



PRO SLING & SAFETY INC.

Procraft Rigging Products

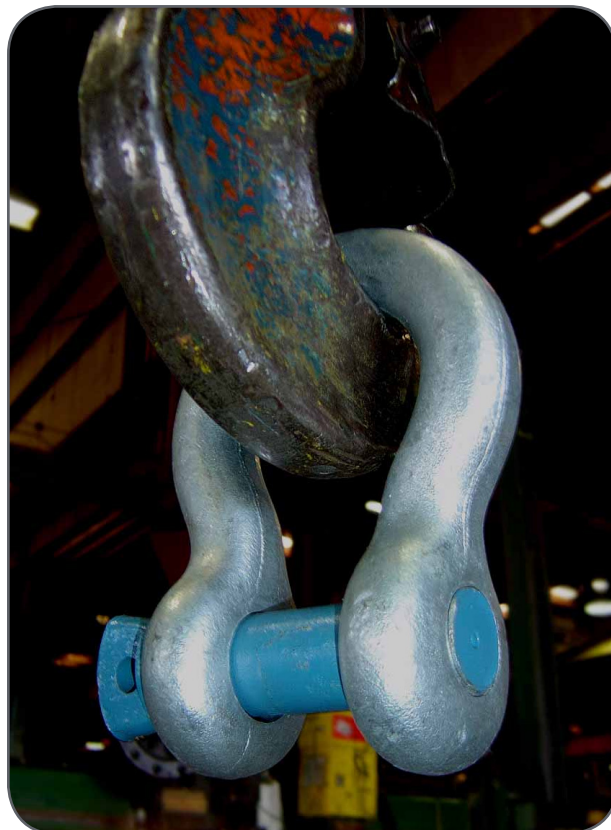


**PRO SLING &
SAFETY INC.**

Lift with Experience

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GALVANIZED LOAD RATED SHACKLES are used extensively for lifting in static environments as removable links to connect all types of slings to fittings and attachments.

Shackle Types

Anchor type shackles are generally used on multi-leg systems or where more space at the top is required. Chain Shackles are generally used on single leg assemblies only. However, in most circumstances chain and anchor shackles are interchangeable. Screw Pin Shackles should be used in applications where they need to be connected and disconnected frequently. However, **NEVER** use them in long term or permanent applications, or where there is a chance that the load may rotate the pin. Please use Bolt Type (Safety) Shackles in these types of applications. Procraft shackles are hot dipped galvanized and meet or exceeds US Fed Spec RR-C-271 Type IVA Class 2 Grade A and ASTM B30.26. Working Load Limits (WLL) are marked on all shackles, and the factor of safety is 6:1. The WLL marked on shackles is for in line loading, angular loading should be avoided wherever possible. Manufacturers traceability code is forged on the pin and body for easy identification.

Rigging Practices

When installing screw pin shackles make sure that the pin is fully engaged and the collar makes contact with the shackle body, a wrench or screw driver can be used to lock the pin. If you are using a safety pin shackle make sure the nut is secured and the cotter pin is in good condition and inserted correctly. Check that the pin has penetrated the entire length of the threaded eye, if it does not remove from service as you may have a bent pin or incorrect pin for the shackles. When using screw pin shackles for an extended time the pin should be moused or secured to the body of the shackle, this will prevent the pin from backing out.

Make sure that you have selected the correct shackle for your application and that the shackle's working load limit will not be exceeded. Contact with any sharp edges should be avoided. The load applied to the shackle should be centered in the bow of the shackle to prevent side loading. If side loading is to occur the following reductions should be considered:

- 0 Deg - 100% of marked working load limit
- 45 Deg - 30% reduction on marked working load limit
- 90 Deg - 50% reduction on marked working load limit
- Over 90 Deg is not recommended

Multiple leg slings should never be applied to the shackle pin, place the shackle pin in the hook. When shackles are used with multi leg slings the angle should never exceed 120 deg included angle, and consideration should also be given to the effect of the angle between the legs. As the horizontal angle decreases so does the load on the sling leg and shackle.

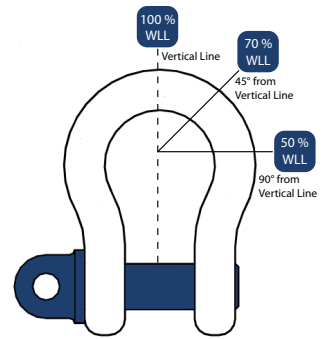
When a shackle is used in a choke hitch, the pin must be secured in the choking eye of the sling. Packing can be placed in shackle pins to make sure the hook is centered. Do not weld any material to the pin or body of the shackle.

Shock loading should always be avoided.

Inspection Before Use

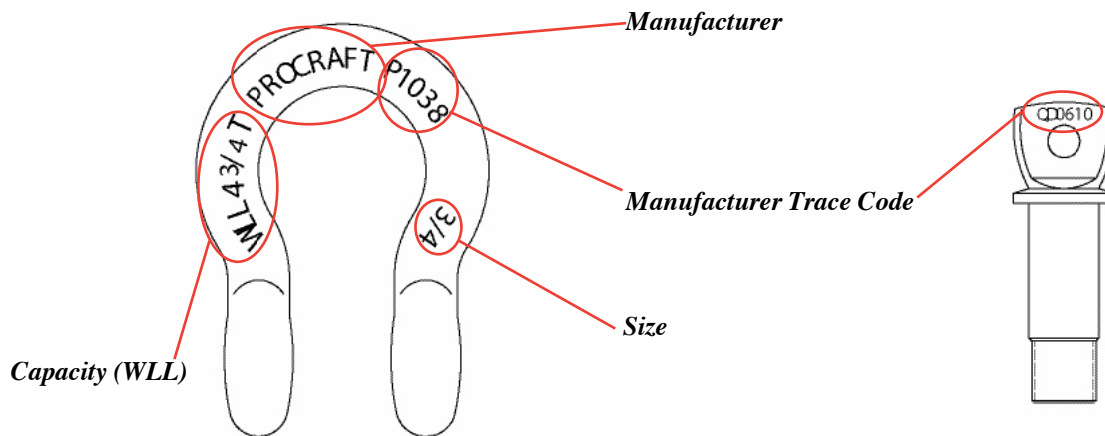
As with all lifting equipment, shackles should be inspected before being used each day. Begin your visual inspection of the shackle by checking for a clearly marked working load limit. If you can not determine the working load limit remove shackle from service. Check the body for wear, cracks, nicks and gouges especially in the bowl of the shackle and the pins. A reduction of 10% on the original or catalogue dimensions, at any point around the body or pin, is reason for retirement of the shackle. Make sure the shackle pin and body are compatible and are from the same manufacturer. **NEVER** use a shackle with a pin that has been replaced by a nut and bolt. Check the shackle pin thread for wear or damage. Make sure it fits correctly and snugly into the shackle body. Check that the shackle has not opened up between the ears, and the shackle is not bent or twisted. If the shackle pin is not seating properly due to this, remove shackle immediately from service.

Evidence of heat damage including weld splatter or arc strike, and unauthorized welding of shackle is reason for removal from service.



Never Exceed Working Load Limit. It is the users responsibility to determine the suitability of the equipment for its intended use. Incorrect use of shackles can cause death, serious injury, or property damage.

Procraft load rated shackles are hot dipped galvanized and meet or exceed US Fed Spec RR-C-271 Type IVA Class 2 Grade A. Working Load Limits (WLL), diameter and traceability code are forged on all Procraft load rated shackles as per ASME Standard B30.9. Load rated shackles are available as an Anchor (Bow) or Chain (Dee) type shackle, and are available with either a Screw Pin or Bolt Type (Safety) with nut and cotter pin. Look for the 'Blue Pin' which identifies Procraft's quality and reliability.



Procraft Screw Pin Load Rated Anchor Shackle

Load Rated Screw Pin Anchor (SPA) Shackles are hot dipped galvanized and meet or exceeds US Fed Spec RR-C-271 Type IVA Class 2 Grade A. The screw pin is the most common type of shackle due to its ease of installation, DO NOT use screw pin shackles or fit pins in contact with moving parts if the pin can roll and unscrew.



Stock Code	Size Inches	Working Load Limit Tons	Pin Diameter	Inside Length	Inside Width @ Pin	Weight per Piece Pounds
50LSP-G06	3/16	1/3	1/4	7/8	3/8	0.06
50LSP-G08	1/4	1/2	5/16	1 1/8	15/32	0.10
50LSP-G10	5/16	3/4	3/8	1 7/32	17/32	0.19
50LSP-G12	3/8	1	7/16	1 7/16	21/32	0.31
50LSP-G14	7/16	1-1/2	1/2	1 11/16	3/4	0.38
50LSP-G16	1/2	2	5/8	1 7/8	13/16	0.72
50LSP-G20	5/8	3-1/4	3/4	2 3/8	1 1/16	1.37
50LSP-G24	3/4	4-3/4	7/8	2 13/16	1 1/4	2.35
50LSP-G28	7/8	6-1/2	1	3 5/16	1 7/16	3.62
50LSP-G32	1	8-1/2	1 1/8	3 3/4	1 11/16	5.03
50LSP-G36	1 1/8	9-1/2	1 1/4	4 1/4	1 13/16	7.41
50LSP-G40	1 1/4	12	1 3/8	4 11/16	2 1/32	9.5
50LSP-G44	1 3/8	13-1/2	1 1/2	5 1/4	2 1/4	13.53
50LSP-G48	1 1/2	17	1 5/8	5 3/4	2 3/8	17.20
50LSP-G56	1 3/4	25	2	7	2 25/32	27.78
50LSP-G64	2	35	2 1/4	7 3/4	3 1/4	45.00
50LSP-G80	2 1/2	55	2 3/4	10 1/2	4 1/8	94.00
50LSP-G96	3	85	3 1/4	13	5	145.00



Procraft Bolt Type (Safety) Anchor Shackle

Load Rated Screw Pin Anchor (SBA) Shackles are hot dipped galvanized and meet or exceeds US Fed Spec RR-C-271 Type IVA Class 2 Grade A. Bolt type shackles are perfect for permanent or semi-permanent installations.



Stock Code	Size Inches	Working Load Limit Tons	Pin Diameter	Inside Length	Inside Width @ Pin	Weight per Piece Pounds
50LSA-G16	1/2	2	5/8	1 7/8	13/16	0.79
50LSA-G20	5/8	3-1/4	3/4	2 3/8	1 1/16	1.68
50LSA-G24	3/4	4-3/4	7/8	2 13/16	1 1/4	2.72
50LSA-G28	7/8	6-1/2	1	3 5/16	1 7/16	3.95
50LSA-G32	1	8-1/2	1 1/8	3 3/4	1 11/16	5.66
50LSA-G36	1 1/8	9-1/2	1 1/4	4 1/4	1 13/16	8.27
50LSA-G40	1 1/4	12	1 3/8	4 11/16	2 1/32	11.71
50LSA-G44	1 3/8	13-1/2	1 1/2	5 1/4	2 1/4	15.83
50LSA-G48	1 1/2	17	1 5/8	5 3/4	2 3/8	20.80
50LSA-G56	1 3/4	25	2	7	2 25/32	33.91
50LSA-G64	2	35	2 1/4	7 3/4	3 1/4	55.25
50LSA-G80	2 1/2	55	2 3/4	10 1/2	4 3/16	98.25
50LSA-G96	3	85	3 1/4	12 3/4	5	154.00

Procraft Screw Pin Chain Shackle

Load Rated Screw Pin Chain (SPC) Shackles are hot dipped galvanized and meet or exceeds US Fed Spec RR-C-271 Type IVA Class 2 Grade A. The screw pin is the most common type of shackle due to its ease of installation, DO NOT use screw pin shackles or fit pins in contact with moving parts if the pin can roll and unscrew.



Stock Code	Size Inches	Working Load Limit Tons	Pin Diameter	Inside Length	Inside Width @ Pin	Weight per Piece Pounds
51LSP-G08	1/4	1/2	5/16	7/8	15/32	0.11
51LSP-G10	5/16	3/4	3/8	1 1/32	17/32	0.17
51LSP-G12	3/8	1	7/16	1 1/4	21/32	0.28
51LSP-G14	7/16	1-1/2	1/2	1 7/16	3/4	0.43
51LSP-G16	1/2	2	5/8	1 5/8	13/16	0.60
51LSP-G20	5/8	3-1/4	3/4	2	1 1/16	1.25
51LSP-G24	3/4	4-3/4	7/8	2 3/8	1 1/4	2.63
51LSP-G28	7/8	6-1/2	1	2 13/16	1 7/16	3.16
51LSP-G32	1	8-1/2	1 1/8	3 3/16	1 11/16	4.75
51LSP-G36	1 1/8	9-1/2	1 1/4	3 37/64	1 13/16	6.75
51LSP-G40	1 1/4	12	1 3/8	3 15/16	2 1/32	9.06
51LSP-G44	1 3/8	13-1/2	1 1/2	4 3/8	2 1/4	11.63



Never Exceed Working Load Limit. It is the users responsibility to determine the suitability of the equipment for its intended use. Incorrect use of shackles can cause death, serious injury, or property damage.

Procraft Non-Rated Anchor Shackle

Non-Rated Shackles are generally used in conjunction with chain, wire rope and cordage in non-load bearing applications such as guying, anchoring and mooring. These shackles are non-load rated and **SHOULD NOT** be used in any load bearing or lifting applications!



Stock Code	Size Inches	Grade of Steel	Inside Length	Inside Width @ Pin	Weight per Piece Pounds
50SP-G08	1/4	C-1015	1 1/8	1/2	0.09
50SP-G10	5/16	C-1015	1 7/32	17/32	0.11
50SP-G12	3/8	C-1015	1 7/16	21/32	0.27
50SP-G14	7/16	C-1015	1 11/16	23/32	0.42
50SP-G16	1/2	C-1015	1 7/8	13/16	0.44
50SP-G20	5/8	C-1015	2 3/8	1 1/16	1.32
50SP-G24	3/4	C-1015	2 13/16	1 1/4	1.92
50SP-G28	7/8	C-1015	3 5/16	1 7/16	3.08
50SP-G32	1	C-1015	3 3/4	1 11/16	4.40

Procraft Non-Rated Chain Shackle

Non-Rated Shackles are generally used in conjunction with chain, wire rope and cordage in non-load bearing applications such as guying, anchoring and mooring. These shackles are non-load rated and **SHOULD NOT** be used in any load bearing or lifting applications!



Stock Code	Size Inches	Grade of Steel	Inside Length	Inside Width @ Pin	Weight per Piece Pounds
51SP-G08	1/4	C-1015	7/8	1/2	0.09
51SP-G10	5/16	C-1015	1	17/32	0.11
51SP-G12	3/8	C-1015	1 3/16	21/32	0.27
51SP-G14	7/16	C-1015	1 27/32	23/32	0.42
51SP-G16	1/2	C-1015	1 5/8	13/16	0.44
51SP-G20	5/8	C-1015	2	1 1/16	1.32
51SP-G24	3/4	C-1015	2 3/8	1 1/4	1.90

Procraft Non-Rated Trawl Shackle

Trawl Shackles are used extensively in the fishing industry. The square head is used for ease of installation and the thin head avoids getting caught on netting and gear. These shackles are non-load rated and **SHOULD NOT** be used in any load bearing or lifting applications!



Stock Code	Size Inches	Weight per Piece Pounds
51TRL-S12	3/8	0.26
51TRL-S16	1/2	0.49



Procraft Non-Rated Stainless Steel Anchor Shackle

Stainless Steel Shackles are manufactured from grade 316 stainless steel. They are generally used in corrosive environments in conjunction with chain, wire rope and cordage as part of non-load bearing applications such as railings, mooring and anchoring. These shackles are non-load rated and **SHOULD NOT** be used in any load bearing or lifting applications!



Stock Code	Size Inches	Grade of Stainless	Inside Length	Inside Width @ Pin	Weight per Piece Pounds
50LSP-SS08	1/4	Type 316	1 1/16	1/2	0.10
50LSP-SS10	5/16	Type 316	1 5/16	9/16	0.19
50LSP-SS12	3/8	Type 316	1 7/16	5/8	0.31
50LSP-SS16	1/2	Type 316	1 13/16	7/8	0.72
50LSP-SS20	5/8	Type 316	2 5/16	1 1/16	1.37
50LSP-SS24	3/4	Type 316	2 7/8	1 3/16	2.35
50LSP-SS32	1	Type 316	3 3/4	1 5/8	5.00

Procraft Non-Rated Stainless Steel Chain Shackle

Stainless Steel Shackles are manufactured from grade 316 stainless steel. They are generally used in corrosive environments in conjunction with chain, wire rope and cordage as part of non-load bearing applications such as railings, mooring and anchoring. These shackles are non-load rated and **SHOULD NOT** be used in any load bearing or lifting applications!



Stock Code	Size Inches	Grade of Stainless	Inside Length	Inside Width @ Pin	Weight per Piece Pounds
51LSP-SS08	1/4	Type 316	7/8	15/32	0.10
51LSP-SS10	5/16	Type 316	1	1/2	0.16
51LSP-SS12	3/8	Type 316	1 1/4	5/8	0.24
51LSP-SS16	1/2	Type 316	1 5/8	13/16	0.40
51LSP-SS20	5/8	Type 316	1 15/16	1 1/16	1.00
51LSP-SS24	3/4	Type 316	2 5/16	1 3/16	2.05
51LSP-SS32	1	Type 316	3 1/4	1 9/16	4.12



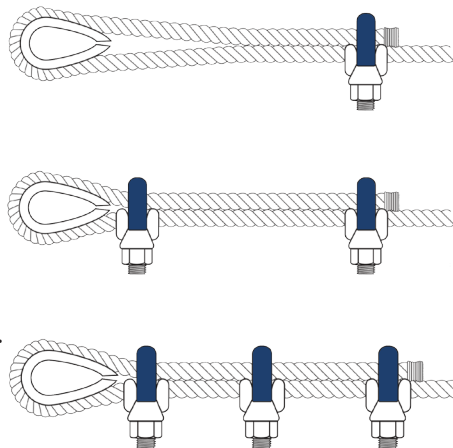
This product is not designed for load carrying purposes. Do not use in load carrying, overhead lifting or load bearing application where disengagement could result in death, serious injury or property damage.

DROP FORGED WIRE ROPE CLIPS are useful for field installation of eyes in wire rope. With correct installation using a torque wrench, this type of termination can create 80% efficiency when used with 6 x 19 / 6 x 36 class wire rope.

It is important that installation instructions are followed carefully and the table below outlining minimum clips to be used and torque to be applied **is strictly adhered to**.

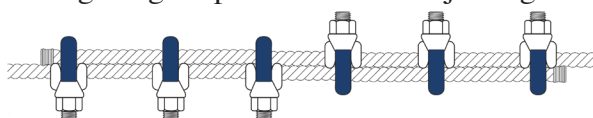
Installation

1. Turn back specified amount of rope (see table) from thimble or loop. Apply first clip one base width from dead end of rope. Apply U-bolt over dead end of wire rope - live end rests in saddle (Never saddle a dead horse!). Tighten nuts evenly, alternating from one nut to the other until reaching the recommended torque.
2. Apply the second clip as near the loop or thimble as possible. Tighten nuts evenly, alternating until reaching the recommended torque. When more than two clips are required, apply the second clip as near the loop or thimble as possible, turn nuts on second clip firmly, but do not tighten. Proceed to Step 3.
3. When three or more clips are required, space additional clips between first two - take up rope slack - tighten nuts on all clips, alternating from one nut to the other until reaching the recommended torque.
4. Apply an initial load equal to or greater than the loads expected in use. Inspect for proper spacing and re-tighten the nuts to the recommended torque.



Maintenance & Use

Wire Rope clips should be inspected frequently to make sure there is no wire rope slippage, indication of wire rope damage, improperly installed clips, loose or improperly tightened nuts and any signs of fatigue, wear or corrosion on the clip. Periodical re-tightening of nuts to torque values may be required. Wire rope clips should not come into contact with any loads or obstruction during lifts or when installed in static environments. Shock loading should be avoided at all times and using wire rope clips for lifting slings is prohibited. When joining two wire ropes with wire rope clips they must be installed as per diagram opposite. **NEVER** use wire rope clips with plastic coated wire rope.



Procraft Drop Forged Stainless Steel Wire Rope Clips

Stainless Steel Drop Forged Clips are manufactured from grade 304 Stainless material. They are generally used in corrosive or harsh environments, and are easily installed to form eyes in wire rope.



Stock Code	Size Inches	Minimum Clips per Eye	Amount of Rope to Turn Back Inches	Torque in Foot-Pounds	Weight per Piece Pounds
22SS-04	1/8	2	3 1/4	4.5	0.06
22SS-06	3/16	2	3 3/4	7.5	0.09
22SS-08	1/4	2	4 3/4	15	0.18
22SS-10	5/16	2	5 1/4	30	0.31
22SS-12	3/8	2	6 1/2	45	0.43
22SS-16	1/2	3	11 1/2	65	0.76
22SS-20	5/8	3	12	95	1.01
22SS-24	3/4	4	18	130	1.52



Procraft Drop Forged Wire Rope Clips

Drop forged wire rope clips are used for heavy duty applications or where loading conditions are severe. Precision manufactured and galvanized to meet Federal Specifications FF-C-450, Type 1, Class 1. The base is drop forged and hot dipped galvanized for the toughest conditions. Please see installation instructions on page 8.



Stock Code	Size Inches	Minimum Clips Per Eye	Amount of Rope to Turn Back Inches	Torque in Foot-Pounds	Weight per Piece Pounds
22FG-04	1/8	2	3 1/4	4.5	0.06
22FG-06	3/16	2	3 3/4	7.5	0.10
22FG-08	1/4	2	4 3/4	15	0.19
22FG-10	5/16	2	5 1/4	30	0.28
22FG-12	3/8	2	6 1/2	45	0.48
22FG-16	1/2	3	11 1/2	65	0.80
22FG-18	9/16	3	12	95	1.09
22FG-20	5/8	3	12	95	1.10
22FG-24	3/4	4	18	130	1.42
22FG-28	7/8	4	19	225	2.12
22FG-32	1	5	26	225	2.52
22FG-36	1 1/8	6	34	225	2.83
22FG-40	1 1/4	7	44	360	4.38
22FG-44	1 3/8	7	44	360	4.42
22FG-48	1 1/2	8	54	360	5.44
22FG-56	1 3/4	8	61	590	9.34
22FG-64	2	8	71	750	13.00

Procraft Malleable Wire Rope Clips

Malleable Clips are used in very light rigging applications where strength is not required. **DO NOT** use these clips for lifting, hoisting or any critical load carrying applications.



Stock Code	Size Inches	Weight per Piece Pounds
22MG-02	1/16	0.03
22MG-04	1/8	0.04
22MG-06	3/16	0.03
22MG-08	1/4	0.12
22MG-10	5/16	0.14
22MG-12	3/8	0.21
22MG-14	7/16	0.27
22MG-16	1/2	0.35
22MG-20	5/8	0.58
22MG-24	3/4	0.84
22MG-28	7/8	1.24
22MG-32	1	1.50



Malleable Clips are not designed for load carrying purposes. Do not use in load carrying, overhead lifting or any application where disengagement could result in death, serious injury or property damage.

THIMBLES are designed and manufactured to protect wire rope from wear and damage, and preserve the shape of the eye when using shackles and hooks. Always ensure that you have the correct thimble for the size of rope being used, for any intermediate size the next size must be used. Thimbles are not load rated and only serve to protect the rope. Always inspect thimbles for abuse, damage, cracks and deformation (stretch) before use. Thimbles can be used for wire or synthetic rope.

Procraft Galvanized Heavy Duty Thimbles

Heavy duty thimbles should be used for any lifting or load bearing applications. These heavy duty thimbles are galvanized and ideal for use in wire rope slings, winch lines and other wire or synthetic rope terminations.



Stock Code	Size Inches	Maximum Inside Diameter Inches	Weight per Piece Pounds
76HD-G08	1/4	11/16	0.07
76HD-G10	5/16	13/16	0.14
76HD-G12	3/8	15/16	0.25
76HD-G14	7/16	1	0.35
76HD-G16	1/2	1 1/8	0.51
76HD-G20	5/8	1 3/8	0.76
76HD-G24	3/4	1 5/8	1.47
76HD-G28	7/8	1 7/8	1.78
76HD-G32	1	2 1/2	3.00
76HD-G3640	1 1/8 to 1 1/4	2 3/4	3.80
76HD-G4044	1 1/4 to 1 3/8	3 1/2	8.60
76HD-G4448	1 3/8 to 1 1/2	3 1/2	12.94
76HD-G56	1 3/4	4 1/2	17.75
76HD-G64	2	6	27.75

Procraft Stainless Steel Heavy Duty Thimbles

Heavy duty thimbles should be used for any lifting or load bearing applications. These heavy duty thimbles are stainless steel and ideal for use in wire rope slings, winch lines and other wire or synthetic rope terminations. The Stainless Steel finish make them ideal for many marine applications.



Stock Code	Size Inches	Maximum Inside Diameter Inches	Weight per Piece Pounds
76SS-HD08	1/4	11/16	0.08
76SS-HD10	5/16	13/16	0.14
76SS-HD12	3/8	15/16	0.26
76SS-HD16	1/2	1 1/8	0.53
76SS-HD20	5/8	1 3/8	0.70
76SS-HD24	3/4	1 5/8	1.25
76SS-HD28	7/8	1 7/8	1.50
76SS-HD32	1	2 1/2	2.50



Procraft Zinc Plated Light Duty Thimbles

Light duty thimbles are used in light rigging applications where the thimble is not exposed to heavy loads. These thimbles will stretch and deform if subject to heavy loading.



Stock Code	Size Inches	Maximum Inside Diameter Inches	Weight per Piece Pounds
76ST-G04	1/8	11/16	0.04
76ST-G06	3/16	11/16	0.04
76ST-G08	1/4	11/16	0.04
76ST-G10	5/16	13/16	0.05
76ST-G12	3/8	15/16	0.08
76ST-G16	1/2	1	0.14
76ST-G20	5/8	1 1/4	0.36
76ST-G24	3/4	1 1/2	0.50
76ST-G28	7/8	1 3/4	0.90
76ST-G32	1	2 3/8	1.04

Procraft Stainless Steel Light Duty Thimbles

Light duty thimbles are used in light rigging applications where the thimble is not exposed to heavy loads. These thimbles will stretch and deform if subject to heavy loading. The Stainless Steel finish make them ideal for many marine applications.



Stock Code	Size Inches	Maximum Inside Diameter Inches	Weight per Piece Pounds
76SS-02	3/64, 1/16, 5/64	3/8	0.01
76SS-04	3/32, 1/8, 7/64	3/8	0.02
76SS-05	5/32	7/16	0.03
76SS-06	3/16	1/2	0.03
76SS-08	1/4	3/4	0.04
76SS-10	5/16	15/16	0.06
76SS-12	3/8	1	0.08

Procraft Steel Tube Thimbles

Tube thimbles are designed to protect the rope at the bearing point and the sides from chaffing. They are commonly used in the fishing industry and as end fittings on utility winch lines.

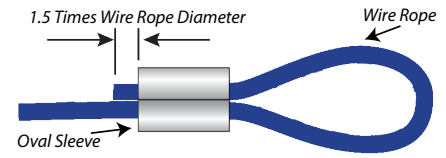


Stock Code	Size Inches	Maximum Inside Diameter Inches	Weight per Piece Pounds
76TB-16	3/8	0.87	0.55
76TB-20	1/2	1.05	0.93
76TB-24	5/8	1.25	1.33
76TB-28	3/4	1.40	1.77
76TB-32	7/8	1.75	3.01
76TB-36	1	1.80	4.42



This product is not load rated and not suitable for any load bearing or lifting applications. Thimbles are designed to protect rope from damage.

WIRE ROPE SLEEVES are used in conjunction with swaging tools and machines to form eyes or stops onto wire rope. When field installation is required for smaller diameter ropes, a wire rope crimping tool can be used on hand swage sleeves. To ensure a safe and correct swage the following needs to be reviewed:

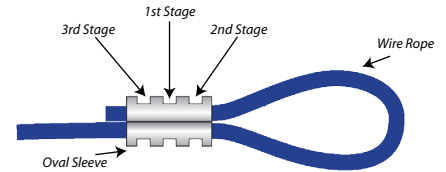


- 1 - Always ensure that you have the correct size sleeve for the wire rope diameter that you are using.
- 2 - The correct tool and groove on the tool is used for your wire rope diameter.
- 3 - You have the correct number of presses on the sleeve for your diameter rope.
- 4 - Check the sleeve for the correct finish diameter (many tools have a gauge to assist with this)
- 5 - When crimping wire rope to form an eye it is important to allow a tail to protrude from the end of the sleeve. This tails should be at least 1.5 times the rope diameter before crimping. If swaging a Thimble eye there should be a small space between the thimble and sleeve to allow thimble some self alignment.

To crimp the sleeve as follows:

- Step 1 - Crimp centre of the Sleeve first.
- Step 2 - Crimp the end closest to the eye next.
- Step 3 - Crimp the end closest to the tail.

Aluminum sleeves are not to be used for dynamic loads.



Procraft Aluminum Duplex Sleeves (Hourglass)

Aluminum hourglass sleeves are an economical way to install eyes on site with the use of a swaging tool. To determine actual holding strength of the pressed assembly a proof load test is recommended.

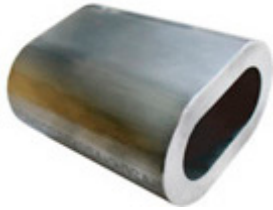


Stock Code	Size Inches	Weight per Piece Pounds
56AL-015	3/64	0.001
56AL-02	1/16	0.001
56AL-03	3/32	0.003
56AL-04	1/8	0.006
56AL-05	5/32	0.008
56AL-06	3/16	0.016
56AL-08	1/4	0.026
56AL-10	5/16	0.046
56AL-12HG	3/8	0.062
56AL-14HG	7/16	0.118
56AL-16HG	1/2	0.176



Procraft Aluminum Oval Swage Sleeves

Aluminum oval swage sleeves are for installing eyes onto wire ropes for non critical applications. These sleeves are used in hydraulic presses with special dies to swage the sleeve. To determine actual holding strength of the pressed assembly a proof load test is recommended.



Stock Code	Size Inches	Weight per Piece Pounds
56AL-10	5/16	0.043
56AL-12HG	3/8	0.053
56AL-14HG	7/16	0.110
56AL-16HG	1/2	0.165
56AL-18	9/16	0.220
56AL-20	5/8	0.320
56AL-24	3/4	0.520
56AL-28	7/8	0.670
56AL-32	1	1.250
56AL-36	1 1/8	1.720
56AL-40	1 1/4	2.140

Procraft Aluminum Button Stops

Aluminum button stops are mainly used to install stop ends on wire ropes for quick installation into drums and fittings. Stop sleeves will not hold to the nominal published break strength of any cable, if installed correctly the stop will hold to 1/3 the nominal strength of the cable.



Stock Code	Size Inches	Weight per Piece Pounds
56BS-02	1/16	0.001
56BS-03	3/32	0.001
56BS-04	1/8	0.003
56BS-05	5/32	0.004
56BS-06	3/16	0.004
56BS-08	1/4	0.021
56BS-10	5/16	0.021



Aluminum sleeves and stops are not recommended for any critical overhead lifting applications. To determine the holding strength of any assembly a proof load test and destruction testing is recommended. Sleeves and stops crimped over plastic jackets on wire rope will not hold to published breaking strengths. Unsafe use of this product could result in disengagement and the potential of death or serious injury.

Procraft Copper Duplex Sleeves (Hourglass)

Copper hourglass sleeves are an economical way to install eyes on site with the use of a swaging tool. To determine actual holding strength of the pressed assembly a proof load test is recommended.



Stock Code	Size Inches	Weight per Piece Pounds
56CP-015	3/64	0.002
56CP-02	1/16	0.003
56CP-03	3/32	0.009
56CP-04	1/8	0.018
56CP-05	5/32	0.027
56CP-06	3/16	0.055
56CP-08	1/4	0.079
56CP-10	5/16	0.141
56CP-12	3/8	0.196
56CP-14	7/16	0.372
56CP-16	1/2	0.595

Procraft Copper Button Stops

Copper button stops are mainly used to install stop ends on wire ropes for quick installation into drums and fittings. Stop sleeves will not hold to the nominal published break strength of any cable, if installed correctly the stop will hold to 1/3 the nominal strength of the cable.



Stock Code	Size Inches	Weight per Piece Pounds
56BS-02	1/16	0.001
56BS-03	3/32	0.002
56BS-04	1/8	0.007
56BS-05	5/32	0.014
56BS-06	3/16	0.014
56BS-08	1/4	0.071
56BS-10	5/16	0.064



Procraft Steel Machine Press Choker Knobs

Steel press choker knobs are heavily used in the logging industry. They are easily inserted under logs and loads that are to be lifted or moved, and are quickly installed in choker bells to form a tight choke around loads. These fittings are designed to be installed onto cables by special dies and presses, and **SHOULD NOT** be installed by any other methods.



Stock Code	Description & Wire Rope Diameter	Weight per Piece Pounds
30CHK-12	3/8" Midget	0.37
30CHK-14	7/16" Midget	0.35
30CHK-16	1/2" Midget	0.33
30CHK-18	9/16" Midget	0.80
30CHK-20	5/8" Midget / Dwarf	0.80
30CHK-24	3/4" Bantam	1.10

Procraft Choker Hooks (Choker Bells)

Procraft choker hooks are used in conjunction with choker knobs to form a strong choke around logs or loads which are to be moved or lifted. They are made from high quality steel to provide strength and ruggedness. Make sure that you are properly trained in the use of this product before using it with loads.



Stock Code	Description Wire Rope Diameter	Weight per Piece Pounds
30CFER-L293I	Micro Midget 3/8"-7/16"-1/2"	1.00
30CFER-L625I	Heavy Duty Midget 3/8"-1/2"-9/16"	1.75
30CFER-L320I	Light Bantam (Dwarf) 1/2"-5/8"-11/16"	3.00



Choker Knobs and Hooks ARE NOT intended for use in overhead lifting operations except for some log harvesting systems where adequate protection and precautions are taken. Unsafe use of this product could result in disengagement and the potential of death, serious injury or property damage.

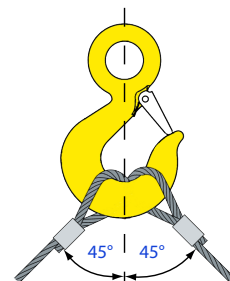
ALLOY HOOKS are used extensively for overhead lifting in a variety of applications to connect loads to slings and other hardware.

Rigging Practices

Always use alloy hooks for overhead lifting. Know what hook to use, and how to use it, and match or exceed the WLL of the slings that you are to use. When rigging a load on hooks make sure the load is centered in the bowl of the hook. If using two slings the angle from the vertical to the outermost leg should not exceed 45 degrees.

NEVER tip load, point load, side load or back load a hook. Always check to ensure that the safety latch has fully closed correctly before lifting and ensure the safety latch is **NOT** supporting any load.

Always use a swivel hook with a proper bearing if you intend to rotate a hook when fully loaded. **NEVER** swivel or turn a standard swivel hook with bushing or bearing washer when fully loaded (as per hooks found in this catalogue). **Inspection before use is extremely important.**



Inspection

Always check that the WLL is still visible.

Check that the safety latch is installed and functioning correctly.

Hooks should be inspected carefully for cracks, distortion, corrosion or heat strike / welding marks.

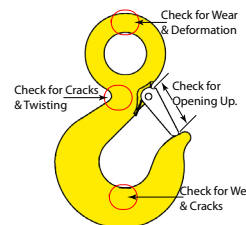
Inspect for any signs of excessive wear. Any wear exceeding 10% should be removed from service immediately.

Check the throat opening. If throat opening exceeds 15% of the original dimension, it must be removed from service. A good practice is to remove any hook that shows sign of throat opening.

Check hook for side loading. If the hook tip and eye do not line up and the hook is bent or twisted remove from service.

Never use a hook that has been repaired or altered by heating, welding, burning or bending.

Inspect carefully the neck (shank) of a swivel hook for signs of side loading, wear or deterioration.



Procraft Alloy Eye Hoist Hooks

Alloy eye hooks come complete with a safety latch, and are marked with the working load limit, manufacturer and traceability code as per ASME standards. They have a built in safety factor of 5:1 which make them ideal for wire rope, synthetic rope and chain assemblies.



Stock Code	Working Load Limit Tons	Opening Inches	Weight per Piece Pounds
36EYE-A010	1	0.90	0.61
36EYE-A015	1 1/2	0.93	0.82
36EYE-A020	2	1.00	1.44
36EYE-A030	3	1.13	1.94
36EYE-A050	5	1.44	4.30
36EYE-A070	7	1.75	7.75
36EYE-A110	11	2.29	15.00



Procraft Alloy Swivel Eye Hoist Hooks

Swivel alloy eye hooks come complete with a safety latch, and are marked with the working load limit, manufacturer and traceability code as per ASME standards. They have a built in safety factor of 5:1 which make them ideal for wire rope, synthetic rope and chain assemblies. These hooks are designed for load positioning and therefore will not swivel under load. **NEVER** swivel this type of hook when fully loaded.



Stock Code	Working Load Limit Tons	Opening Inches	Weight per Piece Pounds
36SW-A010	1	0.90	0.77
36SW-A015	1 1/2	0.93	1.27
36SW-A020	2	1.00	2.28
36SW-A030	3	1.13	2.60
36SW-A050	5	1.47	4.81
36SW-A070	7	1.75	10.40
36SW-A110	11	2.29	16.42

Procraft Stainless Steel Latch Kits

These latch kits are a suitable replacement for when your factory installed latches have been damaged or are beyond repair. They are manufactured from Stainless Steel for increased service life.



Stock Code	Hook Capacity Tons	Overall Length	Width @ Opening	Weight per Piece Pounds
36XLK-A010	1	1.48	0.41	0.02
36XLK-A015	1 1/2	1.84	0.41	0.02
36XLK-A020	2	1.84	0.49	0.03
36XLK-A030	3	2.02	0.49	0.03
36XLK-A050	5	2.41	0.63	0.06
36XLK-A070	7	2.99	0.71	0.11
36XLK-A110	11	3.68	0.79	0.17

Procraft Alloy Swivel Trigger Hooks

Swivel positive locking trigger hooks are marked with manufacturer and traceability code as per ASME standards. They have a built in safety factor of 4:1 which make them ideal for chain. These hooks are designed for load positioning and therefore will not swivel under load. **NEVER** swivel this type of hook when fully loaded.



Stock Code	Chain Size	Working Load Limit Pounds	Weight per Piece Pounds
71HSA-SE08	1/4" - 5/16"	3,500	2.65
71HSA-SE12	3/8"	7,100	4.96
71HSA-SE16	1/2"	12,000	9.11
71HSA-SE20	5/8"	18,100	16.87



Inspect all alloy hooks prior to use. NEVER point load or side load a lifting hook. NEVER exceed the working load limit. Safety latches are not designed to be loaded. Unsafe or improper use could result in disengagement and the potential of death, serious injury or property damage.

Procraft Galvanized Barrel Hooks

Barrel hooks can be used with wire rope, web, rope or chain slings. Ensure that the barrel to be lifted is in excellent condition and that the barrel hooks are secured safely on barrel before lifting. Use extreme caution once load is lifted from the ground. These hooks have a 4:1 factor of safety. **DO NOT** exceed Working Load Limits.



Stock Code	Working Load Limit Pounds	Weight per Pair Pounds
36BAR-I	2,000 (Pair)	3.56

PEAR LINKS AND ROUND RINGS are designed for use on wire rope, synthetic rope and web assemblies. They are carbon steel weldless links that are drop forged to create a seamless one piece unit. They are great for sling assemblies with multiple legs, but may not be optimal for some crane hook designs.

Before use, links and rings should be inspected for signs of wear, bending, distortion (elongation or collapse), cracks, corrosion damage, nicks and gouges.

Any links or rings which have 10% loss of material diameter from original diameter should be discarded. If any gouges or nicks have penetrated to 10% of the original material diameter, the product must be removed from service.

Links or rings which are bent more than 10 degrees in the plane, or which are visibly distorted or twisted should also be discarded.

Procraft Carbon Steel Round Links

Steel round rings are generally used as part of multi leg wire or synthetic rope bridles. They have a 5:1 factor of safety and marked on the ring working load limit, manufacturer and traceability code. **DO NOT** exceed Working Load Limits.



Stock Code	Diameter Inches	Working Load Limit Pounds	Weight per Piece Pounds
40RNG-2840	7/8" x 4"	7,200	2.72
40RNG-3240	1" x 4"	10,800	3.47

Procraft Galvanized Carbon Steel Pear Links

Pear shaped sling links are generally used as part of multi leg wire rope, synthetic rope or chain bridles. They are a one piece carbon steel forged product, hot dipped galvanized, with the Working Load Limit, manufacturer and traceability code marked on the link. They have a 6:1 factor of safety. **DO NOT** exceed Working Load Limits.



Stock Code	Diameter Inches	Working Load Limit Pounds	Weight per Piece Pounds
40SLG-12	3/8"	1,800	0.23
40SLG-16	1/2"	2,900	0.51
40SLG-20	5/8"	4,200	1.06
40SLG-24	3/4"	6,000	1.95
40SLG-32	1"	10,800	4.35



SWIVELS are used in conjunction with chain, wire or synthetic rope and slings. They are designed to be used for positioning hooks or slings onto the correct plane before lifting any product. They **SHOULD NOT** be used for rotating product while under load. They are fully forged and hot dipped galvanized product with forged markings for easy identification and traceability. Two different types are available, a Jaw End Swivel which has an eye one end and a jaw fitting for easy attachment and a Regular Swivel which has an enclosed eye at each end. They have a 5:1 factor of safety for lifting, which the Working Load Limit should **NEVER** be exceeded.

Swivels should be inspected regularly for any signs of damage, distortion or wear. Careful inspection should take place where the two sections of the swivel meet, look for any signs of fatigue, corrosion or excessive wear. A 10% reduction in material diameter is classified as excessive wear, and should be removed from service.

Procraft Galvanized Carbon Steel Jaw End Swivel

Jaw & Eye or Jaw End Swivels can be used in conjunction with wire, chain or synthetic slings. One end has an enclosed eye while the other end has a jaw fitting for quick installation onto ropes and assemblies. They are **NOT** designed to rotate under load and are for load positioning only.



Stock Code	Diameter Inches	Working Load Limit Pounds	Weight per Piece Pounds
68JE-08	1/4	850	0.21
68JE-10	5/16	1,250	0.34
68JE-12	3/8	2,250	0.66
68JE-16	1/2	3,600	1.34
68JE-20	5/8	5,200	2.30
68JE-24	3/4	7,200	3.50
68JE-28	7/8	10,000	5.87
68JE-32	1	12,500	9.85

Procraft Galvanized Carbon Steel Regular Swivel

Eye & Eye or Regular Swivels can be used in conjunction with wire, chain or synthetic slings. Each end has an enclosed eye for installation onto ropes and assemblies with connectors. They are **NOT** designed to rotate under load and are for load positioning only.



Stock Code	Diameter Inches	Working Load Limit Pounds	Weight per Piece Pounds
68REG-08	1/4	850	0.21
68REG-10	5/16	1,250	0.39
68REG-12	3/8	2,250	0.71
68REG-16	1/2	3,600	1.00
68REG-20	5/8	5,200	2.00
68REG-24	3/4	7,200	4.00
68REG-28	7/8	10,000	6.25
68REG-32	1	12,500	8.95



Swivels are designed for load positioning, **DO NOT** force rotation of swivel when under load. Swivels must be inspected for wear, distortion and damage before using for any lifts. **DO NOT** exceed Working Load Limits.

EYEBOLTS are commonly attached to a load to provide an attachment point for slings and rigging. They are generally manufactured from forged carbon or alloy steel.

Eyebolt Types

Eyebolts come in many varying configurations. You can get them with shoulder nut, regular (shoulder less), machinery, swivel hoist rings and eyenuts. Shoulder eyebolts are the most practical eyebolt to use as they provide a support to the eyebolt shaft and allows angular lifting with a reduction in capacity. Shoulderless eyebolts are used for in-line lifting only. Swivel hoist rings are suitable for angular type lifting particularly angles exceeding 45 degrees (swivel hoist rings are available in a range of products, please check with Pro Sling & Safety for further details). Eyenuts are drilled and tapped to accept threaded rated rod.

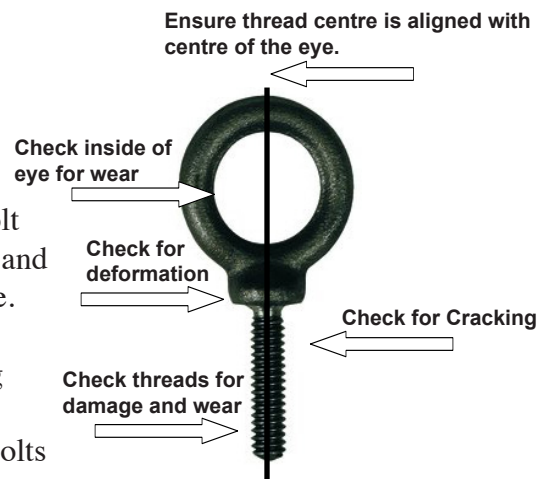
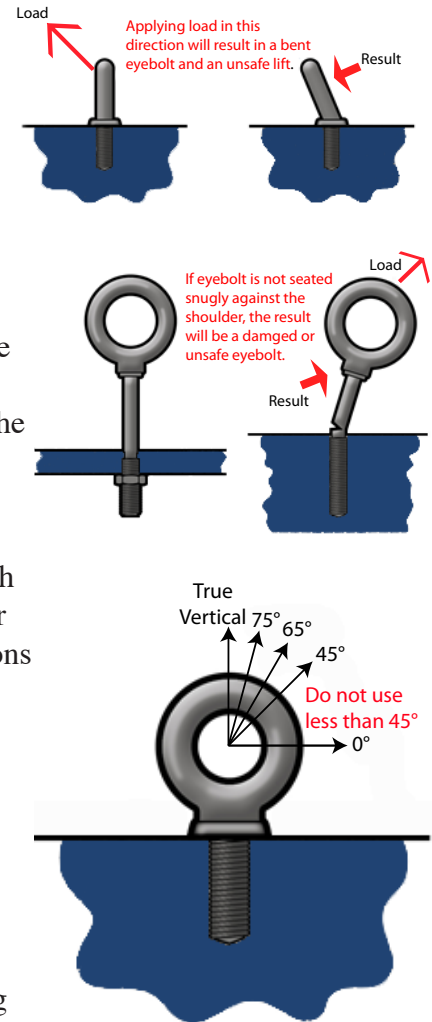
Instructions for Safe Use

1. Ensure that you have the correct eyebolt for the lift. Always use shoulder eyebolts for all applications, except where it is not possible due to the configuration of the load. Shoulderless eyebolts are fine for vertical loading but can bend and fail under angular loading. Shoulder eyebolts lose some capacity when loaded on an angle. Use swivel hoist rings where ever possible on angular lifting especially angles at or less than 45 degrees.
2. Ensure shoulder seats snugly on the surface which they bear. Make sure the eyebolt is screwed down completely and the nut is tightened securely against the load. Spacers may be used, if necessary, to ensure proper seating of the eyebolt. A washer should not be less in diameter than the diameter of the shoulder, and the thickness of the steel washer or spacer must not exceed one thread pitch.
3. An eyebolt must be installed into a tapped hole with a minimum depth of two times the shank diameter.
4. When using lifting slings having two or more legs, make sure the load on each leg is calculated based on the angular loading. Use an eyebolt with a shoulder or swivel hoist ring with the correct WLL suited to the angle being lifted. Reductions for Angular Lifting with Eyebolts:
 True Vertical - Full catalogue Working Load Limit
 75° - 55% of full catalogue Working Load limit
 65° - 35% of full catalogue Working Load limit
 45° - 25% of full catalogue Working Load limit
DO NOT USE less than 45°
5. **DO NOT** reeve a sling through a pair of bolts, attach a separate sling to each eyebolt. **NEVER** insert the point of a hook in an eyebolt, use a shackle instead.
6. **DO NOT** use wrenches, bars etc to tighten standard eyebolts. Hand tightening is recommended.
7. **DO NOT** use a single eyebolt to lift a load that can rotate.
8. **DO NOT** exceed the rated capacity. **DO NOT** shock load eyebolts, gradually increase lifting with a steady and even lift.
9. Always inspect eyebolts before use.

Inspection Before Use

Clean eyebolt and inspect for any signs of defects or wear. Check eyebolt for signs of deformation, distortion, cracks, loss of material, bent shank and that the centre line of the thread is aligned with the centre line of the eye. Always inspect carefully the thread ensuring that there is no damage or wear to the threaded section. Remove and destroy any eyebolts showing signs of damage or abuse as outlined above.

NEVER machine, cut, grind or weld any eyebolts. **DESTROY** any eyebolts showing signs of alteration.

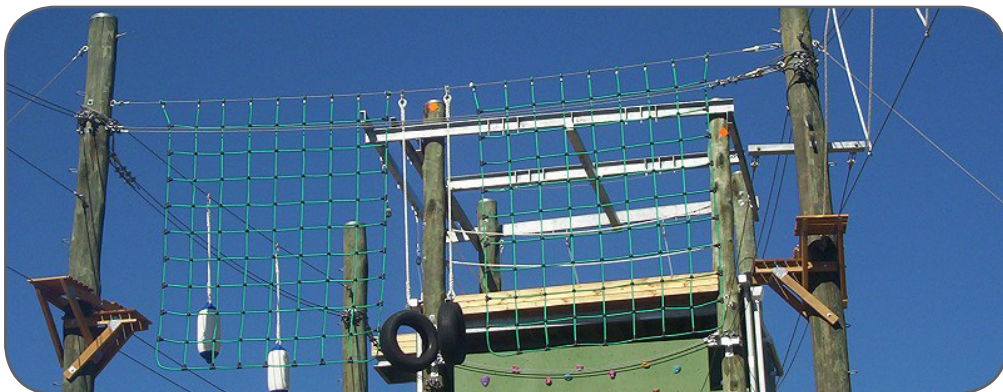


Procraft Galvanized Shoulder Nut Eyebolts

Shoulder nut eyebolts are carbon steel and hot dipped galvanized, which makes them ideal for marine and outdoor environments. They are available with long shank lengths suitable for inserting through thicker material. The shoulder gives support to the eyebolt and allows for limited angular loading.



Stock Code	Diameter x Thread Length	Working Load Limit Pounds @ 90 Degrees	Eye Diameter	Weight per Piece Pounds
28BSH-01	1/4 X 2	650	0.50	0.06
28BSH-02	1/4 X 4	650	0.50	0.09
28BSH-03	5/16 X 2 1/4	1,200	0.62	0.11
28BSH-04	5/16 X 4 1/4	1,200	0.62	0.15
28BSH-05	3/8 X 2 1/2	1,550	0.75	0.19
28BSH-06	3/8 X 4 1/2	1,550	0.75	0.25
28BSH-06X	3/8 x 6	1,550	0.75	0.31
28BSH-07	1/2 X 3 1/4	2,600	1.00	0.41
28BSH-08	1/2 X 6	2,600	1.00	0.59
28BSH-08X	1/2 x 8	2,600	1.00	0.63
28BSH-09	5/8 X 4	5,200	1.25	0.83
28BSH-10	5/8 X 6	5,200	1.25	1.00
28BSH-10X	5/8 x 8	5,200	1.25	1.17
28BSH-11	3/4 X 4 1/2	7,200	1.50	1.50
28BSH-12	3/4 X 6	7,200	1.50	1.68
28BSH-12X	3/4 x 8	7,200	1.50	1.92
28BSH-14	1 x 6	13,300	2.00	3.67
28BSH-15	1 x 9	13,300	2.00	4.22
28BSH-15X	1 x 12	13,300	2.00	4.77
28BSH-16	1 1/4 x 8	21,000	2.50	6.50



To avoid injury or property damage ensure that instructions are followed carefully and eyebolts are always inspected before each use. If unsure on instructions please check with Pro Sling & Safety for further details.

Procraft Carbon Steel Machinery eyebolts

Machinery eyebolts are suitable for equipment lifts. It has a short thread perfect for installing in electric motors, gearboxes, and other types of equipment with pre-sunk holes. The shoulder gives support to the eyebolt and allows for limited angular loading.



Stock Code	Diameter x Thread Length	Working Load Limit Pounds @ 90 Degrees	Eye Diameter	Weight per Piece Pounds
28BTH-08	1/4 X 1	500	0.88	0.04
28BTH-10	5/16 X 1 1/8	900	1.12	0.06
28BTH-12	3/8 X 1 1/4	1,300	1.38	0.13
28BTH-16	1/2 X 1 1/2	2,400	1.75	0.25
28BTH-20	5/8 X 1 3/4	4,000	2.25	0.50
28BTH-24	3/4 X 2	5,000	2.75	0.88
28BTH-28	7/8 X 2 1/4	7,000	3.25	1.50
28BTH-32	1 X 2 1/2	9,000	3.75	2.18

Procraft Carbon Steel Galvanized Eye Nuts

Eye Nuts are hot dipped galvanized and are suitable for installing onto threaded, load rated rod. When using in lifting applications it is critical that you ensure the threaded rod to be used in conjunction with the Eye Nut has an equal or greater working load limit than the Eye Nut.



Stock Code	Number & Thread Diameter	Working Load Limit Pounds @ 90 Degrees	Inside Width	Weight per Piece Pounds
28NUT-08	# 1 - 1/4"	520	0.75	0.09
28NUT-10	# 1A - 5/16"	700	0.75	0.09
28NUT-12	# 2 - 3/8"	1,250	1.00	0.18
28NUT-16	# 3A - 1/2"	2,250	1.25	0.29
28NUT-20	# 4 - 5/8"	3,600	1.50	0.58
28NUT-24	# 5 - 3/4"	5,200	1.75	1.00
28NUT-28	# 6 - 7/8"	7,200	2.00	1.70
28NUT-32	# 7 - 1"	10,000	2.15	2.75
28NUT-40	# 8 - 1 1/4"	15,200	2.50	3.85



Procraft Carbon Steel Self Colour Pad Eyes

Pad Eyes are suitable for installing onto trucks, farm machinery and marine vessels. They are easily installed by welding to steel surfaces. Ensure you follow Canadian Welding instructions and standards.



Stock Code	Size Number	Eye Diameter	Weight per Piece Pounds
28PAD-1	# 1	0.37	0.07
28PAD-15	# 1 1/2	0.63	0.11
28PAD-2	# 2	0.75	0.22
28PAD-4	# 4	1.00	0.53
28PAD-5	# 5	1.25	0.82

Procraft Carbon Steel Screw Eyebolts (Lag Eyebolts)

Screw eyebolts are hot dipped galvanized and are ideal for screwing into timbers. **DO NOT** use this type of eye-bolt for any critical load bearing or lifting applications.



Stock Code	Diameter x Thread Length	Eye Diameter	Weight per Piece Pounds
28BSC-12	3/8 X 2 1/2	1.38	0.19
28BSC-16	1/2 X 3 1/4	1.75	0.38
28BSC-20	5/8 X 4	2.25	0.69

Procraft Galvanized Malleable Timber Washers

Timber washers are used in dock and wood construction. The large surface area is designed to prevent the bolt heads and nuts from pulling into the timber.



Stock Code	Bolt Diameter	Weight per Piece Pounds
44ZW-TMBR12	3/8	0.18
44ZW-TMBR16	1/2	0.22
44ZW-TMBR20	5/8	0.32
44ZW-TMBR24	3/4	0.42
44ZW-TMBR28	7/8	0.55
44ZW-TMBR32	1	0.69



Ensure Pad Eyes are welded and installed correctly according to Canadian & American Welding Standards. Pad Eyes should NEVER be used for any critical overhead lifting applications. DO NOT insert screw eyebolts into any rotting, decaying or damaged timber.

TURNBUCKLES are used to make adjustments on length for all type of rigging assemblies. They can be used for both lifting slings and as standing rigging for guy cables on towers and other engineered applications.

Description & Types

Turnbuckles sizes are designated by the thread diameter on the end fitting and the length measurement inside the body. For instance a 3/8" x 6" Jaw & Jaw, is 3/8" thread diameter on the jaw fitting and 6" measurement on the inside of the body or "take up". Turnbuckles can be supplied with several different end fittings including eyes, jaws, stub and hooks. Eye and Jaw end fittings are the most common, and hook or stub end fittings are less frequently used and have a rated capacity lower than Jaw and Eye fittings.

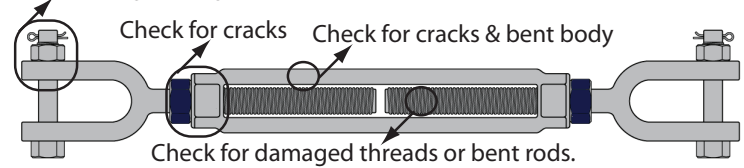
Instructions for Safe Use

1. Ensure the correct Turnbuckle is selected for its application or intended use. Check strength ratings match the wire rope or hardware that it is installed with.
2. Place turnbuckle in line with the rigging and adjust turnbuckle so that the "slack" is taken out of the line and tension is applied to the turnbuckle. (turnbuckles are designed for loading in direct tension only).
3. Ensure that there is thread engagement at either end of at least 1.5 times the thread diameter.
4. When tightening a turnbuckle, do not apply more torque than you would to a bolt of equal size.
5. When turnbuckles are exposed to vibration, lock frames to end fittings. This will prevent turning and loosening of the end fittings. Use jam nuts or lock nuts, or secure end fittings with wire.
6. Lubricate threads and body for extra corrosion protection.
7. Ensure the threaded fittings in the turnbuckle are clear and free from any potential strike or wear damage from foreign objects.

Inspection

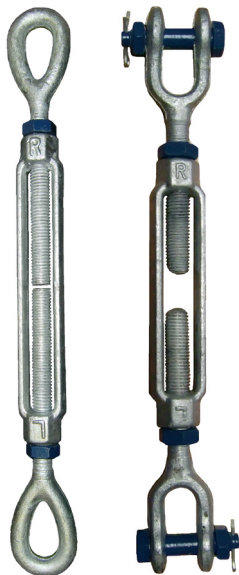
1. Inspect turnbuckles before installing on any line. Also, regular periodic inspection of permanently installed turnbuckles is required.
2. Inspect end fittings for any cracks especially at the neck of the fitting. Check the end fitting for deformation or elongation, deformed or bent rods, and any signs of thread damage.
3. Check body for deformation or bends, and any signs of thread damage or cracks in the body.
4. Locknuts which are fitted are a method of locking the turnbuckle, but may not provide reliable locking under all circumstances. Locknuts should be inspected regularly for any "backing off".
5. Turnbuckles are not designed for continous adjustment while under rated load conditions. If they are used in this way careful frequent inspections of the thread should be performed as wear on the threads is expected.

Ensure fittings are tight & secured and no bent or distorted pins.

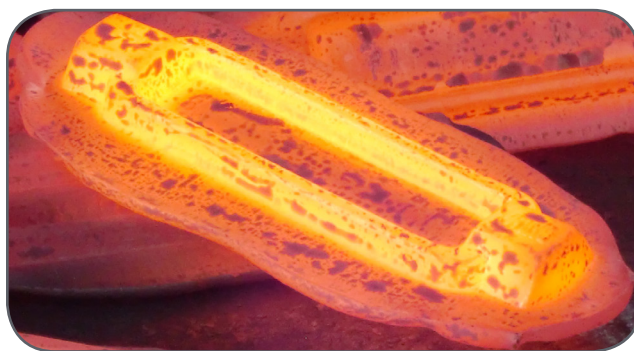


Procraft Hot Dipped Galvanized Turnbuckles

These turnbuckles are drop forged hot dipped galvanized which meets US Federal Spec FF-T-792B Type 1, Form 1 (open Body). They are stamped and marked with size, manufacturer and traceability code to meet with the ASME standards. Procraft turnbuckles come complete with lock nuts installed on the threaded ends for safer installation practices.



Eye & Eye Stock Code	Jaw & Jaw Stock Code	Size Inches	Working Load Limit Pounds	Weight Per Piece Pound (Jaw & Jaw)
84TRN-EE0804	84TRN-JJ0804	1/4 x 4	500	0.40
84TRN-EE1004	84TRN-JJ1004	5/16 x 4 1/2	800	0.54
84TRN-EE1206	84TRN-JJ1206	3/8 x 6	1,200	0.83
84TRN-EE1606	84TRN-JJ1606	1/2 x 6	2,200	1.57
84TRN-EE1609	84TRN-JJ1609	1/2 x 9	2,200	1.95
84TRN-EE1612	84TRN-JJ1612	1/2 x 12	2,200	2.24
84TRN-EE2006	84TRN-JJ2006	5/8 x 6	3,500	2.80
84TRN-EE2009	84TRN-JJ2009	5/8 x 9	3,500	3.35
84TRN-EE2012	84TRN-JJ2012	5/8 x 12	3,500	4.00
84TRN-EE2406	84TRN-JJ2406	3/4 x 6	5,200	4.30
84TRN-EE2409	84TRN-JJ2409	3/4 x 9	5,200	4.89
84TRN-EE2412	84TRN-JJ2412	3/4 x 12	5,200	5.90
84TRN-EE2418	84TRN-JJ2418	3/4 x 18	5,200	7.75
84TRN-EE2812	84TRN-JJ2812	7/8 x 12	7,200	8.60
84TRN-EE2818	84TRN-JJ2818	7/8 x 18	7,200	11.44
84TRN-EE3206	84TRN-JJ3206	1 x 6	10,000	9.44
84TRN-EE3212	84TRN-JJ3212	1 x 12	10,000	11.53
84TRN-EE3218	84TRN-JJ3218	1 x 18	10,000	16.40
84TRN-EE3224	84TRN-JJ3224	1 x 24	10,000	18.60
84TRN-EE4012	84TRN-JJ4012	1 1/4 x 12	15,200	23.60
84TRN-EE4018	84TRN-JJ4018	1 1/4 x 18	15,200	26.60
84TRN-EE4024	84TRN-JJ4024	1 1/4 x 24	15,200	31.20
84TRN-EE4824	84TRN-JJ4824	1 1/2 x 24	21,400	47.60
84TRN-EE6424	84TRN-JJ6424	2 x 24	37,000	115.00



To avoid injury or property damage use turnbuckles in direct tension only. NEVER side load or exceed the working load limit. Always ensure there is thread engagement of at least 1.5 times the thread diameter.

YARDING AND SNATCH BLOCKS are one of the most widely used blocks. It is a temporary or intermittent - service block which quickly attaches to the wire rope and moves load over comparatively short distances. This is opposed to long lifts and continuous service for which crane and construction blocks are designed. Snatch Blocks wire rope-to-sheave diameter ratio is not the same as that recommended for crane and construction blocks. Since the height and frequency of the lifts is not as critical, larger sheaves are not as crucial to snatch block operations. However, provisions should be made to increase the sheave size where the situation demands. Naturally a larger sheave is an advantage for bearing and wire rope life. The head fittings on these type of snatch blocks are **NOT** installed with thrust bearings, therefore the fitting will not swivel under full load.

Instructions for Safe Use

- Always design and rig snatch block systems so that the load will not slip or fall.
- Always design the lifting system with appropriate sheave assembly material to prevent premature sheave, bearing or wire rope wear and failure.
- Always have a qualified person rig the snatch block system. The lower fittings on snatch blocks are **NOT** installed with thrust bearings, therefore the fitting will not swivel under full load.
- Instruct workers to keep hands and body away from the block sheaves, swivels, and “pinch points” where wire rope makes contact with block parts or loads.
- Do not side load snatch blocks. Side loading exerts additional force or loading which the snatch block is not designed to accommodate.
- Always make sure the hook (and not the latch) supports the load.
- Do not weld snatch blocks or load supporting parts.
- Keep out from under a raised load and stay out of the line of force. Never lift personnel with snatch blocks.
- Remove from service any snatch block that is cracked or deformed. Blocks must be inspected regularly and maintained to increase service life and to enhance safety.

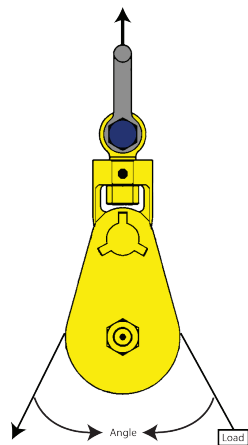
Inspection

- *Check all nuts or retaining pins for any signs of backing off due to high vibration or damage. The head fitting nut must be checked to ensure it is properly engaged into its retaining nut to full depth and the thread is locked. Also, check for excessive “play” in the head fitting. Excessive free play is a sign of wear.
- *Look for wear on pins, axles (check if axle is still fixed), side plates, bushings/bearings and fittings attachment points. Any excessive wear (10% wear is the maximum permissible) will require the block to be pulled from service.
- *Check Sheaves for wobble, misalignment, uneven groove flange wear, corrugations or wear in sheave groove. If sheave wobbles or is misaligned this indicates bearing wear which will require removal from service.
- *Check any head fittings for deformation or stretch. Make sure hook has not stretched and latch still fits the hook correctly. Check the shackle pin for damage or deformation.

Load Angle Factors

The stress on a snatch block varies between the degree of angle between the lead and load lines. As the angle between the lines increases, the stress on the block is reduced. With both lines parallel, 1000 pounds on the lead line results in 2000 pounds on the block.

Provisions should also be made to increase the sheave size where the situation demands. Naturally a larger sheave is an advantage for bearing and rope life. Use the chart below to calculate the total load, by multiplying the line pull by the angle factor and then add 10% for sheave friction.



ANGLE FACTOR MULTIPLIERS			
Angle	Factor	Angle	Factor
0°	2.00	90°	1.41
10°	1.99	100°	1.29
20°	1.97	110°	1.15
30°	1.93	120°	1.00
40°	1.87	130°	0.84
45°	1.84	140°	0.68
50°	1.81	150°	0.52
60°	1.73	160°	0.35
70°	1.64	170°	0.17
80°	1.53	180°	0.00



Procraft Snatch Blocks Bronze Bush Single Sheave

Snatch blocks have a bronze bushing and are generally used with wire rope. They are mostly suited to applications where hoisting speed are not high, and the head fitting is not designed to rotate while under load (not suitable for concrete tilt wall panels). Snatch blocks are designed with a 4:1 factor of safety.



Stock Code	Size Inches	Working Load Limit Tons	Wire Rope Diameter	Head Fitting	Weight per Piece Pounds
07SB-HK030	3	2	5/16 - 3/8	Hook	8.60
07SB-HK040	4 1/2	4	3/8 - 1/2	Hook	13.67
07SB-HK050	6	4	3/8 - 1/2	Hook	18.52
07SB-HK060	6	8	5/8 - 3/4	Hook	31.08
07SB-HK080	8	8	5/8 - 3/4	Hook	41.88
07SB-SH030	3	2	5/16 - 3/8	Shackle	8.38
07SB-SH040	4 1/2	4	3/8 - 1/2	Shackle	13.67
07SB-SH050	6	4	3/8 - 1/2	Shackle	18.29
07SB-SH060	6	8	5/8 - 3/4	Shackle	31.08
07SB-SH080	8	8	5/8 - 3/4	Shackle	41.22
07SB-SH1508	8	15	7/8 - 1	Shackle	72.73
07SB-SH1210	10	12	1	Shackle	76.50
07SB-TB030	3	2	5/16 - 3/8	Tailboard	4.80
07SB-TB040	4 1/2	4	3/8 - 1/2	Tailboard	8.00
07SB-TB060	6	8	5/8 - 3/4	Tailboard	16.00
07SB-TB080	8	8	5/8 - 3/4	Tailboard	24.00

Procraft Light Duty Snatch Blocks Single Sheave

Light Duty Snatch blocks are suitable for synthetic or wire rope. A drop side plate allows easy access for the installation of the rope, and its light weight design aids quick installation. Snatch blocks are designed with a 4:1 factor of safety.



Stock Code	Size Inches	Working Load Limit Tons	Wire Rope Diameter	Head Fitting	Weight per Piece Pounds
07SN-DS03J	3	1/2	5/16	Hook	3.30
07SN-DS04J	4	1	3/8	Hook	5.51
07SN-DS05J	5	1 1/2	1/2	Hook	10.58
07SN-DS06J	6	2	5/8	Hook	16.31



To avoid injury or property damage know the Working Load Limit of the block, or blocks, to be used and how to use them. This product is not designed for personnel lifting. Working Load Limits are resultant Working Loads. Never exceed working load limit or wire rope size.

Procraft Hot Dipped Galvanized Yarding Blocks

These yarding blocks have a bronze bearing and are mostly suited to light duty applications where hoisting speed is not high. They are perfect for fishing vessels and other marine uses with the hot dipped galvanized finish. They are offered with either a single sheave or double sheave, and can be used with wire or synthetic ropes. Working load limits are in Metric Tonnes and are built with a 4:1 factor of safety.



Stock Code	Size Inches	Working Load Limit Tonnes	Wire Rope Diameter	Weight per Piece Pounds
Single Sheave				
07YD-103G	3	0.5	5/16	2.42
07YD-104G	4	1.0	3/8	3.97
07YD-105G	5	1.5	7/16	7.71
07YD-106G	6	2.0	9/16	11.24
07YD-108G	8	4.0	3/4	25.35
07YD-110G	10	5.0	7/8	37.47
Double Sheave				
07YD-203G	3	0.5	5/16	3.97
07YD-204G	4	1.0	3/8	6.17
07YD-205G	5	1.5	7/16	12.12
07YD-206G	6	2.0	9/16	18.74
07YD-208G	8	4.0	3/4	36.37

Procraft Black Painted Yarding Blocks

These yarding blocks have a bronze bushing and are mostly suited to light duty applications where hoisting speed is not high. They are perfect for entertainment rigging with the black painted finish. They are offered with either a single sheave or double sheave, and can be used with wire or synthetic ropes. Larger sizes come complete with a grease nipple for relubrication. Working load limits are in Metric Tonnes and are built with a 4:1 factor of safety.



Stock Code	Size Inches	Working Load Limit Tonnes	Maximum Diameter Wire Rope	Weight per Piece Pounds
Single Sheave				
07YD-103	3	0.5	5/16	2.42
07YD-104	4	1.0	3/8	3.97
07YD-105	5	1.5	7/16	7.71
07YD-106	6	2.0	9/16	11.24
Double Sheave				
07YD-203	3	0.5	5/16	3.97
07YD-204	4	1.0	3/8	6.17
07YD-205	5	1.5	7/16	12.12
07YD-206	6	2.0	9/16	18.74



Off Road Blocks

These blocks are perfect for winching or hauling where increased capacity in a winch line is required. The two opening cheek plates allows quick access for synthetic or wire winchline. These blocks are not suitable for overhead lifting or critical load bearing applications.



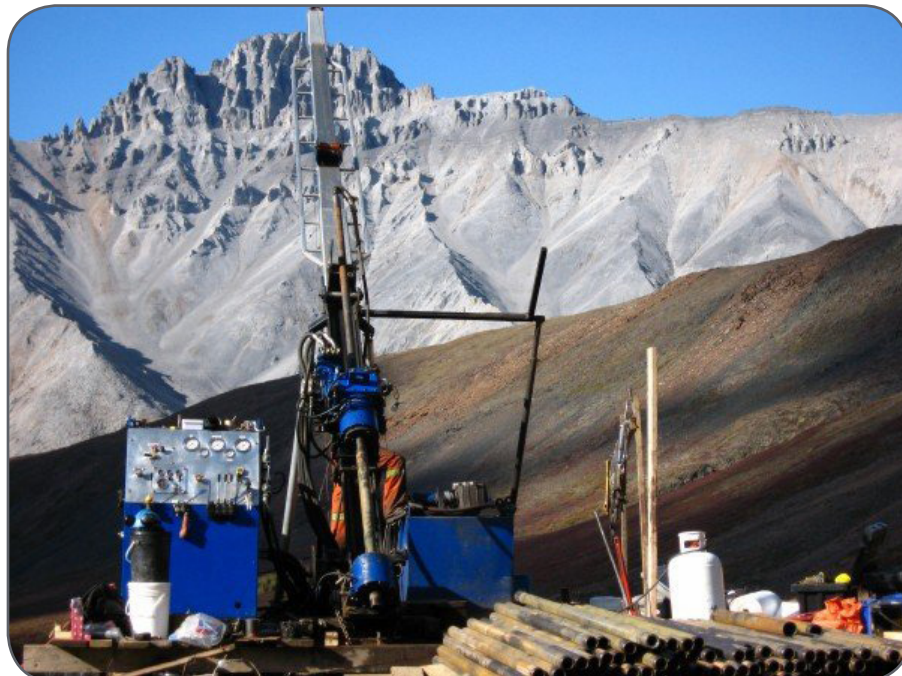
Stock Code	Sheave Diameter	Rated Capacity Pounds	Wire Rope Diameter	Weight per Piece Pounds
07ORB-104	4	4,500	7/16	4.20
07ORB-105	5	12,000	9/16	7.70

Procraft Steel Sheaves with Bearing

Cast iron sheaves with installed sealed bearings is ideal for wire rope and synthetic ropes.



Stock Code	Outside Diameter	Axle Pin Diameter (Bore)	Wire Rope Diameter	Weight per Piece Pounds
07SH-B03	3	5/8	5/16	0.90
07SH-B04	4	11/16	3/8	1.50
07SH-B05	5	7/8	7/16	3.50
07SH-B06	6	7/8	9/16	5.80
07SH-B08	8	1 1/4	3/4	15.00
07SH-B10	10	1 3/8	7/8	20.00



To avoid injury or property damage know the Working Load Limit of the block, or blocks, to be used and how to use them. This product is not designed for personnel lifting. Working Load Limits are resultant Working Loads. Never exceed working load limit or wire rope size.

LOAD SECUREMENT PRODUCTS, “Any load-carrying vehicle must be loaded and driven in such a manner as to prevent danger to any person, or damage to any property” this is why it is extremely important to use and know how to use quality load securement products.

Minimum Number of Tiedowns

Each cargo securement system must be able to withstand a minimum amount of force in each direction.

Forward Force = 80% of cargo weight when breaking while driving straight ahead.

Rearward Force = 50% of cargo weight when accelerating, shifting gears while climbing a hill, or breaking in reverse.

Sideways Force = 50% of cargo weight when turning, changing lanes, or breaking while turning.

Upward Force = 20% of cargo weight when travelling over bumps in the road or cresting a hill.

This requirement is satisfied when the cargo is “fully contained”

All elements of the vehicle structure, anchor points and tiedowns must be strong enough to withstand the forces described above (see guide table on number of chains and tie down straps required for loads in weight on following pages).

Always ensure each tiedown is attached and secured so that it does NOT become loose or unfastened, open, or release during transit.

Minimum number of tie downs required will also depend upon the length of the article(s) being secured. When an article is not blocked or positioned to prevent forward movement by a bulkhead or headboard, or by other cargo that is positioned to avoid movement and other appropriate blocking devices, loads must be secured by at least:

- A) One Tiedown if the article is 5 feet (1.52 metres) or less in length, and 1,100 pounds (500kgs) or less in weight.
- B) Two tiedowns if the article is 5 feet (1.52 metres) or less in length and more than 1,100 pounds (500kgs) in weight.
- C) Two tiedowns if the article is longer than 5 feet (1.52 metres) but less than or equal to 10 feet (3.04 metres) in length, irrespective of weight and more than 1,100 pounds (500kgs) in weight.
- D) Two tiedowns if the article is longer than 10 feet (3.04 meters), and one additional tiedown for every 10 feet (3.04 meters) of article length, or fraction thereof, beyond the first 10 feet (3.04 meters) of length.

Log Wrappers

To determine the required amount of load encircling wrappers for long logs on logging trucks use the following formula; Aggregate working load limit of tie downs used to secure each stack shall be at least 1/6 of the weight of the stack.

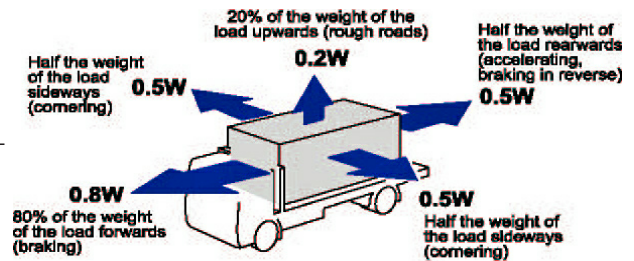
Example would be 35,000 kg load of long logs using 3/8” wire rope wrappers: 35,000kgs divide by 6 (1/6) = 5,833kgs 5,833kgs divided by 1,360kgs (WLL of 3/8” wrapper) = 4.28 Therefore a total of 5 load wrappers would be required to secure this load.

To determine the required amount of load encircling wrappers for short logs on logging trucks use the following formula; Aggregate working load limit of tie downs used to secure each stack shall be at least 1/6 of the weight of the stack.

Example would be 14,000 kg load of short logs using 3/8” wire rope wrappers:

14,000kgs divide by 6 (1/6) = 2,333kgs - 2,333kgs divided by 1,360kgs (WLL of 3/8” wrapper) = 1.71 Therefore a total of 2 load wrappers would be required to secure each load.

Please check with Pro Sling & Safety or the Federal Motor Carriers Safety Administration DOT Regulations for special requirements on securing Dressed Lumber, Metal Coils, Paper Rolls, Concrete Pipe, Vehicles and other special loads. Its important that you also check your local regulations to ensure that you conform to their requirements.



Inspection and Care in Use

Always inspect load securement devices regularly before use. Inspect chains, hooks and binders for wear, cracks, stretch and any signs of fatigue. Inspect Web Straps and Wires for any cuts, nicks or abrasion resulting from sharp corners. If working load tags are damaged, removed or can not be read, assembly should be discarded. Use corner protectors or padding on loads with sharp edges or corners. The lashing capacity of any chain is reduced by 25% if the corner radius is less than the nominal chain size. NEVER use extender (cheater) bars on loadbinders. Always ensure that load securement devices are evenly loaded and secured so that it does NOT become loose or unfastened.

Procraft Grade 70 Gold Chromate Transport Chain

Transport chain is used in tie down and load securement applications. It has a gold zinc plated finish for cleanliness and ease of identification. Procraft transport chain is produced to the NACM standards and is marked with grade and each individual link is proof load tested. **DO NOT** use in overhead applications and **NEVER** exceed the rated capacity of the chain.

Grade 70 Chain Diameter	Working Load Limit		Minimum number of chains required to secure loads in forward direction by weight of articles in lbs. (kgs)									
	(lbs)	(kgs)	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)
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
7/16	8,750	3,990	1	1	2	2	3	3	4	4	5	5
1/2	11,300	5,127	1	1	2	2	2	3	3	4	4	4

Minimum number of tie down chains required to secure a load as per Federal Motor Carriers Safety Administration, DOT Regulations; per 49CFR, Part 393 - Paragraph 393.102.



Stock Code	Chain Size Inches	Feet Per Drum	Working Load Limit Pounds	Weight per Foot Pounds
0807-08	1/4	400	3,150	0.94
0807-10	5/16	550	4,700	1.11
0807-12	3/8	400	6,600	1.50
0807-16	1/2	200	11,300	2.60

Procraft Grade 70 Gold Chromate Grab Hooks

Grade 70 Grab Hooks are to be used with Grade 70 transport chain for tie down applications. Grab hooks are designed to grab onto the chain or hook into rails. These hooks are suitable for load securement and are **NOT** to be used for overhead lifting. **DO NOT** exceed rated capacities.



Stock Code	Chain Size Inches	Rated Capacity Pounds	Weight per Piece Pounds
38CL-A08	1/4	3,150	0.36
38CL-A10	5/16	4,700	0.62
38CL-A12	3/8	6,600	1.00
38CL-A14	7/16	8,800	1.31
38CL-A16	1/2	11,300	2.22



To avoid injury inspect before use, do not overload, **NEVER** use handle extenders (cheater bars) and never use grade 70 transport chains and fittings for overhead lifting. Death or injury can occur from improper use.

Procraft Grade 70 Grab Hooks Trigger Safety (Latch)

Grade 70 Grab Hooks are to be used with Grade 70 transport chain for tie down applications. Grab hooks are designed to grab onto the chain or hook into rails. These hooks are suitable for load securement and are **NOT** to be used for overhead lifting. **DO NOT** exceed rated capacities.



Stock Code	Chain Size Inches	Rated Capacity Pounds	Weight per Piece Pounds
38CL-AP12	3/8	6,600	1.20
38CL-AP16	1/2	11,300	2.60

Procraft Grade 70 Gold Chromate Slip Hooks

Grade 70 Slip Hooks are to be used with Grade 70 transport chain for tie down applications. Slip hooks are designed to slip onto the chain or hook into rails. These hooks are suitable for load securement and are **NOT** to be used for overhead lifting. **DO NOT** exceed rated capacities. Hooks come with or without a safety latch, please advise the preferred type at time of order.



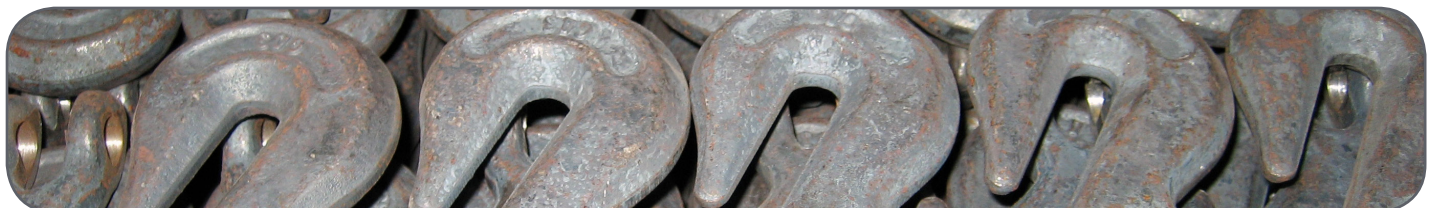
Stock Code	Chain Size Inches	Rated Capacity Pounds	Weight per Piece Pounds
39CL-A08	1/4	2,750	0.55
39CL-A10	5/16	4,300	0.79
39CL-A12	3/8	5,250	1.21
39CL-A14	7/16	7,000	2.06
39CL-A16	1/2	9,000	2.75

Procraft Grade 70 Slip Hooks with Latch Kit

Grade 70 Slip Hooks are to be used with Grade 70 transport chain for tie down applications. Slip hooks are designed to slip onto the chain or hook into rails. These hooks are suitable for load securement and are **NOT** to be used for overhead lifting. **DO NOT** exceed rated capacities. This hook comes with a safety latch installed for increased safety.



Stock Code	Chain Size Inches	Rated Capacity Pounds	Weight per Piece Pounds
39CL-AL08	1/4	2,750	0.65
39CL-AL10	5/16	4,300	0.92
39CL-AL12	3/8	5,250	1.32
39CL-AL14	7/16	7,000	2.07
39CL-AL16	1/2	9,000	2.90



Procraft Forged Lever Type Loadbinders (Cinches)

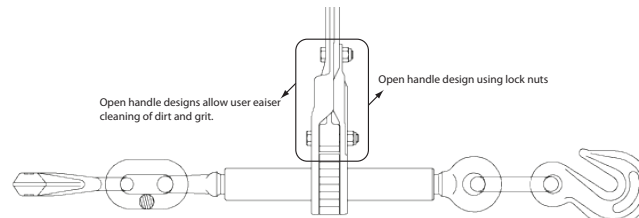
Procraft Load Binders are forged, quenched and tempered with each binder being proof load tested. The all forged design is better suited to the cold environments than cast product, and will yield or stretch before failing. Loadbinders are suitable for load securement and are **NOT** to be used for overhead lifting. **DO NOT** exceed rated capacities and **NEVER** use handle extenders or “cheater” bars.



Stock Code	Chain Size Inches	Rated Capacity Pounds	Weight Per Piece Pounds
04ST-08	1/4 G7	2,600	3.63
04ST-12	5/16 G7 to 3/8 G4	5,400	7.93
04ST-16	3/8 G7 to 1/2 G4	9,200	12.56

Procraft Forged Ratchet Loadbinders (Cinches)

Procraft Ratchet Load Binders have a ratchet handle with an open design using locking bolts. The open handle allows the user to simply strike with a hammer or other tool, and any substances (ice, snow and dirt) that may interfere with the ratchet system will be removed. They are forged, quenched and tempered with each binder being proof load tested. The all forged design is better suited to the cold environments than cast product, and will yield or stretch before failing. Loadbinders are suitable for load securement and are **NOT** to be used for overhead lifting. **DO NOT** exceed rated capacities and **NEVER** use handle extenders or “cheater” bars.



Stock Code	Chain Size Inches	Rated Capacity Pounds	Weight Per Piece Pounds
04RA-10	1/4 G7 to 5/16 G4	3,900	3.68
04RA-12	5/16 G7 to 3/8 G4	5,400	10.95
04RA-16	3/8 G7 to 1/2 G4	9,200	12.96

Procraft Forged Ratchet Loadbinders with Safety Pin

This Ratchet Load Binders is manufactured to European Standard EN12195-3 and are suitable for use with Grade 80 alloy chain and the grab hooks have safety pins for increased safety. They are forged, quenched and tempered with each binder being proof load tested. Loadbinders are suitable for load securement and are **NOT** to be used for overhead lifting. **DO NOT** exceed rated capacities and **NEVER** use handle extenders or “cheater” bars.



Stock Code	Chain Size Inches	Lashing Capacity kN (Pounds)	Weight Per Piece Pounds
04RA08-16CPL	1/2	100 (22,480)	16.53



To avoid injury inspect before use, **DO NOT** overload, never use handle extenders (cheater bars) and **NEVER** use grade 70 transport chains and fittings for overhead lifting. Death or injury can occur from improper use.

Procraft Web Tie Down Straps

Procraft web tie down straps are light weight and are simple to use. They are a cost effective product to use in place of chain, but can be more easily damaged and prone to being cut on sharp edges and should **NOT** be used on certain loads. Procraft straps are manufactured to the WSTDA standards for increased strength and durability, and come complete with rated capacity tags.

Webbing Width	Working Load Limit		Minimum number of web straps required to secure loads in forward direction by weight of articles in lbs. (kgs)									
	(lbs)	(kgs)	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)
2	3,335	1,512	2	3	4	5	6	8	9	10	11	12
3	4,300	1,950	1	2	3	4	5	6	7	8	9	10
4	5,400	2,449	1	2	3	3	4	5	6	6	7	8

Minimum number of tie down web straps required to secure a load as per Federal Motor Carriers Safety Administration, DOT Regulations; per 49CFR, Part 393 - Paragraph 393.102.

Procraft 4" Truck Winch Straps

Winch straps are used in conjunction with truck winches on flat bed trucks and large trailers. Make sure winch straps are protected from sharp corners when securing to the load. Straps can be manufactured to customers requirements including varying lengths, special end fittings and ink marked with companies name.



Stock Code	Description	Rated Capacity Pounds	Weight per Piece Pounds
90TIE-4D25YEL	4" x 25 ft Dee Ring	5,400	5.00
90TIE-4D30YEL	4" x 30 ft Dee Ring	5,400	6.20
90TIE-4D40YEL	4" X 40 ft Dee Ring	5,400	8.00
90TIE-4F30YEL	4" x 30 ft Flat Hook	5,400	6.20
90TIE-4F40YEL	4" x 40 ft Flat Hook	5,400	8.00

Procraft 4" Truck Winch Straps & Accessories

Winches are available as portable or weld on units, easily installed on flat bed trucks, trailers, and railcars. Used in conjunction with either 3" or 4" winch straps they can be lighter and easier to handle than chain and loadbinders. Extra care should be taken with the webbing on sharp corners.



Stock Code	Style	Mounting	Rated Capacity Pounds	Weight per Piece Pounds
44WN-PRT	Standard	Portable	5,000	10.50
44WN-PRTLTP	Low Profile	Portable	5,000	10.50
44WN-REG	Standard	Weld-On	5,400	9.20
44WN-RHM	Low Profile	Weld-On	5,400	9.10
44WNBAR-COMBO	Combination Winch Bar	»	»	5.90
44WN-WNDR	Strap Winder	»	»	2.50
44WN	Lashing Winch	Bolt-On	3,335	3.10
44CAP-04	2 & 4" Wide Plastic Corner	»	»	0.30



Procraft 3" & 2" Web Ratchet Tie Down Sets

This type of ratchet tie down is one the most commonly used tie down for general use and is suitable for a wide range of applications including flat bed trucks and van tie downs. Standard assemblies come complete with fixed end, but can be manufactured to customers specifications and requirements. **DO NOT** use a cheater bar to increase leverage on ratchets.



Stock Code	Description	Rated Capacity Pounds	Weight per Piece Pounds
90TIE-3SET30F	Flat Hooks 3" x 30 ft	5,000	12.44
90TIE-3SET30WH	Wire Hooks 3" x 30 ft	5,000	14.30
90TIE-2SET30F	Flat Hooks 2" x 30 ft	3,335	6.00
90TIE-2SET30W16	HD Wire Hooks 2" x 30 ft	3,335	5.80
90TIE-2SET25W16	HD Wire Hooks 2" x 25 ft	3,335	5.40
90TIE-2SET20W16	HD Wire Hooks 2" x 20 ft	3,335	5.00
90TIE-2SET15W16	HD Wire Hooks 2" x 15 ft	3,335	4.60
90TIE-2RL08	Ratchet Loop Strap 2" x 8 Ft	3,335	3.40
90TIE-2RL12	Ratchet Loop Strap 2" x 12 Ft	3,335	3.70
90TIE-2RL16	Ratchet Loop Strap 2" x 16 Ft	3,335	4.00
90TIE-2RL20	Ratchet Loop Strap 2" x 20 Ft	3,335	4.40
90TIE-2SET12E	'E' Track Fittings with LD Ratchet 2" x 12 ft	1,000	1.00
90TIE-ROPEE	'E' Track Tie Off & Dee Ring	1,000	1.00

Procraft 1" Web Ratchet Tie Down Straps

These straps are commonly used for small utility or van tie downs. Standard assemblies come complete with 9" fixed end, but can be manufactured to customers specifications. **DO NOT** use a cheater bar to increase leverage on ratchets.



Stock Code	Description	Rated Capacity Pounds	Weight per Piece Pounds
90TIE-1X10WSET	1" x 10ft Wire Hooks	1,000	1.50
90TIE-1X12WDSET	1" x 12 ft Wire Hooks & Dee Ring	1,000	1.40
90TIE-1X20WDSET	1" x 20ft Wire Hooks & Dee Ring	1,000	1.60
90TIE-1RL12	Ratchet Loop Strap 1" x 12 Ft	1,000	1.20
90TIE-1R20	Ratchet Loop Strap 1" x 20 Ft	1,000	1.40



To avoid injury inspect before use, check webbing for cuts and abrasion. Protect any web belts from sharp corners or edges. Always ensure you are using the correct strap for the load or job. Never exceed rated capacities. Death or injury can occur from improper use.

COMMERCIAL GRADE CHAINS are commonly used in many marine, light industrial, hardware and general applications. All commercial grade chains are **NOT** to be used in overhead lifting or critical load bearing applications. This chain will fail without warning or notice, for any lifting applications please see our Grade 80 & Grade 100 chains. The chain is available in four different finish types, with each type having separate qualities and attributes.

Self Colour / Bright chain is the steel in its raw form with no anti-rust protection applied. It is used as a cheaper cost alternative to other chains where it will not be subject to environmental conditions. It is also used in mooring applications where the chain is fully submerged. The chain has a tan or brown colour.

Hot Dipped Galvanized is a Zinc coating applied to the chain after manufacture. Its gives great rust protection so is heavily used in the marine and coastal areas. It is a cost effective alternative to Stainless Steel. It generally has a dull grey and slightly uneven surface.

Zinc Plated process adds a very fine zinc finish to the chain. The finish is around 10 times thinner than that of Hot Dip Galvanized and so will not have the rust protection of Hot Dipped Galvanized Chain. This chain is very popular for indoor uses or where a nice finish is preferred due to its silver and smooth finish.

Stainless Steel is manufactured from 316 stainless steel and has the highest resistance to corrosive environments. Its the most expensive of all the chain types and has the least strength, but can be used in many marine environments, acidic areas and food preparation areas. The smooth finish also makes it popular as a decorative chain.

Procraft Grade 30 Chain

Grade 30 chain is a low carbon chain used for many hardware type applications and light duty marine use. Our chain is all machine welded and each link is proof load tested. This chain is **NOT** suitable for overhead lifting or any critical load bearing applications



Stock Code	Diameter	Length Per Drum	Inside Dimensions (L x W)	Breaking Strength Pounds	Weight per Foot Pounds
08PR-T*04	1/8	500	0.94 x 0.22	1,600	0.20
08PR-T*06	3/16	500	0.98 x 0.30	3,200	0.40
08PR-T*08	1/4	800	1.24 x 0.38	5,200	0.66
08PR-T*10	5/16	550	1.29 x 0.44	6,800	0.86
08PR-T*12	3/8	400	1.38 x 0.55	10,600	1.42
08PR-T*16	1/2	200	1.79 x 0.72	17,900	2.42

* Insert the following letters for the stock code on finish types,
 G - Galvanized, S - Self Colour/Bright & Z - Zinc Plated



Procraft 316 Stainless Steel Chain

Stainless steel chain is used widely in the marine environment. It is an excellent all purpose chain manufactured from grade 316 stainless steel. **DO NOT** use in overhead lifting or any critical load bearing applications.



Stock Code	Diameter	Length Per Drum	Inside Dimensions (L x W)	Breaking Strength Pounds	Weight Per Foot Pounds
08SS-04	1/8	500	0.94 x 0.25	1,600	0.20
08SS-06	3/16	500	0.98 x 0.30	3,200	0.40
08SS-08	1/4	800	1.24 x 0.38	5,200	0.66
08SS-10	5/16	550	1.29 x 0.44	7,600	0.96
08SS-12	3/8	400	1.38 x 0.55	10,600	1.42

Procraft Long Link Mooring Chain

Long link mooring chain is used extensively for mooring and anchoring docks, floats and buoys. The oversized long links is more acceptable to shackles passing directly into the chain links. This chain is a low carbon chain and is not suitable for heavy mooring applications (check stud link anchor chain).



Stock Code	Chain Size Inches	Length	Inside Dimensions (L x W)	Breaking Strength Pounds	Weight per Foot Pounds
08MO-GV12	3/8 (GV)	200	2.36 x 0.63	10,000	1.18
08MO-GV16	1/2 (GV)	200	3.23 x 0.98	17,000	1.98
08MO-GV20	5/8 (GV)	150	3.75 x 0.91	26,500	2.95
08MO-GV24	3/4 (GV)	200	4.92 x 2.95	42,082	4.66
08MO-SC24	3/4 (SC)	200	4.92 x 2.95	42,082	4.66
08MO-GV32	1 (GV)	200	6.10 x 3.93	78,859	7.75
08MO-SC32	1 (SC)	200	6.10 x 3.93	78,859	7.75
08MO-SC36	1 1/8 (SC)	100	6.60 x 3.98	91,268	10.93
08MO-SC40	1 1/4 (SC)	100	6.80 x 4.00	102,220	11.56

Procraft Chains

Procraft also have available other chains for specialized applications including alloy mooring / boom chains and deck lashing chains for the shipment of logs on transport ships.



Stock Code	Chain Size Inches	Length	Inside Dimensions (L x W)	Breaking Strength Pounds	Weight per Foot Pounds
Galvanized Deck Lashing Chain					
08DL-LLG16	1/2 (GV)	200	3.25 x 0.79	48,000	3.68
Alloy Galvanized Boom Chain					
08BM-GV24	3/4 (GV)	200	3.00 x 1.10	75,000	5.03

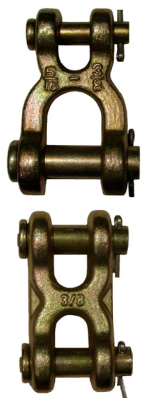


To avoid injury or property damage never use commercial grade chains for overhead lifting or any critical load bearing applications. Always inspect chain before use, and never use a worn or damaged chain.

CHAIN CONNECTING LINKS are used for easy connection of commercial type chains. These types of connecting links are **NOT** suitable for any lifting or critical load bearing applications but can be used in conjunction with small diameter chains to form a connection point between two chains or as an attachment point.

Procraft Double & Twin Clevis Links

Clevis links are gold chromate finish and designed for quick connection between Grade 30, 40 & 70 chain to Eyebolts, Padeyes, Hooks, Chain and Rings. **DO NOT** use this type of attachment on lifting chains.



Stock Code	Size Inches	Rated Capacity Pounds	Weight per Piece Pounds
Double Clevis Links			
40DC-08	1/4	2,600	0.44
40DC-12	5/16-3/8	5,400	0.81
40DC-14	7/16	7,000	1.28
40DC-16	1/2	9,200	1.68
Twin Clevis Links			
40TC-08	1/4-5/16	4,700	0.31
40TC-12	3/8	6,600	0.44
40TC-14	7/16-1/2	11,300	0.97

Procraft Cold Shuts

Cold shuts are manufactured from mild zinc plated steel and are designed to form a connection between chain and fittings. **DO NOT** use this type of attachment on lifting chains and they should never be reused once fittings has been closed.



Stock Code	Size Inches	Weight per Piece Pounds
40RC-Z08	1/4	0.07
40RC-Z12	5/16	0.10
40RC-Z14	3/8	0.18
40RC-Z16	1/2	0.38



Procraft Galvanized Missing Links

Missing links are commonly used to connect two chain lengths such as an anchor chain. To ensure positive connections use the correct size for the chain, and ensure youpeen the prongs to fill the hole of the paired half as much as possible. These fittings are **NOT** to be used for lifting or critical load bearing applications.



Stock Code	Size Inches	Rated Capacity Pounds	Weight per Piece Pounds
40MIG-06	3/16	800	0.03
40MIG-08	1/4	1,400	0.06
40MIG-10	5/16	2,000	0.10
40MIG-12	3/8	2,800	0.18
40MIG-16	1/2	4,750	0.38
40MIG-20	5/8	7,250	0.72

Procraft Repair (Lap) Links

Repair / Lap links are manufactured from zinc plated mild steel and are designed to form a connection between chain and fittings, especially useful as a quick and easy repair link on Tire Chains. **DO NOT** use this type of attachment for lifting, and they should never be reused once fittings have been closed.



Stock Code	Size Inches	Rated Capacity Pounds	Weight per Piece Pounds
40RL-08/40	1/4 x 2	400	0.09
40RL-10/64	5/16 x 2	700	0.14
40RL-12/52	3/8 x 2	1,250	0.25
40RL-16/80	1/2 x 2 1/2	1,525	0.54



This product is designed for non load rated chains and fittings. To avoid injury or property damage. DO NOT use this type of product in any critical load bearing or lifting applications.

Procraft Zinc Plated Quick Links

Quick links provide an easy to use solution for attaching chain and wire rope. **DO NOT** use this type of attachment on lifting chains or slings as they are not suitable for lifting or any critical load bearing applications.



Stock Code	Size Inches	Rated Capacity Pounds	Opening Inches	Inside Dimensions	Weight per Piece Pounds
40RQ-04	1/8	220	1/8	7/16 x 1 1/8	0.03
40RQ-06	3/16	660	3/16	9/16 x 1 5/8	0.05
40RQ-08	1/4	880	1/4	5/8 x 1 13/16	0.07
40RQ-10	5/16	1,760	5/16	3/4 x 2 1/4	0.16
40RQ-12	3/8	2,200	3/8	13/16 x 2 1/2	0.22
40RQ-14	7/16	2,650	1/2	7/8 x 2 3/4	0.32
40RQ-16	1/2	3,300	9/16	1 x 3 1/4	0.51
Stainless Steel					
40RQ-08	1/4	875	1/4	5/8 x 1 13/16	0.07
40RQ-10	5/16	1,525	5/16	3/4 x 2 1/4	0.16
40RQ-12	3/8	2,300	3/8	13/16 x 2 1/2	0.22

Procraft Zinc Plated Snap Links

Snap links provide an easy to use solution for attaching chain and wire rope. They come with or without an eyelet which traps the cable in the snap end. **DO NOT** use for any overhead lifting or load bearing applications.



Stock Code	Size Inches	Opening Inches	Inside Dimensions	Weight per Piece Pounds
40SNP-06	3/16	1/4	1/4 x 2 1/8	0.04
40SNP-08	1/4	5/16	5/16 x 2 1/2	0.08
40SNP-10	5/16	7/16	7/16 x 3 1/8	0.15
40SNP-12	3/8	1/2	1/2 x 3 5/8	0.23
40SNP-14	7/16	3/4	5/8 x 4 3/4	0.38
40SNP-16	1/2	1	11/16 x 5 1/2	0.58
Retainer / Eyelet				
40SNP-R08	1/4	5/16	5/16 x 2 1/2	0.08
40SNP-R10	5/16	7/16	7/16 x 3 1/8	0.15
40SNP-R12	3/8	1/2	1/2 x 3 5/8	0.23
Stainless Steel				
40SNP-SS08	1/4	5/16	5/16 x 2 1/2	0.08
40SNP-SS10	5/16	7/16	7/16 x 3 1/8	0.15
40SNP-SS12	3/8	1/2	1/2 x 3 5/8	0.23



Procraft Galvanized Snap Hooks

Snap hooks are suitable for light weight rigging and general purpose use. They are galvanized with forged traceability on each piece. They have a 4:1 factor of safety and you should **NEVER** exceed Working Load Limits.



Stock Code	Hook Size	Working Load Limit Pounds	Weight per Piece Pounds
36SN-G14	7/16	750	0.23
36SN-G18	9/16	1,000	0.48

Procraft Zinc Plated Eye Snap Hook

This snap hook is generally used in conjunction with tie down webbing or wire rope as quick attachment point. This hook is **NOT** suitable for any lifting or load bearing applications.



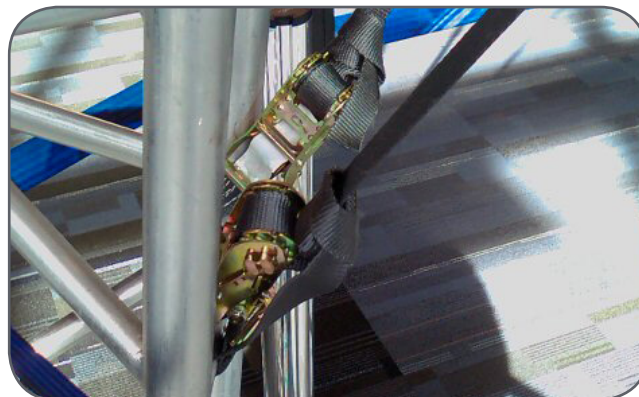
Stock Code	Size Inches	Hole Diameter	Opening Inches	Weight per Piece Pounds
36SN-Z08DI	4	3/4	3/4	0.56

Procraft Zinc Plated 'S' Hooks

'S' Hooks are used for attaching accessories to chain, and also as a side chain end hook for tire chains. Ensure the 'S' is closed to prevent disengagement. This type of fitting is **NOT** load rated and should **NEVER** be used for overhead lifting or critical load bearing applications.



Stock Code	Size	Overall Length	Weight per Piece Pounds
36BC-SHK08	# 8 1/4"	3/4	0.15
36BC-SHK10	# 10 5/16"	1	0.28
36BC-SHK12	# 12 3/8"	1 1/2	0.33



To avoid injury or property damage ensure that the users has sufficient experience in installing this product. These products are not suited for any lifting or critical load bearing applications.

Procraft Danforth Anchors

Anchors are generally sized by its weight in the air. Its holding power is determined by the anchors efficiency multiplied by the weight of the anchor. Anchor efficiency is determined by design, testing and the type of soils which the anchor is used in. Danforth Anchors are for smaller recreational vessels including power boats and sail boats.



Stock Code	Weight Each
06DNFT-G22	22 Pounds
06DNFT-G30	30 Pounds
06DNFT-G44	44 Pounds

Procraft Sledge Hammers

Sledge hammers have a wide variety of uses in Rigging Applications, including installation of Rafting Dogs and Wire Rope Staples. They are supplied with a heavy duty composite handle which can handle all heavy duty applications.



Stock Code	Head Weight	Description	Weight per Piece Pounds
80HSL-H03	3 lbs	18" Oregon Handle	3.15
80HSL-H04FG	4 lbs	Soft 16" Composite Handle	5.25
80HSL-H06FG	6 lbs	Soft 36" Composite Handle	7.50
80HSL-H08FG	8 lbs	Soft 36" Composite Handle	9.50
80HSL-H10FG	10 lbs	Soft 36" Composite Handle	11.50
80HSL-H12FG	12 lbs	Soft 36" Composite Handle	13.50



Procraft Zinc Plated Rafting Dogs

Rafting Dogs are used extensively in the marine and logging industry. They are used to secure wire and strand to logs and timber in a safe and efficient manner. These products are not suited for any lifting or critical load bearing applications.



Stock Code	Size Inches	Rafting Dog Type	Weight per Piece Pounds
44DOG-16	1/2	Hammer Head	0.60
44DOG-20	5/8	Hammer Head	0.93

Procraft Zinc Plated Wire Rope Staples

Wire Rope Staples are used extensively in the marine and logging industry. They are used to secure wire and strand to logs and timber in a safe and efficient manner. These products are not suited for any lifting or critical load bearing applications.



Stock Code	Material Diameter Size Inches	Length Inches	Weight per Piece Pounds
66WR-124	3/8	4	0.29
66WR-1245	3/8	4-1/2	0.30
66WR-164	1/2	4	0.56
66WR-1645	1/2	4-1/2	0.63
66WR-165	1/2	5	0.70
66WR-166	1/2	6	0.84
66WR-2055	5/8	5-1/2	1.10
66WR-206	5/8	6	1.20
66WR-208	5/8	8	1.40



Staples and Rafting Dogs are NOT to be used for critical load bearing applications or overhead lifting.



**PRO SLING &
SAFETY INC.**

Lift with Experience

Head Office

Unit 17, 3 Brewster Rd.

Brampton ON L6T 5G9

Ph: 905 794 3330

Fx: 905 794 1345

Email: info@proslingsafety.com

Ratings shown in this catalogue are based upon the items being new or in "as new" condition. Strengths are shown in either working load limit or rated capacity which is the maximum load that should be applied to the product, or breaking strength where the product must be used with an appropriate design factor applied to calculate the rated capacity of the product. All details are correct at time of printing and specifications may change without notice. It is the customers responsibility to determine the suitability of the product to its intended use, including all industry regulations and guidelines. Careful inspection of any lifting and rigging product is highly recommended for any wear, deformation and misused prior to use.

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