

# CHAINS



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**VANGUARD STEEL LTD.**



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**For grade 80/100 lifting components see separate listings**



# Chain Dimensions

## Grade 30 Specifications

Size Inches	Wire Diameter		Inside Dimensions		Working Load Limit Lbs	Wt. Per 100 ft. Lbs.
	mm	Inches	Length Inches	Width Inches		

### Exact

3/16"	4.8	0.192	1.035	0.340	600	27.00
1/4"	6.3	0.250	1.070	0.440	1,050	53.00
5/16"	8.0	0.312	1.198	0.550	1,700	86.00
3/8"	9.5	0.375	1.519	0.649	2,400	121.00
1/2"	12.5	0.500	1.990	0.837	4,150	206.00
5/8"	16.0	0.630	2.530	0.920	6,800	330.00

### Trade

1/8"	4.0	0.162	0.900	0.290	355	20.39
3/16"	5.0	0.218	0.960	0.400	800	40.00
1/4"	7.0	0.276	1.190	0.500	1,300	63.60
5/16"	8.0	0.329	1.240	0.460	1,900	94.80
3/8"	10.0	0.385	1.330	0.570	2,650	133.00
1/2"	13.0	0.519	1.720	0.750	4,500	258.00
5/8"	16.0	0.656	1.900	0.820	6,900	382.00

### NACM

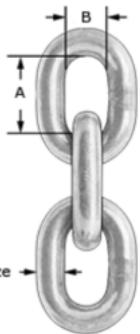
1/8"	4.0	0.156	0.940	0.250	375	19.00
3/16"	5.5	0.217	0.980	0.300	800	38.00
1/4"	7.0	0.276	1.240	0.380	1,300	66.00
5/16"	8.0	0.315	1.290	0.440	1,900	98.00
3/8"	10.0	0.394	1.380	0.550	2,650	144.00
1/2"	13.0	0.512	1.790	0.720	4,500	278.00
5/8"	16.0	0.630	2.200	0.790	6,900	422.00

Use as guide lines only.



# Grade 30 Bright and Polished Exact Chain

A low carbon general purpose utility chain used in applications where high tensile strength is not required.



G 30 Chain Bright	Nominal Dimension Inches		WLL (lbs)	Footage	Weight 100 ft	Product Code
Size	A	B				
<b>Full Drums</b>						
1/8"	0.94	0.25	375	1,000	19	38022008
3/16"	0.95	0.35	590	750	29	38022012
1/4"	1.30	0.43	1,040	700	50	38022016
5/16"	1.38	0.47	1,650	500	73	38022020
3/8"	1.42	0.56	2,340	400	123	38022024
1/2"	1.79	0.72	4,180	200	215	38022032
5/8"	2.76	0.88	6,750	150	321	38022040
<b>Half Drum</b>						
1/8"	0.94	0.25	375	500	19	380220081
3/16"	0.95	0.35	590	300	29	380220121
1/4"	1.30	0.43	1,040	350	50	380220161
5/16"	1.38	0.47	1,650	275	73	380220201
3/8"	1.42	0.56	2,340	200	123	380220241
1/2"	1.79	0.72	4,180	100	215	380220321
<b>Pail Pack</b>						
3/16"	0.95	0.35	590	150	29	380220122
1/4"	1.30	0.43	1,040	115	50	380220162
5/16"	1.38	0.47	1,650	83	73	380220202
3/8"	1.42	0.56	2,340	66	123	380220242
1/2"	1.79	0.72	4,180	50	215	380220322

Material                    Low Carbon Steel  
 Finish                      Bright and Polished  
 Design Factor            3:1

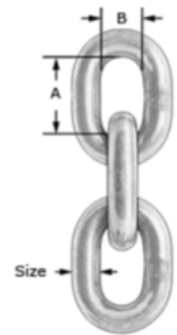
**WARNING :**            **NEVER EXCEED WORKING LOAD LIMITS!**  
 Do not use Grade 30 or 40 chains for overhead lifting applications.

# Grade 30 Hot Dip Galvanized Exact Chain

A low carbon general purpose utility chain that has been hot dipped galvanized for extra corrosion resistance, used in applications where high tensile strength is not required.



G 30 Chain Galvanized	Nominal Dimension Inches		WLL (lbs)	Footage	Weight 100 ft	Product Code
	Size	A				
<b>Full Drums</b>						
1/8"	0.94	0.25	375	1,000	19	38032008
3/16"	0.95	0.35	590	750	29	38032012
1/4"	1.30	0.43	1,040	700	50	38032016
5/16"	1.38	0.47	1,650	500	73	38032020
3/8"	1.42	0.56	2,340	400	123	38032024
1/2"	1.79	0.72	4,180	200	215	38032032
5/8"	2.76	0.88	6,750	150	321	38032040
<b>Half Drum</b>						
1/8"	0.94	0.25	375	500	19	380320081
3/16"	0.95	0.35	590	300	29	380320121
1/4"	1.30	0.43	1,040	350	50	380320161
5/16"	1.38	0.47	1,650	275	73	380320201
3/8"	1.42	0.56	2,340	200	123	380320241
1/2"	1.79	0.72	4,180	100	215	380320321
<b>Pail Pack</b>						
3/16"	0.95	0.35	590	150	29	380320122
1/4"	1.30	0.43	1,040	115	50	380320162
5/16"	1.38	0.47	1,650	83	73	380320202
3/8"	1.42	0.56	2,340	66	123	380320242
1/2"	1.79	0.72	4,180	50	215	380320322



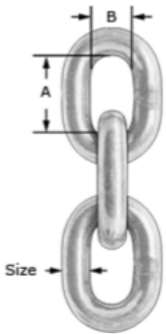
Material                    Low Carbon Steel  
 Finish                      Hot Dip Galvanized  
 Design Factor            3 : 1

**WARNING :**            **NEVER EXCEED WORKING LOAD LIMITS!**  
 Do not use Grade 30 or 40 chains for overhead lifting applications.



# Grade 30 Electro Galvanized Exact Chain

A low carbon general purpose utility chain with a zinc finish used in applications where high tensile strength is not required.



G 30 Chain E. Galv.	Nominal Dimension Inches		WLL (lbs)	Footage	Weight 100 ft	Product Code
Size	A	B				
<b>Full Drums</b>						
1/8"	0.94	0.25	375	1,000	19	38040008
3/16"	0.95	0.35	590	750	29	38040012
1/4"	1.30	0.43	1,040	700	50	38040016
5/16"	1.38	0.47	1,650	500	73	38040020
3/8"	1.42	0.56	2,340	400	123	38040024
1/2"	1.79	0.72	4,180	200	215	38040032
<b>Half Drum</b>						
1/8"	0.94	0.25	375	500	19	380400081
3/16"	0.95	0.35	590	300	29	380400121
1/4"	1.30	0.43	1,040	350	50	380400161
5/16"	1.38	0.47	1,650	275	73	380400201
3/8"	1.42	0.56	2,340	200	123	380400241
1/2"	1.79	0.72	4,180	100	215	380400321
<b>Pail Pack</b>						
3/16"	0.95	0.35	590	150	29	380400122
1/4"	1.30	0.43	1,040	115	50	380400162
5/16"	1.38	0.47	1,650	83	73	380400202
3/8"	1.42	0.56	2,340	66	123	380400242
1/2"	1.79	0.72	4,180	50	215	380400322

Material                    Low Carbon Steel  
 Finish                      Electro Galvanized  
 Design Factor            3 : 1

**WARNING :**            **NEVER EXCEED WORKING LOAD LIMITS!**  
 Do not use Grade 30 or 40 chains for overhead lifting applications.

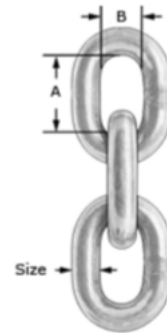


# Grade 70 Transport Chain

Boron Manganese heat treated steel provides exceptional hardness and toughness. Commonly used as a binder tie down chain, meeting the stringent Department of Transport requirements.



G 70 Chain Size	Nominal Dimension Inches		WLL (lbs)	Footage	Weight 100 ft	Product Code
	A	B				
<b>Full Drums</b>						
1/4" SL *	0.88	0.43	3,150	800	75	380700163
1/4" RL *	1.24	0.46	3,150	800	73	38070016
5/16"	1.29	0.44	4,700	550	93	38070020
3/8"	1.38	0.55	6,600	400	143	38070024
7/16"	1.64	0.65	9,000	300	207	38070028
1/2"	1.79	0.72	11,300	200	240	38070032
<b>Half Drum</b>						
1/4" SL *	0.88	0.43	3,150	400	75	380700164
1/4" RL *	1.24	0.46	3,150	400	73	380700161
5/16"	1.29	0.44	4,700	275	93	380700201
3/8"	1.38	0.55	6,600	200	143	380700241
7/16"	1.64	0.65	9,000	150	207	380700281
1/2"	1.79	0.72	11,300	100	240	380700321
<b>Pail Pack</b>						
1/4" RL	1.24	0.46	3,150	114	73	380700162
5/16"	1.29	0.44	4,700	92	93	380700202
3/8"	1.38	0.55	6,600	66	143	380700242
1/2"	1.79	0.72	11,300	50	240	380700322



Material                      Boron Manganese Steel.  
 Finish                         Yellow Chromate  
 Elongation                    Min 15 %  
 Design Factor                4 : 1        In accordance with NACM Specifications

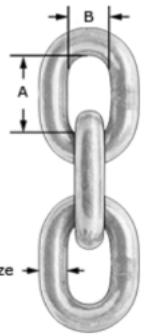
\* SL        Short Link                      \* RL        Regular Link

**WARNING :**        **NEVER EXCEED WORKING LOAD LIMITS!**  
 Do not use Grade 70 chain for overhead lifting applications.



# Grade 80 Alloy Lifting Chain

Produced to exceed the rigorous requirements of overhead lifting. This grade of lifting chain has good strength-to-weight ratio and excellent durability. Meets or exceeds all NACM & ASTM Standards



G 80 Chain Size	Nominal Dimension Inches		WLL (lbs)	Footage	Weight 100 ft	Product Code
	A	B				
<b>Full Drums</b>						
9/32"	0.88	0.41	3,500	800	72	38080016
5/16"	1.02	0.48	4,500	500	106	38080020
3/8"	1.22	0.57	7,100	400	150	38080024
1/2"	1.56	0.75	12,000	200	261	38080032
5/8"	1.93	0.92	18,100	150	361	38080040
3/4"	2.36	1.02	28,300	196	610	38080048
7/8"	2.60	1.13	34,200	164	720	38080056
1"	3.07	1.33	47,700	98	1025	38080100

Material High grade Ni-Cr-Mo Alloy Chain  
 Finish Special Black Epoxy.  
 Elongation Min 20 %  
 Design Factor 4 : 1 In accordance with NACM Specifications

**WARNING: NEVER EXCEED WORKING LOAD LIMITS! LOAD RATINGS ARE FOR CHAINS IN 'NEW CONDITION'! INSPECT LIFTING CHAINS REGULARLY AND REPLACE ALL COMPONENTS SHOWING SIGNS OF WEAR!**

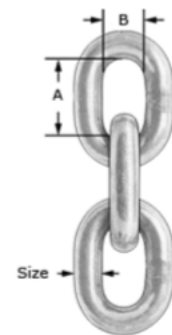


# Grade 100 Alloy Lifting Chain

Produced to exceed the rigorous requirements of overhead lifting.  
 Manufactured from a super high quality alloy steel that allows for 25 % higher working load limit (WLL) than comparable Grade 80 Alloy Chain.



G 100 Chain Size	Nominal Dimension Inches		WLL (lbs)	Footage	Weight 100 ft	Product Code
	A	B				
<b>Full Drums</b>						
9/32"	0.88	0.41	4,300	800	72	38150018
5/16"	1.02	0.48	5,700	500	106	38150020
3/8"	1.22	0.57	8,800	400	150	38150024
1/2"	1.56	0.75	15,000	200	261	38150032
5/8"	1.93	0.92	22,600	150	361	38150040

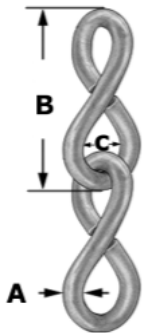


Material	High grade Ni-Cr-Mo Alloy Chain
Finish	Gray Armour
Elongation	Min 20 %
Design Factor	4 : 1 In accordance with NACM Specifications

**WARNING: NEVER EXCEED WORKING LOAD LIMITS!  
 LOAD RATINGS ARE FOR CHAINS IN 'NEW CONDITION'!  
 INSPECT LIFTING CHAINS REGULARLY AND  
 REPLACE ALL COMPONENTS SHOWING SIGNS OF WEAR!**

# Single Jack Chain

A light duty unique chain, in that each link features two eyes 90 ° out of plane to each other. Some uses for this chain are hanging fixtures, children's toys and general utility applications where high strength is not required



Single Jack Chain	Nominal Dimension Inches			WLL (lbs)	Footage	Weight 100 ft	Product Code
	Size	A	B				
<b>Cartons</b>							
# 16	0.063	0.626	0.177	10	100	3	
# 14	0.079	0.787	0.189	16	100	5	
# 12	0.106	0.965	0.217	29	100	9	38305112
# 10	0.134	1.201	0.315	47	100	15	383040101
# 10 T	0.134	1.339	0.315	43	50	13	383050101
# 8	0.157	1.598	0.374	60	100	21	383051081
<b>Reels</b>							
# 16	0.063	0.626	0.177	10	250	3	
# 14	0.079	0.787	0.189	16	200	5	
# 12	0.106	0.965	0.217	29	100	9	38305112
# 10	0.134	1.201	0.315	47	250	15	
# 8	0.157	1.598	0.374	60	1000	21	38305108
# 10 T	0.134	1.339	0.315	43	250	13	383050102

Material: Low Carbon Steel, Not Heat Treated

Finish: Zinc Plated, White polymer, other finishes available on request

**WARNING: DO NOT USE FOR OVERHEAD LIFTING!  
DO NOT EXCEED WORK LOAD LIMIT!**

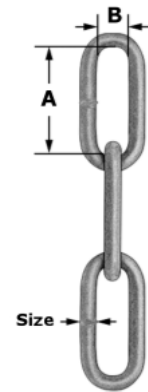
## Grade 30 Long Link Mooring Chain

Mooring chain is a low carbon general purpose chain with a long link design, allowing the hook up of shackles anywhere on the chain, not just the end links.

The long link makes it more flexible and ideally suited for mooring applications.



Mooring Chain	Nominal Dimension Inches		B/S (lbs)	Footage	Weight 100 ft	Product Code
Size	A	B				
<b>Full Drums</b>						
1/2"	3.00	7/8	15,000	100	230	38990032
3/4"	4.15	1-3/16	39,500	100	480	38990048
1"	4.15	2	55,000	100	860	38990100
1-1/8"	4.50	1-3/4	77,000	100	1080	38990108
1-1/4"	5.00	2	91,000	100	1350	38990116



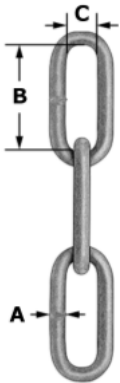
Material	Low Carbon Steel
Finish	Bright or Hot Dip Galvanized
Packing	100 ft. shots 500 ft per pallet

Sold in 100 ft quantities only !

**WARNING :** **NEVER EXCEED WORKING LOAD LIMITS!**  
Do not use Grade 30 or 40 chains for overhead lifting applications.

## Passing Link Chain

Links of chain designed so the chain will not kink or knot.  
Used generally for tie out purposes on livestock.



Passing Chain Size	Nominal Dimension Inches			WLL (lbs)	Footage	Weight 100 ft	Product Code
	A	B	C				
2/0	0.189	0.875	0.470	450	100	32	38250020
4/0	0.210	0.875	0.500	600	100	41	38250040

Material: Low Carbon Steel, Not Heat Treated  
Finish: Zinc Plated.  
Packing: 100 ft cartons

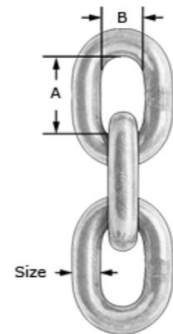
**WARNING: DO NOT USE FOR OVERHEAD LIFTING!  
DO NOT EXCEED WORK LOAD LIMIT!**

## "No-Crack" Security Chain

This chain is manufactured to provide the highest possible security. Triple heat treated chain, made from square bar stock, with short pitch and inverted "V" welds to resist bolt cutters.



Security Chain	Nominal Dimension Inches		WLL (lbs)	Footage	Weight 100 ft	Product Code
	Dia	A				
3/8"	1.500	0.620	3,150	400	170	38400024



Hardness: Surface hardness exceeds Rockwell Hardness 65  
 Finish: Electro Galvanized

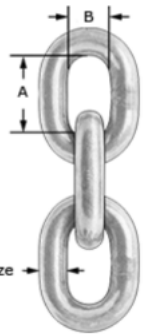
**WARNING: DO NOT USE FOR OVERHEAD LIFTING!**



# T-316 Stainless Steel Chain

A most economic and commonly used chain for industrial and marine application where corrosion is a concern.

Due to particular metallurgical structure of base material it also resists high temperature.



T-316 S.S. Chain	Nominal Dimension Inches		WLL (lbs)	Footage	Weight 100 ft	Product Code
Size	A	B				

### Full Drums

1/8"	0.93	0.28	375	1,000	18	38160008
3/16"	0.94	0.38	930	500	37	38160012
1/4"	1.24	0.47	1,570	400	63	38160016
5/16"	1.26	0.50	2,400	200	93	38160020
3/8"	1.38	0.57	3,550	150	142	38160024
1/2"	1.79	0.72	6,500	100	240	38160032

Material T-316 Stainless Steel  
 Finish Polished

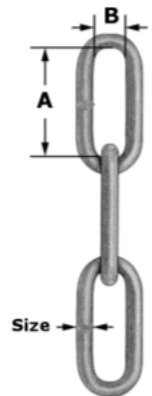
**WARNING: NEVER EXCEED WORKING LOAD LIMITS!  
 DO NOT USE STAINLESS STEEL CHAIN FOR OVERHEAD LIFTING AND WHERE FAILURE MAY CAUSE DAMAGE TO LIFE OR PROPERTY!**

# Studio Chain

Used generally for Hanging Theatrical Lights and Fixtures.  
 The links are elongated allowing a shackle to be used in the middle of the link.



Studio Chain	Nominal Dimension Inches			WLL (lbs)	Footage	Weight 100 ft	Product Code
	A	B	Size				
6/0	1.50	.281	0.46	2,000	100/1000	63	38029960

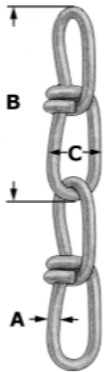


Material: Low Carbon Steel, Not Heat Treated  
 Finish: Self color with rust inhibitor  
 Packing: 100 ft cartons or 1000 ft drums  
 Design Factor 4 : 1 In accordance with NACM Specifications

**WARNING: DO NOT USE FOR OVERHEAD LIFTING!  
 DO NOT EXCEED WORK LOAD LIMIT!**

## Double Loop (Tenso, Lion) Chain

A weldless chain that combines strength, flexibility, light weight and neat appearance. A general utility chain for hardware and manufacturing applications such as playground, gym equipment hanging fixtures, tie out chains, etc.



Tenso Chain	Nominal Dimension Inches			WLL (lbs)	Footage	Weight 100 ft	Product Code
Size	A	B	C				

### Carton

# 4	0.071	1.142	0.197	70	100	6	383000041
# 3	0.079	1.280	0.236	90	100	6	383000031
# 2	0.091	1.969	0.276	115	100	9	383000002
# 1	0.106	1.811	0.295	155	100	10	383000001
1/0	0.118	2.126	0.315	200	100	13	383001001
2/0	0.134	2.480	0.345	255	100	17	383002001
3/0	0.150	2.677	0.433	305	100	20	383003001

### Reel

# 4	0.071	1.142	0.197	70	250	6	383000004
# 3	0.079	1.280	0.236	90	200	6	383000003
# 2	0.091	1.969	0.276	115	200	9	383000002
# 1	0.106	1.811	0.295	155	100	10	383000001
1/0	0.118	2.126	0.315	200	200	13	383001000
2/0	0.134	2.480	0.345	255	175	17	383002000
3/0	0.150	2.677	0.433	305	150	20	383003000
4/0	0.161	2.835	0.512	365	70	25	383004000

Material: Low Carbon Steel, Not Heat Treated

Finish: Zinc Plated, White or Black polymer, other finishes available on request

**WARNING: DO NOT USE FOR OVERHEAD LIFTING!  
DO NOT EXCEED WORK LOAD LIMIT!**



## 18" Chain Tails - Grade 70



Chain Size	Model	Web Width	WLL (lbs)	Product Code
5/16"	S-925	2"	3,335	37054010
5/16"	S-928	3"	5,500	37055000
3/8"	S-926	3"	6,000	37054011
3/8"	S-927	4"	6,600	37054012

Material                      Grade 70 Chain, Alloy Hooks, Forged Alloy Delta Ring  
 Finish                         Yellow Chromate  
 Design Factor                3 : 1

**WARNING:**                Never exceed working load limits  
                                       Do not use grade 70 chains for lifting applications

## Trailer Safety Chain Assembly

Safety Chain is defined as an assembly which provides a secondary means of connection between the rear of the towing vehicle and the front of the trailer (or towed vehicle); it includes link chain and all attaching means, or an alternative system. The purpose of Safety Chain is to retain connection between the towing vehicle and trailer in the event of separation of the trailer coupling from the ball or the ball from the hitch, long enough to bring the vehicles to a stop. It should not be construed that safety chains can ensure that vehicle control or connection will be maintained in the event of vehicle incidents such as loss of control, rollover, jackknife, collision, etc.



Chain Class	Chain Size	Length (ft)	Weight (lbs)	GVW (lbs)	Product Code
3	1/4"	3	2.58	5,000	
3	1/4"	4	3.33	5,000	38061016
3	1/4"	5	3.92	5,000	
3	1/4"	6	4.73	5,000	

### Other lengths and Classes of chain available upon request

Material                      Class III 1/4" Proof Coil Chain  
 Finish                         Zinc Plated  
 " S " Hook                    7/16" Patented Latch kit

Chain can be supplied in bulk or as assemblies.

**WARNING:**                      Never exceed working load limits  
    Do not use for lifting applications

## Grade 70 Tie Down Assemblies

Grade 70 transport chain is designed for use in cargo securement, towing and logging. Supplied with Alloy Grab hooks on each end. Manufactured in accordance to Department of Transport regulations.



Chain Size	Length (ft)	Weight (lbs)	WLL (lbs)	Product Code
5/16"	16	16.00	4,700	38072016
5/16"	20	20.00	4,700	38072020
5/16"	25	25.00	4,700	38072025
3/8"	10	16.00	6,600	38072410
3/8"	12	19.00	6,600	38072412
3/8"	14	22.00	6,600	38072414
3/8"	16	25.00	6,600	38072416
3/8"	20	31.00	6,600	38072420
3/8"	25	38.00	6,600	38072424



Material: Grade 70 Chain, Alloy Hooks  
 Finish: Yellow Chromate  
 Design Factor: 4 : 1 In accordance with NACM Specifications  
**Chain can be supplied in bulk or as tie down assemblies.**

**WARNING:** Never exceed working load limits  
 Do not use grade 70 chains for lifting applications



### General Warnings

All Vanguard rigging products are sold with the express understanding that both the purchaser and the end user are thoroughly familiar with the safe, proper and acceptable applications of the products.

It is the responsibility of the end user to establish proper safety programs and to provide thorough training for all personnel prior to use. The training programs must meet any federal/provincial/state/local code requirements, existing plant/site safety rules and regulations, and all instructions provided in the applicable section of this catalogue.

Product failure can occur due to abuse, misapplication, lack of maintenance, use by unqualified personnel and improper inspection prior to use. **Any failure of rigging products may result in property damage, personal injury and even death!!!!**

### Standards

There are numerous government and industrial standards that cover rigging products. This catalogue makes no attempt to reference all of them; it references to the standards that are most frequently asked about.

### Working Load Limit (WLL) – Safe Working Load (SWL)

The Working Load Limits shown in this catalogue are applicable to products that are new or “in as new” condition. The Working Load Limits ratings refer to the maximum amount of force or load that the rigging product can carry under normal working/environmental conditions. The Working Load Limits and Design Factor can be affected by wear, misuse, overloading, shock loading, side loading, corrosion, deformation, product alteration and other use conditions. Inspection of rigging products prior to use is required to determine whether the product continues to meet the assigned WLL provided in this catalogue, should be used at a reduced rating or removed from service.

**The WLL rating must never be exceeded!!!!**



### General information disclaimer

The contents contained in this publication are for general information only.

Although every effort has been made to assure the accuracy of the information at time of print, persons who use the Catalog should note that ratings, laws, rules, and policies change from time to time and that these changes may alter the information contained in this publication.

Vanguard Steel Ltd. assumes no liability for Catalog errors or omissions.

It is the responsibility of each person who uses this Catalog to ascertain current information that pertains to the individual lifting program, particularly with regard to satisfactory safety compliance requirements. Check your Provincial and Local safety standards before any operation or lift is attempted.

It is the responsibility of the person/operator to frequently search for updated reference information.

Do not use lesser than matching Grade components for any lifting application !

Do not use Slings, Chains or Accessories with signs of wear or deformation !

Inspections - Each day before being used, the sling and all fastenings and attachments shall be inspected for damage or defects by a competent person designated by the employer. Additional inspections shall be performed during sling use where service conditions warrant. Damaged or defective slings shall be immediately removed from service.