



CARGO CONTROL

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VANGUARD STEEL LTD.

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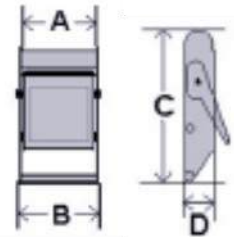
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Cam Buckles

For easy and quick tying down of loads



Cam Buckle		Nominal Dimension Inches				Product Code
WLL (lbs)		A	B	C	D	
230		1.00	1.28	1.95	0.60	37015000
660		2.13	2.40	3.07	0.94	37015001
200		1.00	1.18	1.73	0.47	37015002



Sturdy Construction for additional tension on straps
 Die-cast, solid construction
 Large model with steel base
 For 1" and 2" wide straps
 Design Factor 3 : 1

WARNING: Do not use straps that are cut, frayed or otherwise damaged
 Protect straps from sharp corners or edges with corner protectors
 The total mass/weight of the load shall not exceed the aggregate working load limit of all tie-downs
 Keep cam buckles clean and lubricated



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	17.00	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

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



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-328	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

Corner Protectors

Protects cargo when using chain or webbing to secure your load.



**Chain
Metal protector**

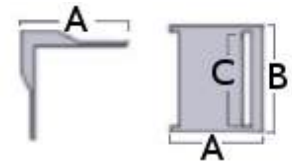


**Web
Metal protector**



**Web
Plastic protector**

Type	Size	Nominal Dimension Inches			Product Code
		A	B	C	
Plastic Corner Protector	2-4"	4.3	5.3	4.1	37030048
Chain Corner Protector	2"	4.7	5.9		37030040
Steel Webbing Protector	3"	4.3	6.5		37030043
Steel Webbing Protector	4"	4.3	7.5		37030045



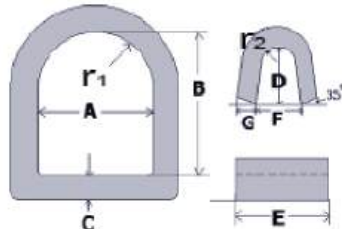
WARNING: Do not use plastic corners for chains
Make sure that webbing or chains slide properly over corner protectors

D-Rings with Weld-on Hinges

These D-Rings make an excellent anchor for winching, tie downs and blocking. They are drop forged and come with a U-shaped mounting bracket which must be welded in place. Great for recovery points on a custom bumper or securing loads on a trailer.



Size	Nominal Dimension Inches									WLL (lbs)	Product Code
Inches	A	B	C	D	E	F	G	r ¹	r ²		
3 x 3 x 5/8	3.000	3.000	0.625	0.875	2.500	1.000	0.375	1.500	0.375	6,000	37050015
3 x 4 x 1	3.000	4.000	1.000	1.325	2.562	1.312	0.500	1.500	0.562	12,000	37050014



Material	Drop forged carbon steel, quenched and tempered
Finish	Self colored, ready to be welded on truck body Hinges are beveled 35 ° for proper weld penetration
Design Factor	3 : 1
Welding	For best welding results use BONARC E 7018 coated electrodes or BONARC ER 70 S 6 welding Wire

WARNING: Weld fillet on hinges must be over the entire length of the hinge (dim. "E") with a minimum penetration on the truck frame of 1/8"
Before welding, make sure that all contaminants like rust, oil, paint, galvanization are removed from welding area
WORKING LOAD LIMITS ARE FOR STRAIGHT IN-LINE PULLS ONLY

2" Lashing Winches

Sturdy construction winches provide a method for securing cargo on flatbed trailers, rail cars and other vehicles.

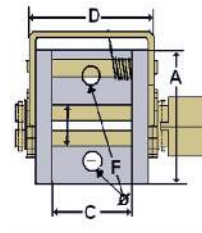
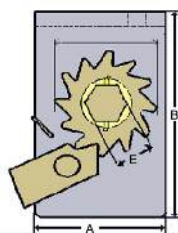
Lashing winches, for use with 2" webbing can be welded or bolted onto a trailer.

Winch design offers similar features of a ratchet buckle with its quick release.

Hex drive style requires a 1-1/8" hex head wrench or socket.



Type	WLL (lbs)	Nominal Dimension Inches							Product Code
		A	B	C	D	E	F	Weight (lbs)	
Hex Key	3,660	3.000	4.00	2.187	3.250	1.062	0.500	3.55	37051000



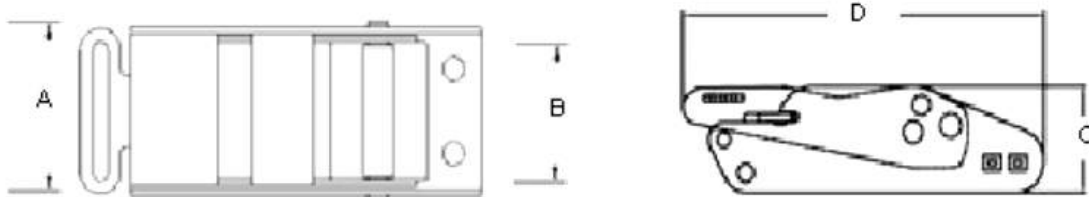
WARNING: Make sure that webbing is inserted min 4" into slot on mandrel and wrapped 2 - 3 times around mandrel before tightening.
 Do not use extensions with winch bars
 Do not release winch bars without prior checking that ratchet pawls are properly engaged.
 Hold winch bars tightly to avoid bars from slipping out of your hands
 Excessive webbing on winches reduces working load limits

Over Centre Buckles

For tightening and tensioning straps



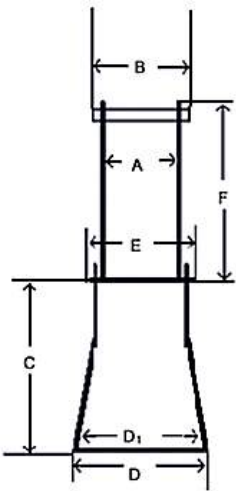
Overcentre Buckle Type	WLL (lbs)	Nominal Dimension Inches				Product Code
		A	B	C	D	
GOLD DYE-CHROMATED	1,860	2.44	2.00	1.00	5.51	37014020
STAINLESS STEEL	1,100	2.36	2.00	.88	6.14	37014050



- Sturdy Construction for additional tension on straps
- Gold Dye-chromate finish or chrome-nickel stainless steel
- Low wear to straps
- Positive locking features
- Design Factor 3 : 1

WARNING: Do not use straps that are cut, frayed or otherwise damaged
 Protect straps from sharp corners or edges with corner protectors
 Keep overcentre buckles clean and lubricated

Ratchet Buckles



R. Buckle WLL (lbs)	Nominal Dimension Inches							Product Code
	A	B	C	D	D 1	E	F	
1,000	1.18	1.85	3.66	2.36	2.20	2.24	3.27	37011003
3,660	2.05	2.95	5.51	3.03	2.68	3.66	4.56	37012004
3,660	2.05	2.95	6.69	4.02	3.66	3.66	4.53	37012006
3,660	2.05	2.95	7.68	4.02	3.66	3.66	4.53	37012011
7,300	3.03	4.88	11.42	4.57	4.13	5.47	7.09	37013001

- Sturdy Construction
- Different handle widths and lengths
- Gold Dye-chromate finish
- Design Factor 3 : 1

WARNING: Make sure that webbing is wrapped 2-3 times around reel before tightening
 Do not use handle extensions or extension bars
 Do not use straps that are cut, frayed or otherwise damaged
 Protect straps from sharp corners or edges with corner protectors
 The total mass/weight of the load shall not exceed the aggregate working load limit of all tie-downs



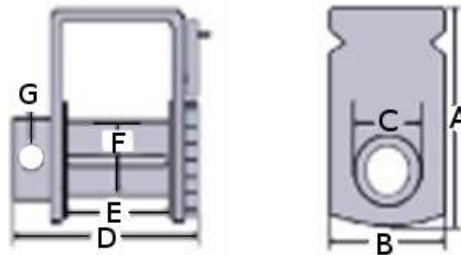
Standard Sliding Winches

Sturdy construction winches provide a method for securing cargo on flatbed trailers, rail cars and other vehicles.

All sliding winches can also be welded in place for fixed application.



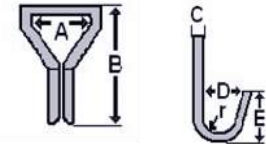
Type	WLL (lbs)	Nominal Dimension Inches							Product Code
		A	B	C	D	E	F	G	
Standard with flange	6,000	6.750	3.92	2.250	7.75	4.300	1.900	.930	37051020
Standard without flange	6,000	6.750	4.00	2.500	8.250	4.500	1.750	1.000	37051021
Standard with flange and handle	6,000	6.750	4.00	2.500	8.250	4.500	1.750	1.000	37051063
Standard with handle no flange	6,000	6.750	4.00	2.500	8.250	4.500	1.750	1.000	37051065



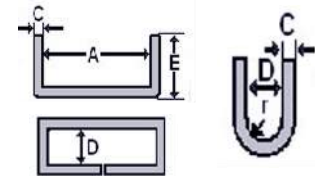
WARNING: Make sure that webbing is inserted min 12" into slot on mandrel and wrapped 2 - 3 times around mandrel before tightening.
 Do not use extensions with winch bars
 Do not release winch bars without prior checking that ratchet pawls are properly engaged.
 Hold winch bars tightly to avoid bars from slipping out of your hands
 Excessive webbing on winches reduces working load limits

Strap Hooks

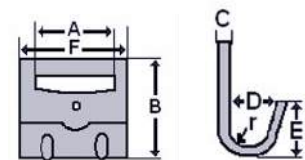
A variety of yellow chromate hooks for webbing



Type	Size	WLL (lbs)	Nominal Dimension Inches						Product Code
			A	B	C	D	E	F	
Narrow Wire Hook	1	800	1.062	2.375	0.250	1.000	1.250		37030006
Narrow Wire Hook	2	1,660	2.000	3.250	0.312	1.062	1.312		37030009
Narrow Wire Hook	2	3,350	2.000	3.250	0.500	1.187	1.312		37030008



Closed Hook	2	2250	1.000	0.375	0.940				37030203
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Flat Hook	2	3,335	1.75	3.50	0.187	0.450	0.875	2.250	37030015
Flat Hook	3	5,000	2.75	3.88	0.187	0.780	1.750	3.625	37030005

WARNING: Do not use straps that are cut, frayed or otherwise damaged
 Protect straps from sharp corners or edges with corner protectors
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WORKING LOAD LIMITS ARE FOR STRAIGHT LINE PULLS ONLY


Tarp Straps with Galvanized S-Hooks

Tarp straps, also known as "tarp tie-downs", are an important tool in helping to keep cargo and tarps in place. They are ideal for use on the tarps used to cover vehicles, machinery, boats, and truck loads.



Type	Nominal Dimension Inches		Product Code
	Length	Max. Stretch	
100 % Natural Rubber			
Black	4	6	37080004
Black	9	14	37080009
Black	15	23	37080015
Black	21	32	37080021
Black	31	47	37080031
Black	41	62	37080041
EDPM			
Arctic Blue	9	14	37081009
Arctic Blue	15	23	37081015
Arctic Blue	21	32	37081021
Arctic Blue	31	47	37081031



- Material** Branded  straps available in either 100 % natural rubber or synthetic EDPM
Supplied with S hooks attached.
- Design** UV and Ozone inhibitors for better resistance to cracking
For conditions with extreme atmospheric Ozone levels (high pollution in
temperatures between -2 to +3 we recommend EDPM straps with increased
resistance against corrosion.
- Stretch** 150 % of nominal length

WARNING: Tying tarp straps over sharp edges shortens the service life
Do not tie knots in tarp straps
Do not extend over safe stretch (150 %)
Inspect straps frequently, replace cracked straps

Trailer Safety Chains

Safety Chains are 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 Chains 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 vehicle 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.

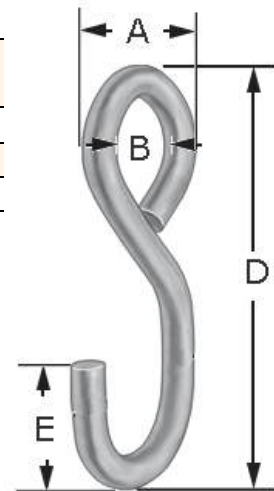
WARNING: Never exceed working load limits
 Do not use for lifting applications

Vinyl Covered Hooks

Strong S-Hooks, covered with black vinyl, for use where hooks are touching delicate surfaces.



Type	WLL (lbs)	Nominal Dimension Inches				Product Code
		A	B	D	E	
1" S-Hook	800	1.062	2.375	1.000	1.250	37030019
2" S-Hook	1,800	2.000	3.250	1.062	1.312	37030017



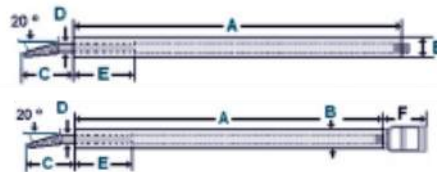
WARNING: Do not use straps that are cut, frayed or otherwise damaged
 Protect straps from sharp corners or edges with corner protectors
 The total mass/weight of the load shall not exceed the aggregate working load limit of all tie-owns
WORKING LOAD LIMITS ARE FOR STRAIGHT IN-LINE PULLS ONLY

Winch Bars

Winch bars are used to tighten and secure winch straps in winches. Non-slip handle and tapered tip for better grip. Combination winch bars have a boxed end for tightening winch straps and lever style chain binders.



Type	Nominal Dimension Inches							Weight (lbs)	Product Code
	A	B	C	D	E	F			
Standard Black	35.00	1.30	3.70	0.98	8.5		4.0	37030060	
Combination Bar Chrome	42.00	1.30	3.70	0.98	8.5		4.5	37030061	
Combination Bar Black	42.00	1.30	3.70	0.98	8.5	4.75	4.5	37030062	



WARNING: Always hold winch bars firmly when tightening or loosening straps
 Before removing winch bars ensure that the ratchet pawl is fully engaged
 Do not use extensions with winch bars
 When tightening or loosening straps make sure that the nose of winch bar is fully inserted into holes of winch drums.
 Keep bystanders in safe distance when tightening or loosening straps.



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.