

# **CHAIN OVERVIEW**

Our chain manufacturing roots date back to the late 1800s and the Columbus Chain Company. We hold patents in chain and chain link design as well as patents in chain manufacturing processes, which help ensure our chain is the strongest and most reliable on the market today. We also invented the first alloy chain in 1933 – the forerunner to our industry-changing Herc-Alloy 800<sup>®</sup> and 1000 chains.

Today, Columbus McKinnon is an industry-leading chain manufacturer. Relying on more than a century of chain-making expertise and innovation, we manufacture a wide selection of welded graded chain in Tennessee, for use in a variety of industries. We have always been an innovator in chain and rigging products, and we continually work to improve our processes and materials to ensure we manufacture the best chain in the industry year after year.

	ASTM & NACM Grade	CM Chain Embossment	ASTM Specification	Name	Typical Uses
E.F.	GRADE 30	G30	A413	Proof Coil	General-purpose, low-carbon chain for industrial and agricultural applications including guard rails, logging and load securement. <b>Not to be used for overhead lifting.</b>
63	GRADE 43	G43	A413	High Test	Grade 43 chain is manufactured to meet ASTM & NACM specifications. Typical uses include container securement, logging, towing and marine industry applications. Grade 43 is available in many finishes. <b>Not to be used for overhead lifting.</b>
	GRADE 70	G70	A413	Transport	A higher-strength, heat-treated carbon steel chain typically used by truckers, loggers and highway crews for load securement, towing, lashing and as trawler chain. Load ratings of Grade 70 chain are approximately 20% higher than Grade 43. <b>Not to be used for overhead lifting.</b>
S	GRADE 80	HA800	A391	Alloy	A higher-strength, heat-treated alloy steel chain primarily used as a sling component for overhead lifting, but can also be used in rigging and tie-down applications where a lighter weight, higher strength chain is desirable. <b>Recommended for overhead lifting by NACM, ASME and OSHA.</b>
6	GRADE 100	HA1000	A973	Alloy	With approximately 25% higher strength than Grade 80, Grade 100 chain is used primarily as a sling component for overhead lifting. Grade 100 chain can be used for all of the same applications as Grades 30 through 80. Recommended for overhead lifting by NACM, ASME and OSHA.

### **GRADED WELDED CHAIN AT A GLANCE**



### CLEVIS GRAB HOOK GRADE 30/43



WORKING LOAD LIMIT: 2,600 TO 20,200 LBS.

#### **BENEFITS & FEATURES**

- Heat-treated pins
- Hooks are heat treated and tempered
- Design factor 4:1 when used with Grade 30
- Design factor 3:1 when used with Grade 43
- When using these hooks with Grade 30 chain, the hooks must rated to the working load limit of the chain.
- Hook embossed with trace code providing traceability through manufacturing and testing process to heat of steel
- Not to be used for overhead lifting

Size (in.)	Working Load	Standard Package	Product Code			Weight						
	Limit (lbs.)		Self Colored	Zinc Plated	w	D	н	L	R	Р	(lbs.)	
1/4	2,600	50	-	61193	0.36	2.05	0.37	2.88	1.57	0.31	0.37	
5/16	3,900	50	-	61293	0.42	2.41	0.44	3.52	1.98	0.38	0.63	
3/8	5,400	50	60392	61393	0.50	2.94	0.54	4.20	2.23	0.44	1.10	
7/16	7,200	10	60492	61493	0.58	3.25	0.59	4.93	2.94	0.50	1.60	
1/2	9,200	10	60592	61593	0.66	3.70	0.67	5.43	2.93	0.55	2.42	
5/8	13,000	10	60692	61693	0.75	4.25	0.781	6.88	4.00	0.69	3.61	
3/4	20,200	5	M812	M812Z	0.88	5.19	0.94	8.00	4.56	0.75	7.00	

FINISHES: Self Colored, Zinc Plated

## EYE GRAB HOOK GRADE 30/43

WORKING LOAD LIMIT: 2,600 TO 20,200 LBS.

#### **BENEFITS & FEATURES**

- Hooks are heat treated and tempered
- Design factor 4:1 when used with Grade 30
- Design factor 3:1 when used with Grade 43
- When using these hooks with Grade 30 chain, the hooks must rated to the working load limit of the chain.
- Hook embossed with trace code providing traceability through manufacturing and testing process to heat of steel
- Zinc plated finish
- Not to be used for overhead lifting

Size (in.)	Working Load Limit (Ibs.)	Standard Package	Product Code	Dimensions (in.)						
				w	D	н	L	R	G	Weight (lbs.)
1/4	2,600	50	71193	0.47	1.78	0.35	2.85	1.78	0.81	0.30
5/16	3,900	50	71293	0.61	2.19	0.44	3.47	2.19	0.98	0.56
3/8	5,400	50	71393	0.82	2.86	0.49	4.13	2.69	1.14	0.87
7/16	7,200	10	71493	0.83	2.99	0.59	4.97	3.21	1.34	1.45
1/2	9,200	10	71593	0.93	3.34	0.67	5.38	3.40	1.50	2.17
5/8	13,000	5	71693	1.16	4.63	0.76	6.95	4.49	1.88	3.89
3/4	20,200	5	71793	1.38	5.50	0.98	8.28	5.35	2.28	6.12

