

**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 Safety Pin Shackles in these types of applications.

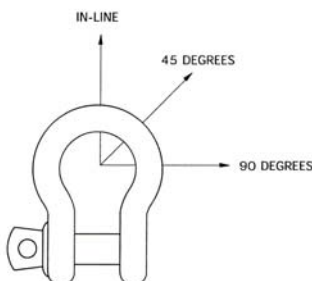
Wesco's shackles are hot dipped galvanized and meet or exceeds US Fed Spec RR-C-271 Type IVA Class 2 Grade A. Working Load Limits (WLL) are marked on all shackles, and the factor of safety is 6:1. The WLL shown below (and marked on shackles) is for in line loading, angular loading should be avoided wherever possible.

## Rigging Practices

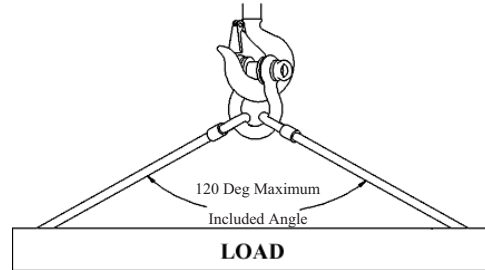
When installing screw pin shackles make sure that the pin is fully engaged and the collar is makes contact with the shackle body, a wrench or screw driver can be used to lock the pin. If you are using a safety pin shackle make sure the nut is secured and the cotter pin is in good condition and inserted 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.

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 is engaged 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.

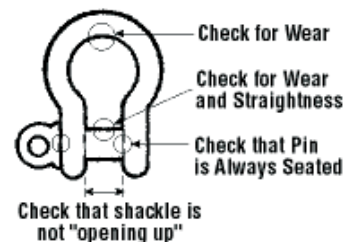


When a shackle is used in a choke hitch, the pin must be secured in the choking eye of the sling. Packing can be placed in shackle pins to make sure the hook are centered. Do not weld any material to the pin or body of the shackle.

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, crack, 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.



**WARNING**

Never exceed working load limit. Incorrect use of shackles can cause death, serious injury or property damage.

Wesco's load rated shackles are hot dipped galvanized and meet or exceeds US Fed Spec RR-C-271 Type IVA Class 2 Grade A. Working Load Limits (WLL) and diameter are forged on all of Wesco's load rated shackles. Look for the 'blue pin' which identifies Wesco's quality and reliability.

## Wesco 'Blue Pin' Screw Pin Anchor Shackles



Stock Code	Size Inches	Working Load Limit	Weight per 100 Pieces Pounds	Pin Diameter	Inside Length	Inside Width @ Pin
50LSP-G06V	3/16	1/3 Ton	6	1/4	7/8	3/8
50LSP-G08V	1/4	1/2 Ton	12	5/16	1 1/8	15/32
50LSP-G10V	5/16	1/4 Ton	20	3/8	1 7/32	17/32
50LSP-G12V	3/8	1 Ton	30	7/16	1 7/16	21/32
50LSP-G14V	7/16	1-1/2 Ton	50	1/2	1 11/16	3/4
50LSP-G16V	1/2	2 Ton	75	5/8	1 7/8	13/16
50LSP-G20V	5/8	3-1/4 Ton	130	3/4	2 3/8	1 1/16
50LSP-G24V	3/4	4-3/4 Ton	225	7/8	2 13/16	1 1/4
50LSP-G28V	7/8	6-1/2 Ton	350	1	3 5/16	1 7/16
50LSP-G32V	1	8-1/2 Ton	500	1 1/8	3 3/4	1 11/16
50LSP-G36V	1 1/8	9-1/2 Ton	700	1 1/4	4 1/4	1 13/16
50LSP-G40V	1 1/4	12 Ton	950	1 3/8	4 11/16	2 1/32
50LSP-G44	1 3/8	13-1/2 Ton	1,250	1 1/2	5 1/4	2 1/4
50LSP-G48	1 1/2	17 Ton	1,650	1 5/8	5 3/4	2 3/8
50LSP-G56	1 3/4	25 Ton	2,900	2	7	2 25/32
50LSP-G64	2	35 Ton	4,500	2 1/4	7 3/4	3 1/4

## Wesco 'Blue Pin' Screw Pin Anchor Shackles



Stock Code	Size Inches	Working Load Limit	Weight per 100 Pieces Pounds	Pin Diameter	Inside Length	Inside Width @ Pin
51LSP-G08	1/4	1/2 Ton	11	5/16	7/8	15/32
51LSP-G10	5/16	3/4 Ton	17	3/8	1 1/32	17/32
51LSP-G12	3/8	1 Ton	29	7/16	1 1/4	21/32
51LSP-G14	7/16	1-1/2 Ton	40	1/2	1 7/16	3/4
51LSP-G16	1/2	2 Ton	60	5/8	1 5/8	13/16
51LSP-G20	5/8	3-1/4 Ton	125	3/4	2	1 1/16
51LSP-G24V	3/4	4-3/4 Ton	200	7/8	2 3/8	1 1/4
51LSP-G28	7/8	6-1/2 Ton	300	1	2 13/16	1 7/16
51LSP-G32	1	8-1/2 Ton	450	1 1/8	3 3/16	1 11/16
51LSP-G36	1 1/8	9-1/2 Ton	650	1 1/4	3 37/64	1 13/16
51LSP-G40	1 1/4	12 Ton	860	1 3/8	3 15/16	2 1/32
50LSP-G44BP	1 3/8	13-1/2 Ton	1200	1 1/2	4 3/8	2 1/4



**WARNING**

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.

## Self Colour Square Head Non-Load Rated 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 100 Pieces Pounds
51TRL-S12	3/8	26
51TRL-S16	1/2	49

## Galvanized Non-Load rated Screw Pin Anchor Shackles

Are generally used in conjunction with chain and wire rope in non-load bearing applications such as guying 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 Steel	Weight per 100 Pieces Pounds	Inside Length	Inside Width @ Pin
50SP-G08	1/4	C-1015	12	1-1/8	1/2
50SP-G10	5/16	C-1015	20	1-7/32	17/32
50SP-G12	3/8	C-1015	30	1-7/16	21/32
50SP-G14	7/16	C-1015	50	1-11/16	23/32
50SP-G16	1/2	C-1015	75	1-7/8	13/16
50SP-G20	5/8	C-1015	130	2-3/8	1 1/16
50SP-G24	3/4	C-1015	225	2-13/16	1 1/4

## Galvanized Non-Load Rated Screw Pin Chain Shackles

Are generally used in conjunction with chain and wire rope in non-load bearing applications such as guying 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 Steel	Weight per 100 Pieces Pounds	Inside Length	Inside Width @ Pin
51SP-G08	1/4	C-1015	11	7/8	1/2
51SP-G10	5/16	C-1015	17	1	17/32
51SP-G12	3/8	C-1015	29	1-3/16	21/32
51SP-G14	7/16	C-1015	40	1-27/32	23/32
51SP-G16	1/2	C-1015	60	1-5/8	13/16
51SP-G20	5/8	C-1015	125	2	1-1/16
51SP-G24	3/4	C-1015	200	2-3/8	1-1/4



**WARNING**

This product is 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.

Wesco's Stainless Steel Shackles are manufactured from grade 304 stainless steel. They are generally used in corrosive environments in conjunction with chain and wire rope as part of non-load bearing applications such as guying and anchoring. These shackles are non-load rated and **SHOULD NOT** be used in any load bearing or lifting applications!

## Stainless Steel Non-Load Rated Screw Pin Anchor Shackles



Stock Code	Size Inches	Grade of Stainless	Weight per 100 Pieces Pounds	Inside Length	Inside Width @ Pin
50LSP-SS08	1/4	Type 304	13	1-1/16	1/2
50LSP-SS10	5/16	Type 304	21	1-5/16	9/16
50LSP-SS12	3/8	Type 304	33	1-7/16	5/8
50LSP-SS16	1/2	Type 304	76	1-13/16	7/8
50LSP-SS20	5/8	Type 304	144	2-5/16	1-1/16
50LSP-SS24	3/4	Type 304	230	2-7/8	1-3/16
50LSP-SS32	1	Type 304	500	3-3/4	1-5/8

## Stainless Steel Non-Load Rated Screw Pin Chain Shackles



Stock Code	Size Inches	Grade of Stainless	Weight per 100 Pieces Pounds	Inside Length	Inside Width @ Pin
51LSP-SS08	1/4	Type 304	13	7/8	15/32
51LSP-SS10	5/16	Type 304	21	1	1/2
51LSP-SS12	3/8	Type 304	33	1-1/4	5/8
51LSP-SS16	1/2	Type 304	76	1-5/8	13/16
51LSP-SS20	5/8	Type 304	144	1-15/16	1-1/16
51LSP-SS24	3/4	Type 304	230	2-5/16	1-3/16
51LSP-SS32	1	Type 304	500	3-1/4	1-9/16



**WARNING**

This product is 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.



**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.

#### Step 1



2. When two clips are required, 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.

#### Step 2



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.

#### Step 3

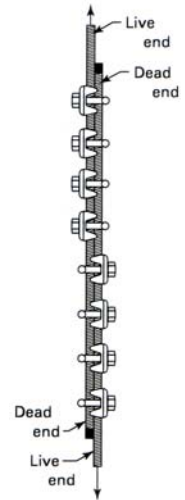


4. Apply an initial load equal to or greater than the loads expected in use. Inspect for proper spacing and re-tighten the nuts to the recommended torque.

### 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.



## Wesco 'Blue Pin' Drop Forged Wire Rope Clips



Stock Code	Size Inches	Weight per 100 Pieces Pounds	Minimum Number of Clips Per Eye	Amount of Rope to Turn Back Inches	Torque in Foot-Pounds
22FG-04	1/8	5	2	3 1/4	4.5
22FG-06	3/16	10	2	3 3/4	7.5
22FG-08	1/4	18	2	4 3/4	15
22FG-10	5/16	31	2	5 1/4	30
22FG-12	3/8	46	2	6 1/2	45
22FG-16	1/2	65	3	11 1/2	65
22FG-18	9/16	90	3	12	95
22FG-20	5/8	100	3	12	95
22FG-24	3/4	150	4	18	130
22FG-28	7/8	215	4	19	225
22FG-32	1	270	5	26	225
22FG-36	1 1/8	283	6	34	225
22FG-40	1 1/4	438	7	44	360



**WARNING**

Strictly adhere to manufacturers instructions on installation. Failure to understand and install wire rope clips incorrectly could result in death, serious injury or property damage.

## Stainless Steel Drop Forged Wire Rope Clips

Wesco's Stainless Steel Drop Forged Clips are manufactured from grade 304 Stainless material. They are generally used in corrosive or harsh environments. Please see installation instructions for standard drop forged wire rope clips on page 6.



Stock Code	Size Inches	Weight per 100 Pieces Pounds	Minimum Number of Clips per Eye	Amount of Rope to Turn Back Inches	Torque in Foot-Pounds
22SS-04	1/8	5	2	3 1/4	4.5
22SS-06	3/16	10	2	3 3/4	7.5
22SS-08	1/4	18	2	4 3/4	15
22SS-10	5/16	31	2	5 1/4	30
22SS-12	3/8	46	2	6 1/2	45
22SS-16	1/2	65	3	11 1/2	65
22SS-20	5/8	100	3	12	95
22SS-24	3/4	142	4	18	130

### **WARNING**

Strictly adhere to manufacturers instructions on installation. Failure to understand and install wire rope clips incorrectly could result in death, serious injury or property damage.

## Zinc Plated Malleable Wire Rope Clips

Wesco's 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 100 Pieces Pounds
22MG-02	1/16	3
22MG-04	1/8	4
22MG-06	3/16	6
22MG-08	1/4	10
22MG-10	5/16	12
22MG-12	3/8	23
22MG-14	7/16	29
22MG-16	1/2	40
22MG-20	5/8	55
22MG-24	3/4	82
22MG-28	7/8	125
22MG-32	1	150

### **WARNING**

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.

## Steel Machine Press Choker Knobs

Wesco's 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-16	1/2" Midget	0.30
30CHK-18	9/16" Midget	0.80
30CHK-20	5/8" Midget	0.80
30CHK-24	3/4" Bantam	1.10

## Logging Choker Hooks (Choker Bells)

Wesco's 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-L625I	Heavy Duty Midget 3/8"-1/2"-9/16"	1.75
30CFER-L320I	Light Bantam Dwarf 1/2"-5/8"-11/16"	2.50

### **WARNING**

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.

## Painted Steel Round Rings

Wesco's steel round rings are generally used as part of multi leg wire rope bridles. They have a 5:1 factor of safety and are marked with the Working Load Limit. **DO NOT** exceed Working Load Limits.



Stock Code	Diameter Inches	Working Load Limit Pounds	Weight per Piece Pounds
40RNG-28/4	7/8" x 4"	7,200	2.7
40RNG-32/4	1" x 4"	10,800	3.5

## Galvanized Pear Links

Wesco's pear links are generally used as part of multi leg wire rope or chain bridles. They have a 6:1 factor of safety and are marked with the Working Load Limit. **DO NOT** exceed Working Load Limits.



Stock Code	Diameter Inches	Working Load Limit Pounds	Weight per Piece Pounds
40SLG-12	3/8"	1,800	0.3
40SLG-16	1/2"	2,900	0.5
40SLG-20	5/8"	4,200	1.1
40SLG-24	3/4"	6,000	2.0

### **WARNING**

Ensure the Working Load Limit of any Links or Rings is greater than the rated capacity of the wire rope or chain bridle. NEVER exceed the working load limit. Unsafe or improper use 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 catch 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.

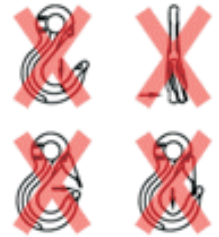
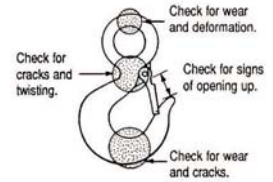
Inspect any signs of excessive wear. Any wear exceeding 10% should be removed from service immediately.

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.



## Painted Alloy Eye Hoist Hooks

Wesco's hoist hooks are suitable for wire rope or chain. They are available with or without a safety latch and are marked with the Working Load Limit. They have a 5:1 factor of safety. **DO NOT** exceed Working Load Limits.



Stock Code	Working Load Limit	Weight per Piece Pounds	Opening Inches
36EYE-A010	1 Ton	0.60	15/16
36EYE-A015	1 1/2 Ton	0.89	1
36EYE-A020	2 Ton	1.44	1 1/16
36EYE-A030	3 Ton	1.94	1 3/16
36EYE-A045	4 1/2 Ton	3.94	1 1/2
36EYE-A070	7 Ton	7.75	1 13/16



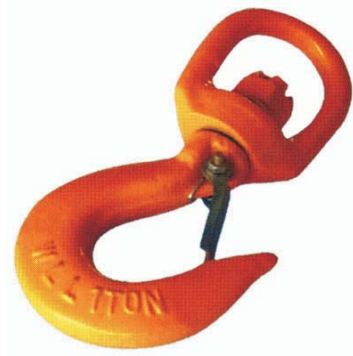
### **WARNING**

Inspect all alloy hooks prior to use. **NEVER** point load or side load a lifting hook. **NEVER** exceed the working load limit. Unsafe or improper use could result in disengagement and the potential of death, serious injury or property damage.



## Painted Alloy Swivel Eye Hoist Hooks

Wesco's swivel hoist hooks are suitable for wire rope or chain. These hooks are designed for load positioning and therefore will not swivel under load. NEVER swivel this type of hook when fully loaded. **DO NOT** exceed Working Load Limits.



Stock Code	Working Load Limit	Weight per Piece Pounds	Opening Inches
36SW-A010	1 Ton	0.75	15/16
36SW-A015	1 1/2 Ton	1.25	1
36SW-A020	2 Ton	2.25	1 1/16
36SW-A030	3 Ton	2.30	1 3/16
36SW-A045	4 1/2 Ton	4.98	1 1/2
36SW-A070	7 Ton	10.29	1 13/16

## Grade 80 Swivel Safety Hooks

Wesco's swivel hooks are suitable for wire rope or chain. These hooks are supplied with a bronze bushing which is designed for load positioning and therefore will not swivel under load. They have a trigger release that will not release when loaded. They have a 4:1 factor of safety. **DO NOT** exceed Working Load Limits.



Stock Code	Chain Size	Working Load Limit	Weight per Piece Pounds
71HSA-SE08	1/4" - 5/16"	3,500lbs	2.4
71HSA-SE12	3/8"	7,100lbs	4.4
71HSA-SE16	1/2"	12,000lbs	8.4



If you are unsure with the correct application and safe use of these products please check with Wesco. Unsafe or improper use could result in disengagement and the potential of death, serious injury or property damage.

"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.

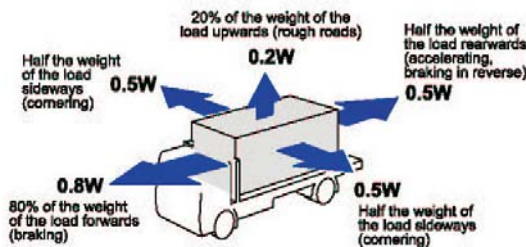
**Forward Force** = 80% of cargo weight when breaking while driving straight ahead.

**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 traveling 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 Wesco 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.

## Inspection and Care in Use

Always inspect load securement devices regular 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.

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 looser or unfastened.



**WARNING**

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.

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.

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

## 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. **DO NOT** use in overhead applications and **NEVER** exceed the rated capacity of the chain.



Stock Code	Chain Size Inches	Feet Per Drum	Breaking Strength Pounds	Weight per 100 feet Pounds
0807-08	1/4	800	12,600	94
0807-10	5/16	550	18,800	111
0807-12	3/8	400	26,400	150

## Grade 70 Gold Chromate Clevis Grab Hook

Grade 70 Grab Hooks are to be used with Grade 70 transport chain for tie down applications. Grab hooks are designed to grab a chain link only. 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 100 Pieces Pounds
38CL-A08	1/4	3,150	25
38CL-A10	5/16	4,700	50
38CL-A12	3/8	6,600	100
38CL-A14	7/16	8,800	130
38CL-A12	1/2	11,300	210

## Grade 70 Gold Chromate Clevis Slip Hook

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 100 Pieces Pounds
39CL-A(L)08	1/4	2,750	50
39CL-A(L)10	5/16	4,300	75
39CL-A(L)12	3/8	5,250	120
39CL-A(L)16	1/2	9,000	275


**WARNING**

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.

## Forged Lever Type Loadbinders (Cinches)

Wesco's Loadbinders are to be used with Grade 70 transport chain for tie down applications. 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
04AA-08	1/4	4,100	3.00
04AA-12	5/16 to 3/8	5,400	7.00
04AB-16	3/8 to 1/2	8,200	10.50

## Forged Ratchet Type Loadbinders (Cinches)

Wesco's Ratchet Loadbinders are to be used with Grade 70 transport chain for tie down applications. 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-12	5/16 to 3/8	5,400	12.00
04RA-16	3/8 to 1/2	8,200	14.00



### WARNING

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.

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.

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

## Truck Winches & Accessories

Wesco's 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
44WN-PRT	Standard	Portable	5,000lbs
44WN-PRTLTP	Low Profile	Portable	5,000lbs
44WN-REG	Standard	Weld-On	5,400lbs
44WN-RHM	Low Profile	Weld-On	5,400lbs
44WNBAR-STD34A	Combination Winch Bar	≈	≈
44WN-WNDR	Strap Winder	≈	≈

## 4" Truck Winch Straps

Wesco's 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 fitting to the load. Straps can be manufactured to customers requirements including varying lengths, special end fittings and ink marked with companies name.



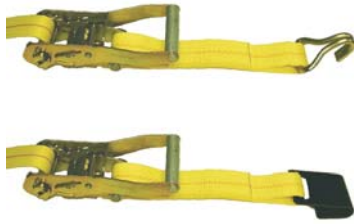
Stock Code	Description	Rated Capacity	Weight per Piece Pounds
90TIE-4.0X30D	4" x 30 feet Yellow Dee Ring	5,400lbs	5.1
90TIE-4.0X30DB	4" x 30 feet Blue Dee Ring	5,400lbs	5.1
90TIE-4.0X30DG	4" x 30 feet Green Dee Ring	5,400lbs	5.1
90TIE-4.0X30DR	4" x 30 feet Red Dee Ring	5,400lbs	5.1
90TIE-4.0X40D	4" X 40 feet Yellow Dee Ring	5,400lbs	6.8
90TIE-4.0X30F	4" x 30 feet Yellow Flat Hook	5,400lbs	5.2

**WARNING**

To avoid injury inspect before use, check webbing for cuts and abrasion. Protect any web belts from sharp corners or edges. Always ensure truck winches are installed correctly and free from defect or damage. Never exceed rated capacities. Death or injury can occur from improper use.

## 2" Ratchet Tie Down Straps

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	Weight per Piece Pounds
90TIE-SET21	Flat Hooks x 30 feet	3,335lbs	6.0
90TIE-SET22	Wire Hooks x 30 feet	3,335lbs	5.8
90TIE-SET2225	Wire Hooks x 25 feet	3,335lbs	5.4
90TIE-SET2220	Wire Hooks x 20 feet	3,335lbs	5.0
90TIE-SET2215	Wire Hooks x 15 feet	3,335lbs	4.6
90TIE-2.0RL08	Endless Loop x 8 Feet	3,670lbs	3.4
90TIE-2.0RL12	Endless Loop x 12 Feet	3,670lbs	3.7
90TIE-2.0RL16	Endless Loop x 16 Feet	3,670lbs	4.0
90TIE-2.0RL20	Endless Loop x 20 Feet	3,670lbs	4.4
90TIE-ROPEE	'E' Track Tie Off & Dee Ring	1,000lbs	1.0

## 1" 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	Weight per Piece Pounds
90TIE-1X15WSET	15ft - Wire Hook	835lbs	1.50
90TIE-1X15WDSET	15ft - Wire Hook & Dee Ring	835lbs	1.40
90TIE-1X20WDSET	20ft - Wire Hook & Dee Ring	835lbs	1.6
90TIE-1.0RATEND	Endless Loop x 12 Feet	1000lbs	1.2

## 1" Cam Buckle Tie Down Sets

This type of strap is commonly used for small utility, van tie downs or consumer applications. Cam buckle assemblies are for very light duty applications, please consider using a heavier duty ratchet tie down for larger/heavier loads.



Stock Code	Description	Weight per Piece Pounds
90TIE-1X6SHCAM	1" x 6 feet Blue - 'S' Hooks	0.76
90TIE-1X10JHCAM	1" x 10 feet Blue - 'J' Hooks	0.85
90TIE-1X10SHCAM	1" x 10 feet Blue - 'S' Hooks	0.85
90TIE-1X15JHCAM	1" x 15 feet Blue - 'J' Hooks	0.92
90TIE-1X15SHCAM	1" x 15 feet Blue - 'S' Hooks	0.92



### WARNING

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 and general applications. The chain is generally available in either a Galvanized, Self Colour or Stainless Steel finish. Some chains are also available with a zinc plated / blue chrome finish. This type of chain is not suitable for lifting or any critical load bearing applications.

## Grade 30 Chain

Wesco's grade 30 chain is a low carbon chain used for many hardware type applications and light duty marine use. This chain is **NOT** suitable for overhead lifting.



Diameter	Length Per Drum	Weight per 100 Feet Pounds	Self Colour Stock Code	Zinc Plated Stock Code	Galvanized Stock Code
1/8	1,000	22	08PR-TS04	~	08PR-TG04
3/16	1,000	39	08PR-TS06	08PR-TZ06	08PR-TG06
1/4	800	63	08PR-TS08	08PR-TZ08	08PR-TG08
5/16	550	83	08PR-TS10	08PR-TZ10	08PR-TG10
3/8	400	142	08PR-TS12	08PR-TZ12	08PR-TG12
1/2	200	270	08PR-TS16	08PR-TZ16	08PR-TG16
5/8	150	336	08PR-TS20	~	08PR-TG20
3/4	100	607	08PR-TS24	~	08PR-TG24

## Stainless Steel Grade 316

Wesco's 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 applications and **NEVER** exceed the rated capacity of the chain.



Stock Code	Chain Size Inches	Breaking Strength Pounds	Weight per 100 feet Pounds
08SS-04W	1/8	1,500	17
08SS-06W	3/16	4,800	34
08SS-08W	1/4	8,000	71
08SS-10W	5/16	11,400	91
08SS-12W	3/8	14,200	138

## Long Link Mooring Chain

Wesco's long link mooring chain is used extensively for mooring and anchoring docks, floats and buoys. 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	Link Inside Dimensions Inches (L x W)	Breaking Strength Pounds	Weight per 100 ft. Pounds
08MO-GV12	3/8 (GV)	200	2.40 x 1.50	3,400	212
08MO-GV16	1/2 (GV)	200	3.42 x 1.80	6,000	368
08MO-GV24	3/4 (GV)	200	4.92 x 2.95	42,082	466
08MO-SC24	3/4 (SC)	200	4.92 x 2.95	42,082	466
08MO-GV32	1 (GV)	200	6.10 x 3.93	78,859	775
08MO-SC32	1 (SC)	200	6.10 x 3.93	78,859	775
08MO-SC36	1 1/8 (SC)	200	6.60 x 3.98	91,268	1,093


**WARNING**

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.

ANCHOR CHAIN is used for both anchoring and mooring applications. The chain is suitable to fit vessels gypsy wheels and can be supplied in various grades. Finish is either Galvanized or Self Colour. Stud link anchor chain and anchors can be ordered in to customers specifications and requirements.

## Stud Link Anchor Chain

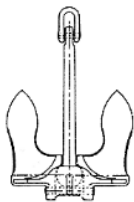
Wesco's anchor chain dimensions are standardized to conform with charts published by various classification societies (ABS, Lloyds, DNV etc.). This type of chain is generally used in shipping, mooring and heavy anchoring applications. It is available in either grade 2 or grade 3 with a Galvanized or Self Colour finish. Lengths are generally 90 foot shots (27.5 metres) and can be supplied with Kenter shackles to attach lengths together.



Stock Code	Chain Size Inches	Length	Breaking Strength Pounds	Weight per 90 ft. Shot Pounds
08STD-2G20G	5/8 (GV Grade 2)	90 Foot Shot	33,220	358
08STD-2G24G	3/4 (GV Grade 2)	90 Foot Shot	47,600	523
08STD-2G28G	7/8 (GV Grade 2)	90 Foot Shot	64,400	684
08STD-2G32G	1 (GV Grade 2)	90 Foot Shot	83,600	860
08STD-3G36	1 1/8 (SC Grade 3)	90 Foot Shot	150,000	1,080
08STD-3G40	1 1/4 (SC Grade 3)	90 Foot Shot	184,000	1,350
08STD-3G42	1 5/16 (SC Grade 3)	90 Foot Shot	203,000	1,490
08STD-3G48	1 1/2 (SC Grade 2)	90 Foot Shot	183,500	1,940
08STD-2G56	1 3/4 (SC Grade 2)	90 Foot Shot	247,000	2,590
08STD-2G64	2 (SC Grade 2)	90 Foot Shot	318,000	3,360

## Stockless 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. Wesco Stockless Anchors are used mainly on smaller fishing type vessels.



Stock Code	Weight Each
06STLS-S350	350 Pounds
06STLS-S500	500 Pounds
06STLS-S750	750 Pounds

## 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. Wesco Danforth Anchors are for smaller recreational vessels including power boats and sail boats.



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



### WARNING

To avoid injury and property damage, be sure to use the correct size of chain and anchor for your application. If you are unsure please consult Wesco or a certified engineer specializing in the marine environment.



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.

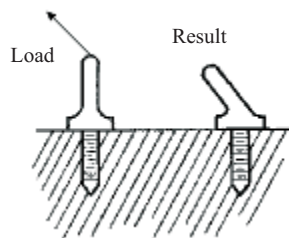
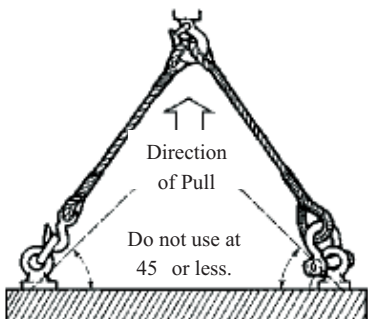
## Eyebolt Types

Eyebolts come in many varying configurations. You can get eyebolts with shoulder nut eyebolts, regular (shoulder less) nut eyebolts, machinery eyebolts and swivel hoist rings. 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. Shoulder less eyebolts are used for inline 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 Wesco for further details).

## 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. Shoulder less eyebolts are fine for vertical loading but can bend and fail under angular loading. Shoulder eyebolts loose 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 seat 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. Loads must always be applied parallel to the plane of the eye and never across the plane of the eye.

Applying load in this direction will result in a bent eyebolt and an unsafe lift.

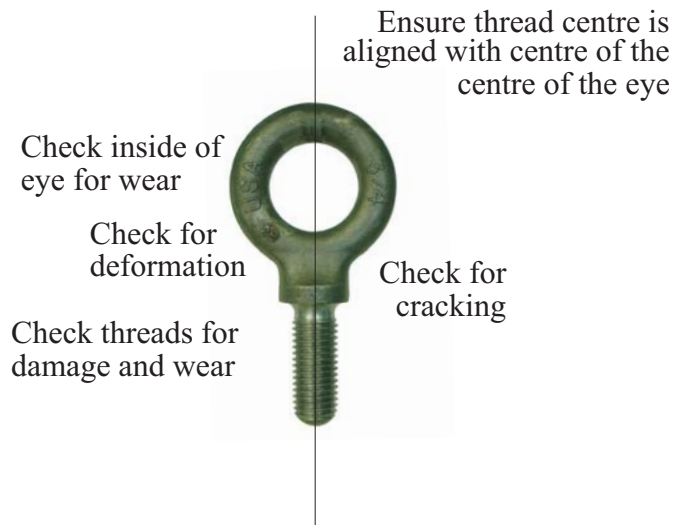


5. When using lifting slings having two or more legs, make sure the load on each leg is calculated based on the angular loading. Use an eyebolt with a shoulder or swivel hoist ring with the correct WLL suited to the angle being lifted. **DO NOT** use eyebolts at an angle of 45 degrees or less.
6. **DO NOT** reeve a sling through a pair of bolts, attach a separate sling to each eyeballed. **NEVER** insert the point of a hook in an eyebolt, use a shackle instead.
7. **DO NOT** use wrenches, bars etc to tighten standard eyebolts. Hand tightening is recommended. Install hoist rings with recommended torque with a torque wrench.
8. **DO NOT** use a single eyebolt to lift a load that can rotate.
9. **DO NOT** exceed the rated capacity. **DO NOT** shock load eyebolts, gradually increase lifting with a steady and even lift.
10. 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 shanks 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 an eyebolts. Destroy any eyebolts showing signs of alteration.



**WARNING**

To avoid injury or property damage ensure that instructions are followed carefully and eyebolts are always inspected before each use. If unsure on instructions or you are using swivel hoist rings please check with Wesco for further details.

SHOULDER NUT EYEBOLTS are available in a long shank style, a machinery eyebolt and screw type eyebolt. Shoulder nut eyebolts can be used in angular lifting.

## Galvanized Shoulder Nut Eyebolts

Wesco shoulder nut eyebolts are 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	WLL @ 90° to Load	Eye Diameter	Weight per 100 Pieces Pounds
28BSH-01	1/4 X 2	650	0.50	6.0
28BSH-02	1/4 X 4	650	0.50	9.0
28BSH-03	5/16 X 2 1/4	1,200	0.62	10.0
28BSH-04	5/16 X 4 1/4	1,200	0.62	15.0
28BSH-05	3/8 X 2 1/2	1,550	0.75	20.0
28BSH-06	3/8 X 4 1/2	1,550	0.75	25.0
28BSH-06X	3/8 x 6	1,550	0.75	32.0
28BSH-07	1/2 X 3 1/4	2,600	1.00	40.0
28BSH-08	1/2 X 6	2,600	1.00	70.0
28BSH-08X	1/2 x 8	2,600	1.00	89.0
28BSH-09	5/8 X 4	5,200	1.25	104.0
28BSH-10	5/8 X 6	5,200	1.25	120.0
28BSH-10X	5/8 x 8	5,200	1.25	150.0
28BSH-11	3/4 X 4 1/2	7,200	1.50	125.0
28BSH-12	3/4 X 6	7,200	1.50	150.0
28BSH-12X	3/4 x 8	7,200	1.50	175.0
28BSH-14	1 x 6	13,300	2.00	390.0
28BSH-15	1 x 9	13,300	2.00	470
28BSH-15X	1 x 12	13,300	2.00	525.0

## Machinery Eyebolts

Wesco machinery eyebolts are suitable for equipment lifts. It has a short thread perfect for installing in electric motors, gearboxes, and other type types of equipment with pre sunk holes. this type of eyebolts is also available with a metric thread.



Stock Code	Diameter x Thread Length	Working Load Limit @ 90 Degrees	Weight per 100 Pieces Pounds
28BTH-08	1/4 X 1	500	5
28BTH-10	5/16 X 1 1/8	900	9
28BTH-12	3/8 X 1 1/4	1,300	16
28BTH-16	1/2 X 1 1/2	2,400	34
28BTH-20	5/8 X 1 3/4	4,000	65
28BTH-24	3/4 X 2	5,000	100
28BTH-28	7/8 X 2 1/4	7,000	150
28BTH-32	1 X 3	9,000	220



**WARNING**

To avoid injury or property damage ensure that instructions are followed carefully and eyebolts are always inspected before each use. If unsure on instructions or you are using swivel hoist rings please check with Wesco for further details.



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. 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).
2. Ensure that there is thread engagement at either end of at least 1.5 times the thread diameter.

3. When tightening a turnbuckle, do not apply more torque than you would to a bolt of equal size.

4. 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.

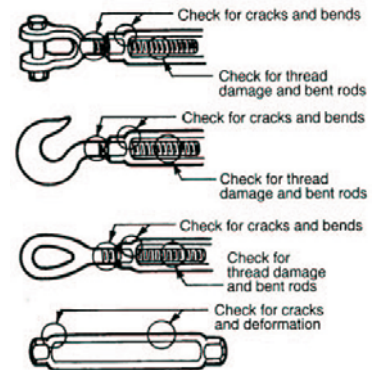
5. Lubricate threads and body for extra corrosion protection.

## 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.



## Galvanized Turnbuckles

Wesco's turnbuckles meet the requirements of US Fed. Spec FF-T-792B Type 1, Form 1 (open body).



Size Inches	Working Load Limit Pounds	Weight Pounds Each	Eye & Eye Stock Code	Jaw & Jaw Stock Code
1/4 x 4	500	0.40	84TRN-EE08/04	84TRN-JJ08/04
5/16 x 4 1/2	800	0.58	84TRN-EE10/04	84TRN-JJ10/04
3/8 x 6	1,200	0.93	84TRN-EE12/06	84TRN-JJ12/06
1/2 x 6	2,200	1.68	84TRN-EE16/06	84TRN-JJ16/06
1/2 x 9	2,200	2.07	84TRN-EE16/09	84TRN-JJ16/09
1/2 x 12	2,200	2.37	84TRN-EE16/12	84TRN-JJ16/12
5/8 x 6	3,500	3.00	84TRN-EE20/06	84TRN-JJ20/06
5/8 x 9	3,500	3.22	84TRN-EE20/09	84TRN-JJ20/09
5/8 x 12	3,500	3.52	84TRN-EE20/12	84TRN-JJ20/12
3/4 x 6	5,200	4.68	84TRN-EE24/06	84TRN-JJ24/06
3/4 x 9	5,200	5.27	84TRN-EE24/09	84TRN-JJ24/09
3/4 x 12	5,200	5.65	84TRN-EE24/12	84TRN-JJ24/12



### WARNING

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 Blocks are normally used when its necessary to change the direction of pull line. They can be used with either wire rope or synthetic rope.

## 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 opposite to calculate the total load, by multiplying the line pull by the angle factor and then add 10% for sheave frictions.

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

## Black Painted Yarding Blocks, Single & Double Sheave

Wesco's yarding blocks have a bronze bearing and can be used with wire rope or synthetic rope. They are mostly suited to light duty applications where hoisting speed are not high. They are offered with either a single sheave or double sheave. Inspection and maintenance is important, never use a block with a fatigue sheaved, damaged head fitting or pin that is not original manufacturers equipment.



Stock Code	Size Inches	Working Load Limit Pounds	Weight per Piece Pounds	Maximun Dia. Wire Rope	Single or Double?
07YD-S03	3	1,100	2.36	5/16	Single
07YD-S04	4	2,200	3.80	3/8	Single
07YD-S05	5	3,300	6.75	7/16	Single
07YD-S06	6	4,400	10.75	9/16	Single
07YD-S08	8	7,700	21.50	3/4	Single
07YD-S10	10	8,800	33.00	7/8	Single
07YD-D04	4	2,200	5.70	3/8	Double
07YD-D05	5	3,300	10.12	7/16	Double
07YD-D06	6	4,400	16.80	9/16	Double
07YD-D08	8	7,700	33.15	3/4	Double

## Galvanized Yarding Blocks Single Sheave

Wesco's galvanized yarding blocks have a bronze bearing and can be used with wire rope or synthetic rope. They are mostly suited to light duty applications where hoisting speed are not high. The galvanized body makes it ideal for the marine environment. Inspection and maintenance is important, never use a block with a fatigue sheaved, damaged head fitting or pin that is not original manufacturers equipment.



Stock Code	Size Inches	Working Load Limit Tons	Weight per Piece Pounds	Maximun Dia. Wire Rope	Single or Double?
07YD-S05G	5	4 1/2	7.0	7/16	Single
07YD-S06G	6	6	11.0	9/16	Single



### WARNING

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.