life, warranty, and product selection. From industry launch to industry leader, Diamond Chain is the most trusted roller chain when performance matters most.

## INTRODUCING INFINITY™ ROLLER CHAIN

The Infinity series is a premier roller chain offering from the Diamond Chain Company and the newest addition to the Company's portfolio of products. Designed, manufactured, and assembled by Diamond Chain, Infinity roller chain delivers consistent quality and wear performance that substantially outperforms other top industry chain suppliers. With one hundred twenty years of experience forged into every pin, plate, bushing, and roller, Infinity roller chain is built to last.

## INDUSTRY LEADING PRODUCT

The Diamond Chain Company has mastered the design and manufacturing processes necessary to create consistently high quality, and high performance, roller chain. Infinity roller chains are closely monitored throughout each stage of the manufacturing process by a rigorous quality control system that ensures only qualified components reach the final assembly stage. By maintaining this strict attention to detail, the end result is the Infinity roller chain product line that leads the competition with unsurpassed quality, unparalleled wear life, and an industry leading five-year warranty.

## INDUSTRY LEADING SERVICE

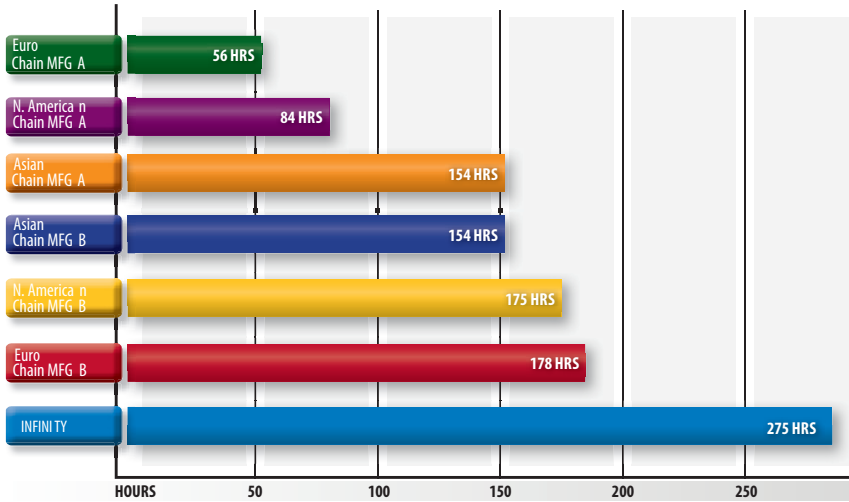
The Infinity series of roller chains comes with world class service tailored to your industry, applications, and operational requirements including:

- *Length Matching*
- *Cut-to-length*
- *On Site Customer Training*
- *Local and Regional Product Availability*
- *Application / Maintenance Training*
- *Total Downtime Cost Analysis*
- *Technical / Engineering Support*
- *Local Field Support*

## INFINITY SERIES PRODUCT PERFORMANCE

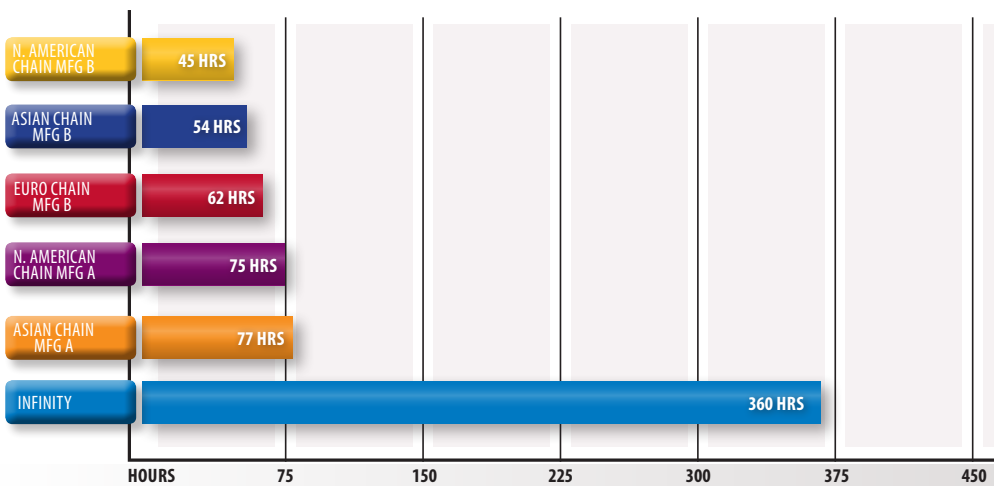
Accelerated wear testing was conducted on Infinity series roller chain and products from five global manufacturers. All products were ASME / ANSI approved products. These tests were performed by the Diamond Chain Company under the supervision of an independent third party.

### #50 CHAIN ACCELERATED WEAR TESTING



Test conditions: 1172 RPMs, 91 lbs. of tension, 3.5 chain horsepower and 21T X 21T sprockets.

### #60 CHAIN ACCELERATED WEAR TESTING



Test conditions: 1725 RPMs, 100 lbs. of tension, 5.2 chain horsepower and 23T X 23T sprockets.

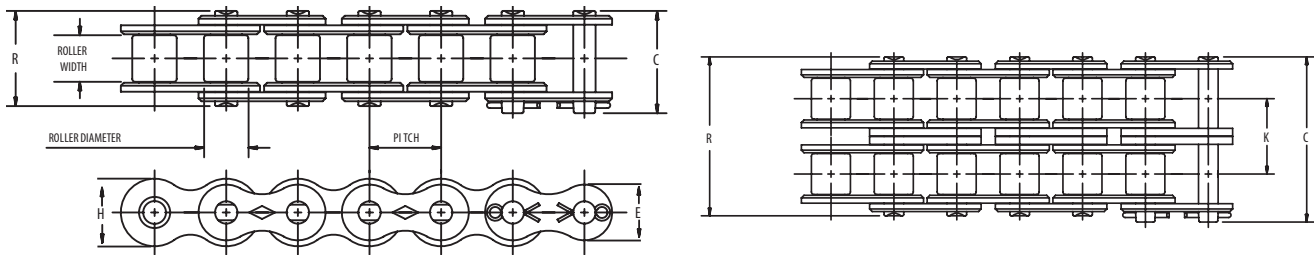
## THE SUM OF ITS PARTS

At the Diamond Chain Company, roller chain is our passion, our focus, and our calling. Our continuing success depends upon your success and that's why attention is paid to the smallest of details. At Diamond Chain, we know that our processes and products are second to none and we back our products with industry leading warranties against defects in material and workmanship.

Diamond Chain Company combines world class products with world class service. From technical support to on-site training, custom solutions to customer products, Diamond Chain is available with the people, products, and expertise to help solve any problem.

# INFINITY SERIES CHAIN

Infinity Standard Chains are built to ASME / ANSI B29.1 standards for dimensions, interoperability, and sprocket fit and exceed the established standards for tensile strength.



Dimensions in inches

ASME/ANSI Number	Pitch Inches	Roller Width	Roller Diameter	Pin Diameter	Link Plate Thickness	C	R	K	Pounds Per Foot	Average Tensile Strength	E	H
25	1/4	1/8	*.130	.090	.030	0.37	0.34	....	0.08	875	0.205	0.238
35	3/8	3/16	*.200	.141	.050	0.56	0.50	....	0.21	2100	0.308	0.356
40	1/2	5/16	.312	.156	.060	0.72	0.67	....	0.41	4000	0.410	0.475
40-2	1/2	5/16	.312	.156	.060	1.29	1.24	0.566	0.80	8000	0.410	0.475
41	1/2	1/4	.306	.141	.050	0.65	0.57	....	0.26	2400	0.310	0.383
50	5/8	3/8	.400	.200	.080	0.89	0.83	....	0.70	6600	0.512	0.594
50-2	5/8	3/8	.400	.200	.080	1.60	1.55	0.713	1.40	13200	0.512	0.594
60	3/4	1/2	.469	.234	.094	1.11	1.04	....	0.99	8500	0.615	0.713
60-2	3/4	1/2	.469	.234	.094	2.01	1.94	0.897	1.95	17000	0.615	0.713
80	1	5/8	.625	.312	.125	1.44	1.32	....	1.73	14500	0.820	0.950
80-2	1	5/8	.625	.312	.125	2.59	2.47	1.15	3.37	29000	0.820	0.950
100	1 1/4	3/4	.750	.375	.156	1.73	1.61	....	2.51	24000	1.025	1.188
120	1 1/2	1	.875	.437	.187	2.14	2.00	....	3.69	34000	1.230	1.425
140	1 3/4	1	1.000	.500	.219	2.31	2.14	....	5.00	46000	1.435	1.663
160	2	1 1/4	1.125	.562	.250	2.73	2.54	....	6.53	58000	1.640	1.900
180	2 1/4	1 13/32	1.406	.687	.281	3.15	2.88	....	9.06	76000	1.845	2.138
200	2 1/2	1 1/2	1.562	.781	.312	3.44	3.12	....	10.65	95000	2.050	2.375
240	3	1 7/8	1.875	.937	.375	4.32	3.83	....	17.03	157600	2.422	2.806

\*Chains are rollerless -- dimension shown is bushing diameter.

ASME/ANSI 60 and larger chains are available as cottered or riveted type design.

Multiple strand chains are available with slip-fit (standard) center plates.

# CHAIN LENGTH IN PITCHES TO FEET CONVERSION TABLE

Chain Pitch—Inches													
No. of Pitches	¼	⅜	½	⅝	¾	1	1¼	1½	1¾	2	2¼	2½	3
Chain Length—Feet													
1	0.02	0.03	0.04	0.05	0.06	0.08	0.10	0.13	0.15	0.17	0.19	0.21	0.25
2	0.04	0.06	0.08	0.10	0.13	0.17	0.21	0.25	0.29	0.33	0.38	0.42	0.50
3	0.06	0.09	0.13	0.16	0.19	0.25	0.31	0.38	0.44	0.50	0.56	0.63	0.75
4	0.08	0.13	0.17	0.21	0.25	0.33	0.42	0.50	0.58	0.67	0.75	0.83	1.00
5	0.10	0.16	0.21	0.26	0.31	0.42	0.52	0.63	0.73	0.83	0.94	1.04	1.25
6	0.13	0.19	0.25	0.31	0.38	0.50	0.63	0.75	0.88	1.00	1.13	1.25	1.50
7	0.15	0.22	0.29	0.36	0.44	0.58	0.73	0.88	1.02	1.17	1.31	1.46	1.75
8	0.17	0.25	0.33	0.42	0.50	0.67	0.83	1.00	1.17	1.33	1.50	1.67	2.00
9	0.19	0.28	0.38	0.47	0.56	0.75	0.94	1.13	1.31	1.50	1.69	1.88	2.25
10	0.21	0.31	0.42	0.52	0.63	0.83	1.04	1.25	1.46	1.67	1.88	2.08	2.50
11	0.23	0.34	0.46	0.57	0.69	0.92	1.15	1.38	1.60	1.83	2.06	2.29	2.75
12	0.25	0.38	0.50	0.63	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	3.00
13	0.27	0.41	0.54	0.68	0.81	1.08	1.35	1.63	1.90	2.17	2.44	2.71	3.25
14	0.29	0.44	0.58	0.73	0.88	1.17	1.46	1.75	2.04	2.33	2.63	2.92	3.50
15	0.31	0.47	0.63	0.78	0.94	1.25	1.56	1.88	2.19	2.50	2.81	3.13	3.75
16	0.33	0.50	0.67	0.83	1.00	1.33	1.67	2.00	2.33	2.67	3.00	3.33	4.00
17	0.35	0.53	0.71	0.89	1.06	1.42	1.77	2.13	2.48	2.83	3.19	3.54	4.25
18	0.38	0.56	0.75	0.94	1.13	1.50	1.88	2.25	2.63	3.00	3.38	3.75	4.50
19	0.40	0.59	0.79	0.99	1.19	1.58	1.98	2.38	2.77	3.17	3.56	3.96	4.75
20	0.42	0.63	0.83	1.04	1.25	1.67	2.08	2.50	2.92	3.33	3.75	4.17	5.00
21	0.44	0.66	0.88	1.09	1.31	1.75	2.19	2.63	3.06	3.50	3.94	4.38	5.25
22	0.46	0.69	0.92	1.15	1.38	1.83	2.29	2.75	3.21	3.67	4.13	4.58	5.50
23	0.48	0.72	0.96	1.20	1.44	1.92	2.40	2.88	3.35	3.83	4.31	4.79	5.75
24	0.50	0.75	1.00	1.25	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	6.00
25	0.52	0.78	1.04	1.30	1.56	2.08	2.60	3.13	3.65	4.17	4.69	5.21	6.25
26	0.54	0.81	1.08	1.35	1.63	2.17	2.71	3.25	3.79	4.33	4.88	5.42	6.50
27	0.56	0.84	1.13	1.41	1.69	2.25	2.81	3.38	3.94	4.50	5.06	5.63	6.75
28	0.58	0.88	1.17	1.46	1.75	2.33	2.92	3.50	4.08	4.67	5.25	5.83	7.00
29	0.60	0.91	1.21	1.51	1.81	2.42	3.02	3.63	4.23	4.83	5.44	6.04	7.25
30	0.63	0.94	1.25	1.56	1.88	2.50	3.13	3.75	4.38	5.00	5.63	6.25	7.50
31	0.65	0.97	1.29	1.61	1.94	2.58	3.23	3.88	4.52	5.17	5.81	6.46	7.75
32	0.67	1.00	1.33	1.67	2.00	2.67	3.33	4.00	4.67	5.33	6.00	6.67	8.00
33	0.69	1.03	1.38	1.72	2.06	2.75	3.44	4.13	4.81	5.50	6.19	6.88	8.25
34	0.71	1.06	1.42	1.77	2.13	2.83	3.54	4.25	4.96	5.67	6.38	7.08	8.50
35	0.73	1.09	1.46	1.82	2.19	2.92	3.65	4.38	5.10	5.83	6.56	7.29	8.75
36	0.75	1.13	1.50	1.88	2.25	3.00	3.75	4.50	5.25	6.00	6.75	7.50	9.00
37	0.77	1.16	1.54	1.93	2.31	3.08	3.85	4.63	5.40	6.17	6.94	7.71	9.25
38	0.79	1.19	1.58	1.98	2.38	3.17	3.96	4.75	5.54	6.33	7.13	7.92	9.50
39	0.81	1.22	1.63	2.03	2.44	3.25	4.06	4.88	5.69	6.50	7.31	8.13	9.75
40	0.83	1.25	1.67	2.08	2.50	3.33	4.17	5.00	5.83	6.67	7.50	8.33	10.00
41	0.85	1.28	1.71	2.14	2.56	3.42	4.27	5.13	5.98	6.83	7.69	8.54	10.25
42	0.88	1.31	1.75	2.19	2.63	3.50	4.38	5.25	6.13	7.00	7.88	8.75	10.50
43	0.90	1.34	1.79	2.24	2.69	3.58	4.48	5.38	6.27	7.17	8.06	8.96	10.75
44	0.92	1.38	1.83	2.29	2.75	3.67	4.58	5.50	6.42	7.33	8.25	9.17	11.00
45	0.94	1.41	1.88	2.34	2.81	3.75	4.69	5.63	6.56	7.50	8.44	9.38	11.25
46	0.96	1.44	1.92	2.40	2.88	3.83	4.79	5.75	6.71	7.67	8.63	9.58	11.50
47	0.98	1.47	1.96	2.45	2.94	3.92	4.90	5.88	6.85	7.83	8.81	9.79	11.75
48	1.00	1.50	2.00	2.50	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00	12.00
49	1.02	1.53	2.04	2.55	3.06	4.08	5.10	6.13	7.15	8.17	9.19	10.21	12.25
50	1.04	1.56	2.08	2.60	3.13	4.17	5.21	6.25	7.29	8.33	9.38	10.42	12.50

# CHAIN LENGTH IN PITCHES TO FEET CONVERSION TABLE

Chain Pitch—Inches													
No. of Pitches	¼	⅜	½	⅝	¾	1	1 ¼	1 ½	1 ¾	2	2 ¼	2 ½	3
Chain Length—Feet													
51	1.06	1.59	2.13	2.66	3.19	4.25	5.31	6.38	7.44	8.50	9.56	10.63	12.75
52	1.08	1.63	2.17	2.71	3.25	4.33	5.42	6.50	7.58	8.67	9.75	10.83	13.00
53	1.10	1.66	2.21	2.76	3.31	4.42	5.52	6.63	7.73	8.83	9.94	11.04	13.25
54	1.13	1.69	2.25	2.81	3.38	4.50	5.63	6.75	7.88	9.00	10.13	11.25	13.50
55	1.15	1.72	2.29	2.86	3.44	4.58	5.73	6.88	8.02	9.17	10.31	11.46	13.75
56	1.17	1.75	2.33	2.92	3.50	4.67	5.83	7.00	8.17	9.33	10.50	11.67	14.00
57	1.19	1.78	2.38	2.97	3.56	4.75	5.94	7.13	8.31	9.50	10.69	11.88	14.25
58	1.21	1.81	2.42	3.02	3.63	4.83	6.04	7.25	8.46	9.67	10.88	12.08	14.50
59	1.23	1.84	2.46	3.07	3.69	4.92	6.15	7.38	8.60	9.83	11.06	12.29	14.75
60	1.25	1.88	2.50	3.13	3.75	5.00	6.25	7.50	8.75	10.00	11.25	12.50	15.00
61	1.27	1.91	2.54	3.18	3.81	5.08	6.35	7.63	8.90	10.17	11.44	12.71	15.25
62	1.29	1.94	2.58	3.23	3.88	5.17	6.46	7.75	9.04	10.33	11.63	12.92	15.50
63	1.31	1.97	2.63	3.28	3.94	5.25	6.56	7.88	9.19	10.50	11.81	13.13	15.75
64	1.33	2.00	2.67	3.33	4.00	5.33	6.67	8.00	9.33	10.67	12.00	13.33	16.00
65	1.35	2.03	2.71	3.39	4.06	5.42	6.77	8.13	9.48	10.83	12.19	13.54	16.25
66	1.38	2.06	2.75	3.44	4.13	5.50	6.88	8.25	9.63	11.00	12.38	13.75	16.50
67	1.40	2.09	2.79	3.49	4.19	5.58	6.98	8.38	9.77	11.17	12.56	13.96	16.75
68	1.42	2.13	2.83	3.54	4.25	5.67	7.08	8.50	9.92	11.33	12.75	14.17	17.00
69	1.44	2.16	2.88	3.59	4.31	5.75	7.19	8.63	10.06	11.50	12.94	14.38	17.25
70	1.46	2.19	2.92	3.65	4.38	5.83	7.29	8.75	10.21	11.67	13.13	14.58	17.50
71	1.48	2.22	2.96	3.70	4.44	5.92	7.40	8.88	10.35	11.83	13.31	14.79	17.75
72	1.50	2.25	3.00	3.75	4.50	6.00	7.50	9.00	10.50	12.00	13.50	15.00	18.00
73	1.52	2.28	3.04	3.80	4.56	6.08	7.60	9.13	10.65	12.17	13.69	15.21	18.25
74	1.54	2.31	3.08	3.85	4.63	6.17	7.71	9.25	10.79	12.33	13.88	15.42	18.50
75	1.56	2.34	3.13	3.91	4.69	6.25	7.81	9.38	10.94	12.50	14.06	15.63	18.75
76	1.58	2.38	3.17	3.96	4.75	6.33	7.92	9.50	11.08	12.67	14.25	15.83	19.00
77	1.60	2.41	3.21	4.01	4.81	6.42	8.02	9.63	11.23	12.83	14.44	16.04	19.25
78	1.63	2.44	3.25	4.06	4.88	6.50	8.13	9.75	11.38	13.00	14.63	16.25	19.50
79	1.65	2.47	3.29	4.11	4.94	6.58	8.23	9.88	11.52	13.17	14.81	16.46	19.75
80	1.67	2.50	3.33	4.17	5.00	6.67	8.33	10.00	11.67	13.33	15.00	16.67	20.00
81	1.69	2.53	3.38	4.22	5.06	6.75	8.44	10.13	11.81	13.50	15.19	16.88	20.25
82	1.71	2.56	3.42	4.27	5.13	6.83	8.54	10.25	11.96	13.67	15.38	17.08	20.50
83	1.73	2.59	3.46	4.32	5.19	6.92	8.65	10.38	12.10	13.83	15.56	17.29	20.75
84	1.75	2.63	3.50	4.38	5.25	7.00	8.75	10.50	12.25	14.00	15.75	17.50	21.00
85	1.77	2.66	3.54	4.43	5.31	7.08	8.85	10.63	12.40	14.17	15.94	17.71	21.25
86	1.79	2.69	3.58	4.48	5.38	7.17	8.96	10.75	12.54	14.33	16.13	17.92	21.50
87	1.81	2.72	3.63	4.53	5.44	7.25	9.06	10.88	12.69	14.50	16.31	18.13	21.75
88	1.83	2.75	3.67	4.58	5.50	7.33	9.17	11.00	12.83	14.67	16.50	18.33	22.00
89	1.85	2.78	3.71	4.64	5.56	7.42	9.27	11.13	12.98	14.83	16.69	18.54	22.25
90	1.88	2.81	3.75	4.69	5.63	7.50	9.38	11.25	13.13	15.00	16.88	18.75	22.50
91	1.90	2.84	3.79	4.74	5.69	7.58	9.48	11.38	13.27	15.17	17.06	18.96	22.75
92	1.92	2.88	3.83	4.79	5.75	7.67	9.58	11.50	13.42	15.33	17.25	19.17	23.00
93	1.94	2.91	3.88	4.84	5.81	7.75	9.69	11.63	13.56	15.50	17.44	19.38	23.25
94	1.96	2.94	3.92	4.90	5.88	7.83	9.79	11.75	13.71	15.67	17.63	19.58	23.50
95	1.98	2.97	3.96	4.95	5.94	7.92	9.90	11.88	13.85	15.83	17.81	19.79	23.75
96	2.00	3.00	4.00	5.00	6.00	8.00	10.00	12.00	14.00	16.00	18.00	20.00	24.00
97	2.02	3.03	4.04	5.05	6.06	8.08	10.10	12.13	14.15	16.17	18.19	20.21	24.25
98	2.04	3.06	4.08	5.10	6.13	8.17	10.21	12.25	14.29	16.33	18.38	20.42	24.50
99	2.06	3.09	4.13	5.16	6.19	8.25	10.31	12.38	14.44	16.50	18.56	20.63	24.75
100	2.08	3.13	4.17	5.21	6.25	8.33	10.42	12.50	14.58	16.67	18.75	20.83	25.00

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