

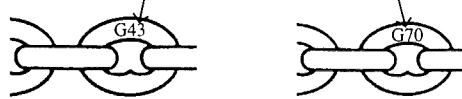
BINDER CHAIN SPECIFICATIONS

This chart indicates the minimum number of chains required to secure loads in the forward direction (0.8g deceleration)* per Federal Motor Carriers Safety Administration, DOT Regulations; per 49CFR, Part 393 – Paragraph 393.102.

*Refer to 49CFR, Parts 392 and 393, for North American Standard for Protection Against Falling and Shifting Cargo for complete regulations

GRADE OF CHAIN	Size (in.)	Working Load Limit		Minimum number of chains required to secure loads in forward direction by Weight of article in lbs. (kg.)									
		(lbs.)	(kg.)	5,000 (2,270)	10,000 (4,540)	15,000 (6,800)	20,000 (9,070)	25,000 (11,340)	30,000 (13,600)	35,000 (15,870)	40,000 (18,140)	45,000 (20,410)	50,000 (22,680)
CM Grade 30 Proof Coil	5/16	1,900	862	3	5	7	9	11	13	15	17	19	22
	3/8	2,650	1,202	2	4	5	7	8	10	11	13	14	16
CM Grade 43 High Test	5/16	3,900	1,770	2	3	4	5	6	7	8	9	10	11
	3/8	5,400	2,450	1	2	3	3	4	5	6	6	7	8
CM Grade 70 Transport	1/4	3,150	1,429	2	3	4	6	7	8	9	11	12	13
	5/16	4,700	2,132	1	2	3	4	5	6	6	7	8	9
	3/8	6,600	2,994	1	2	2	3	4	4	5	5	6	7
CM Grade 80 Herc-Alloy HA800	7/32	2,100	953	2	4	6	8	10	12	14	16	18	20
	9/32	3,500	1,588	2	3	4	5	6	7	9	10	11	12
	5/16	4,500	2,041	1	2	3	4	5	6	7	8	9	10
	3/8	7,100	3,220	1	2	2	3	3	4	4	5	6	6
CM Grade 100 Herc-Alloy HA1000	7/32	2,700	1,225	2	3	5	6	8	9	11	12	14	15
	9/32	4,300	1,950	1	2	3	4	5	6	7	8	9	10
	3/8	8,800	3,992	1	1	2	2	3	3	4	4	5	5

CHAIN GRADE IDENTIFICATION†



GRADES OF CHAIN

CM Grade 30 Proof Coil Chain			CM Grade 43 High Test Chain			CM Grade 70 Transport Chain			CM Grade 80 Herc-Alloy Chain HA800			CM Grade 100 Herc-Alloy Chain HA1000		
CM Embossing G30 Other Embossing includes: PC, 3, 30, C, C3, M3 NOTE: Unmarked chain is to be treated as proof coil			CM Embossing G43 Other Embossing includes: HT, PH, M MHT, H, M4, C4, 4, 43, G4, G40			CM Embossing G70 Other Embossing includes: 7, 70, G7, M7, C7			CM Embossing HA800 Other Embossing includes: A8A, C8, 8, TC8, CA8, G80			CM Embossing HA100 Other Embossing includes: W10, VIP, PW, H26, P10, C10, A10, GC10		
Size (in.)	W.L.L. (lbs.) (kg.)		Size (in.)	W.L.L. (lbs.) (kg.)		Size (in.)	W.L.L. (lbs.) (kg.)		Size (in.)	W.L.L. (lbs.) (kg.)		Size (in.)	W.L.L. (lbs.) (kg.)	
3/16	800	363	1/4	2,600	1,180	1/4	3,150	1,429	7/32	2,100	953	7/32	2,700	1,225
1/4	1,300	590	5/16	3,900	1,770	5/16	4,700	2,132	9/32	3,500	1,588	9/32	4,300	1,950
5/16	1,900	862	3/8	5,400	2,450	3/8	6,600	2,994	5/16	4,500	2,041	3/8	8,800	3,992
3/8	2,650	1,202	7/16	7,200	3,266	7/16	8,750	3,969	3/8	7,100	3,220	1/2	15,000	6,804
7/16	3,700	1,678	1/2	9,200	4,173	1/2	11,300	5,126	1/2	12,000	5,443	5/8	22,600	10,251
1/2	4,500	2,041	5/8	13,000	5,897				5/8	18,100	8,210	3/4	35,300	16,012
5/8	6,900	3,130	3/4	20,200	9,163				3/4	28,300	12,837			
3/4	10,600	4,808												

†Markings shown are for CM chain. Samples of other markings are displayed in Chain Grade boxes.

Depending on product and manufacturer, chain grade identification mark spacing varies from every link to one every 3 feet (91.5 cm).

Chain grade identification is accomplished using embossed (raised) numbers and letters. Embossing may be difficult to see on chain which has been in service and is rusty, dirty or worn. Typically, marked links contain only one marked area. Wire brushing and illumination will help improve visibility of markings.

⚠ WARNING

DEATH / INJURY CAN OCCUR FROM IMPROPER USE OR MAINTENANCE OF TIE DOWN EQUIPMENT.

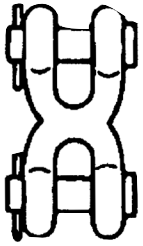
TO AVOID INJURY:

- INSPECT BEFORE USE-REMOVE FROM SERVICE IF CRACKED, WORN, OR DEFORMED.
- DO NOT OVERLOAD. (LOAD BINDERS DEVELOP APPROXIMATE WORKING LOAD WITH HAND EFFORT)
- DO NOT USE HANDLE EXTENDER ON LOAD BINDER(S).
- DO NOT USE BINDER COMPONENTS FOR OVERHEAD LIFTING.

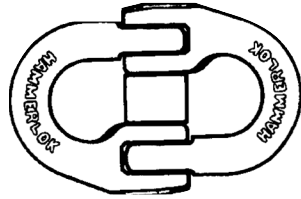
Your source for CM Tiedown Components is:

Acceptable types of repair links

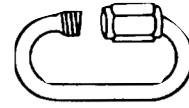
Unsuitable for all applications



Mid-Link including Big Orange® Mid-Link



Coupling Link including Hammerlok® Coupling Link



QuickLink



Repair (Lap) Link

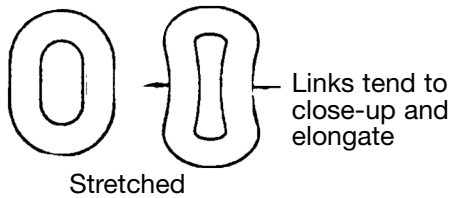


Connecting Link

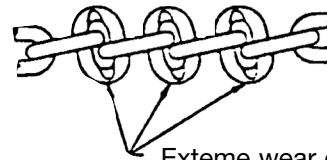


Cold Shut

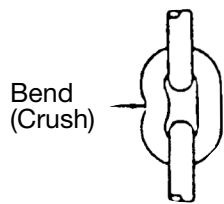
North American Uniform Out-of-Service Criteria for Chain Links and Load Binders



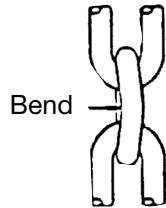
Stretched



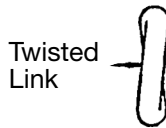
Extreme wear of bearing surfaces



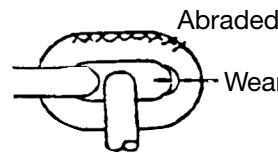
Bend (Crush)



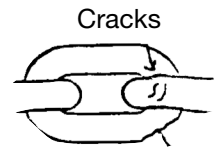
Bend



Twisted Link



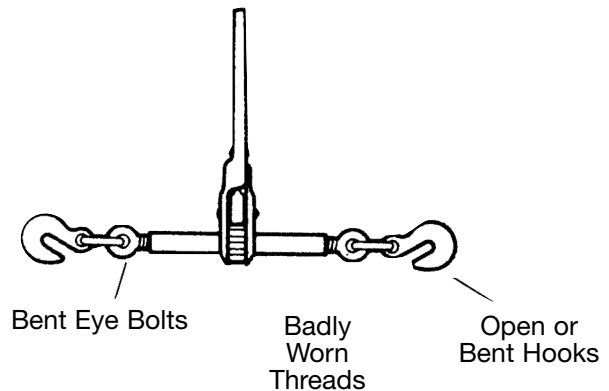
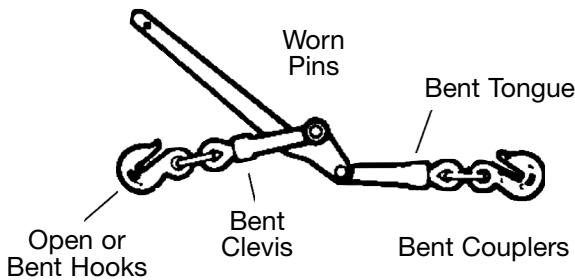
Abraded
Wear



Cracks

Gouged

Obviously Distorted or Stretched Load Binders and Fittings



INDUSTRIAL PRODUCTS

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