

RECOMMENDED OPERATING PRACTICES FOR WEB SLINGS

MECHANICAL CONSIDERATIONS

- Determine the weight of the load
- Select sling having suitable characteristics for the type of load, hitch and environment.
- Slings shall not be loaded in excess of the rated capacity. Consideration should be given to the angle from the horizontal (load to sling angle) which affects rated capacity.
- Slings with fittings which are used in a choker hitch shall be of sufficient length to assure that the choking action is on the webbing.
- Slings used in a basket hitch shall have the load balanced to prevent slippage.
- Slings shall not be dragged on the floor or over an abrasive surface.
- Slings shall not be twisted or tied into knots, or joined by knotting.
- Slings shall not be pulled from under loads when the load is resting on the sling.
- Slings shall always be protected from being cut by sharp corners, sharp edges, protrusions or abrasive surfaces.
- Do not drop slings equipped with metal fittings.
- The opening in fittings shall be the proper shape and size to insure that the fitting will seat properly into the hook or their attachments.

ENVIRONMENTAL CONSIDERATIONS

Slings should be stored in a cool, dry and dark place; and should not be exposed to ultra violet light (sunlight). Chemically active environments can affect the strength of synthetic web slings in varying degrees ranging from none to total degradation. The sling manufacturer should be consulted before slings are used in chemically active environments.

ACIDS

- Nylon is subject to degradation in acids, ranging from none to total degradation.
- Polyester is resistant to many acids, but is subject to degradation ranging from none to moderate in some acids.
- Each application shall be evaluated, taking into consideration the following; Type of Acid, Exposure Conditions, Concentration, and Temperature.

ALKALIS

- Polyester is subject to degradation in alkalis, ranging from none to total degradation.
- Nylon is resistant to many alkalis, but is subject to degradation ranging from none to moderate in some alkalis.
- Each application shall be evaluated taking into consideration the following; Type of Alkalis, Exposure Conditions, Concentration, and Temperature.

Nylon and Polyester slings shall not be used at a temperature in excess of 194°F (90°C). However, they may be used in temperatures as low as -40°F (-40°C). For sling applications where temperatures exceed 194°F (90°C) contact your sling fabricator supplier.

Slings incorporating aluminum fittings shall not be used where fumes, vapors, sprays, mists or liquids of alkalis and/or acids are present.

Environments in which synthetic web slings are continuously exposed to ultra violet light (sunlight) can affect the strength of synthetic webbing varying degrees, ranging from slight to total degradation is also cumulative. Factors which can determine the degree of strength loss are: 1/ Length of time of continuous exposure, 2/ Sling construction and design, 3/ Other environmental factors such as weather conditions and geographic location.

Suggested procedures to minimize the effects of ultra violet light (sunlight); 1/ Store slings in cool, dry and dark place when not being used for prolonged periods of time, 2/ Inspect slings weekly or more often, depending on frequency of use.

Visual indications; 1/ Bleaching out of sling color, 2/ Increased stiffness of slings material, 3/ Surface abrasions in areas not normally in contact with the load.

Recommended Operating Practices are in accordance with the Web Sling & Tie Down Association

HOW TO ORDER

STYLE OF HITCH TO BE USED

Slings can be used in any of the three hitches illustrated. Some slings are designed to be used in a specific hitch application only.



Vertical



Choker



Basket

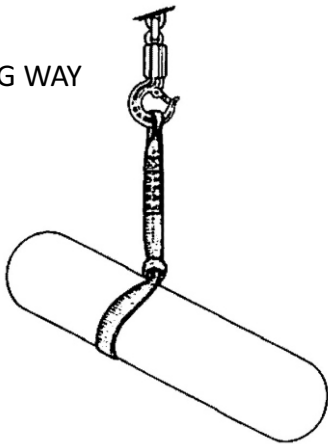
BASIC RULES OF HITCHING

Be sure the slings you intend to use is strong enough for the job. Consult Manufacturer's Rated Capacity chart or refer to identification tag on the actual sling.

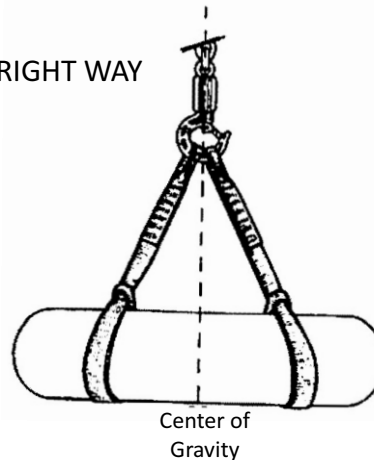
CONTROL AND BALANCE

Use a hitch that will keep the load under control at all times and be sure the lifting device is directly over the center of gravity.

WRONG WAY

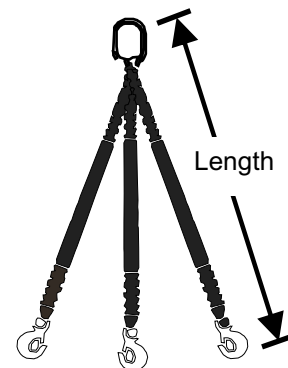
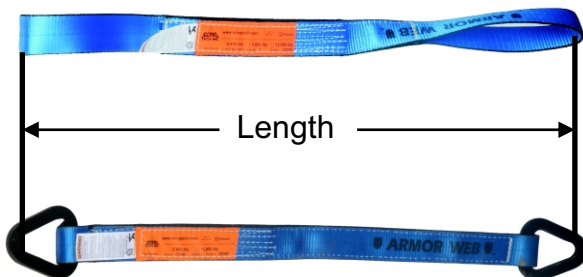


RIGHT WAY



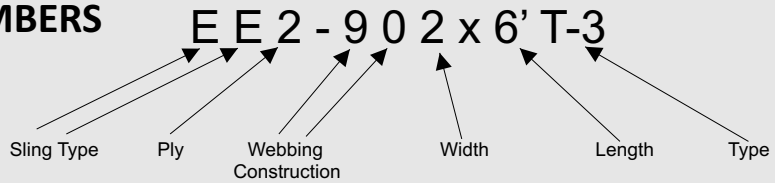
MEASURED LENGTH

All web slings, and web sling bridle assemblies are measured pull to pull:



RATED CAPACITIES

ORDER USING PART NUMBERS



TYPE 1 TRIANGLE - CHOKER



Type 1 (TC) slings have a steel triangle one end and a steel choker on the other end. This sling can be used in vertical, choker or basket hitches. The triangle fits easily through the choker to provide a smooth, even choke.

SINGLE PLY

STOCK CODE NO.	WIDTH INCHES	VERTICAL POUNDS	CHOKER POUNDS	BASKET POUNDS
TC1-902	2	3,100	2,480	6,200
TC1-903	3	4,700	3,760	9,400
TC1-904	4	6,200	4,960	12,400
TC1-906	6	9,300	7,440	18,600
TC1-908	8	11,750	9,400	23,500
TC1-910	10	14,700	11,760	29,400
TC1-912	12	17,650	14,120	35,300

DOUBLE PLY

STOCK CODE NO.	WIDTH INCHES	VERTICAL POUNDS	CHOKER POUNDS	BASKET POUNDS
TC2-902	2	6,200	4,960	12,400
TC2-903	3	8,800	7,040	17,600
TC2-904	4	11,000	8,800	22,000
TC2-906	6	16,500	13,200	33,000
TC2-908	8	22,750	18,200	45,500
TC2-910	10	28,400	22,720	56,800
TC2-912	12	34,100	27,280	68,200

TYPE 2 TRIANGLE - TRIANGLE



Type 2 (TT) slings have a steel triangle fitting on each end. This type of sling can only be used in vertical and basket hitches. These slings cannot be used in a choker hitch.

SINGLE PLY

STOCK CODE NO.	WIDTH INCHES	VERTICAL POUNDS	BASKET POUNDS
TT1-902	2	3,100	6,200
TT1-903	3	4,700	9,400
TT1-904	4	6,200	12,400
TT1-906	6	9,300	18,600
TT1-908	8	11,750	23,500
TT1-910	10	14,700	29,400
TT1-912	12	17,650	35,300

DOUBLE PLY

STOCK CODE NO.	WIDTH INCHES	VERTICAL POUNDS	BASKET POUNDS
TT2-902	2	6,200	12,400
TT2-903	3	8,800	17,600
TT2-904	4	11,000	22,000
TT2-906	6	16,500	33,000
TT2-908	8	22,750	45,500
TT2-910	10	28,400	56,800
TT2-912	12	34,100	68,200

⚠ WARNING MAXIMUM RATED CAPACITIES FOR NEW SLINGS. ⚠ DO NOT EXCEED

RATED CAPACITIES

TYPE 3 & 4 - EYE & EYE



Type 3 (EE) straight eye & eye slings can be used in a vertical, choker or basket hitch. These slings have a straight eye at each end that makes it easier to remove them after the load is in place. Tapered eyes are supplied on slings with a web width of 3" or larger. Eye & eye slings will be supplied with T-3 eyes unless otherwise specified.



Type 4 (EE) twisted eye & eye slings are similar to Type 3 slings except the eyes are turned 90 degrees to the sling body. This allows for a smoother choker hitch and a better fit in a basket hitch. Tapered eyes are supplied on slings with a web width of 3" or larger.

SINGLE PLY

STOCK CODE NO.	WIDTH INCHES	VERTICAL POUNDS	CHOKER POUNDS	BASKET POUNDS
EE1-901	1	1,600	1,280	3,200
EE1-902	2	3,100	2,480	6,200
EE1-903	3	4,700	3,760	9,400
EE1-904	4	6,200	4,960	12,400
EE1-906	6	9,300	7,440	18,600
EE1-908	8	11,750	9,400	23,500
EE1-910	10	14,700	11,760	29,400
EE1-912	12	17,650	14,120	35,300

DOUBLE PLY

STOCK CODE NO.	WIDTH INCHES	VERTICAL POUNDS	CHOKER POUNDS	BASKET POUNDS
EE2-901	1	3,100	2,480	6,200
EE2-902	2	6,200	4,960	12,400
EE2-903	3	8,800	7,040	17,600
EE2-904	4	11,000	8,800	22,000
EE2-906	6	16,500	13,200	33,000
EE2-908	8	22,750	18,200	45,500
EE2-910	10	28,400	22,720	56,800
EE2-912	12	34,100	27,280	68,200

TYPE 5 - ENDLESS



Type 5 (EN) endless slings the webbing is overlapped to form a continuous endless sling. The wear points on these slings can be rotated to increase sling life. This type of sling can be used in a vertical, choker or basket hitch.

SINGLE PLY

STOCK CODE NO.	WIDTH INCHES	VERTICAL POUNDS	CHOKER POUNDS	BASKET POUNDS
EN1-901	1	3,200	2,560	6,400
EN1-902	2	6,200	4,960	12,400
EN1-903	3	9,400	7,520	18,800
EN1-904	4	12,400	9,920	24,800
EN1-906	6	18,600	14,880	37,200
EN1-908	8	21,150	16,920	42,300
EN1-910	10	26,450	21,160	52,900
EN1-912	12	31,750	25,400	63,500

DOUBLE PLY

STOCK CODE NO.	WIDTH INCHES	VERTICAL POUNDS	CHOKER POUNDS	BASKET POUNDS
EN2-901	1	6,200	4,960	12,400
EN2-902	2	12,400	9,920	24,800
EN2-903	3	17,600	14,080	35,200
EN2-904	4	22,000	17,600	44,000
EN2-906	6	33,000	26,400	66,000
EN2-908	8	42,350	33,880	84,700
EN2-910	10	52,900	42,320	105,800
EN2-912	12	63,500	50,800	127,000

⚠ WARNING MAXIMUM RATED CAPACITIES FOR NEW SLINGS. ⚠ DO NOT EXCEED

RATED CAPACITIES

THREE & FOUR PLY - EYE & EYE

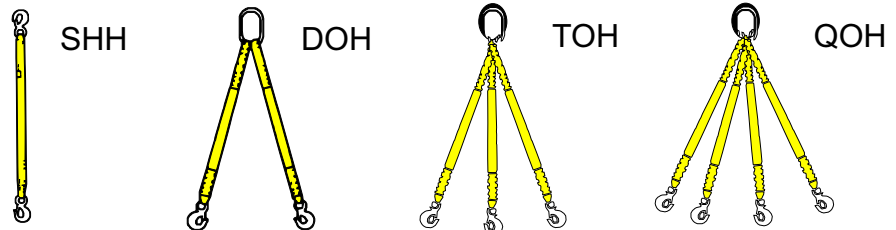
Three and four ply slings are only available in Type 3 or 4. They can be used in a vertical, choker and basket hitch. The eyes are tapered on sling width's of 3" or greater. Type 3 is standard. Type 4 can be supplied upon request.

THREE PLY				
STOCK CODE NO.	WIDTH INCHES	VERTICAL POUNDS	CHOKER POUNDS	BASKET POUNDS
EE3-901	1	4,100	3,300	8,200
EE3-902	2	8,300	6,600	16,600
EE3-903	3	12,500	10,000	25,000
EE3-904	4	16,000	12,800	32,000
EE3-906	6	23,000	18,400	46,000
EE3-908	8	30,700	24,500	61,400
EE3-910	10	36,800	29,400	73,600
EE3-912	12	44,000	35,200	88,000

FOUR PLY				
STOCK CODE NO.	WIDTH INCHES	VERTICAL POUNDS	CHOKER POUNDS	BASKET POUNDS
EE4-901	1	5,500	4,400	11,000
EE4-902	2	11,000	8,800	22,000
EE4-903	3	16,450	13,160	32,900
EE4-904	4	20,400	16,320	40,800
EE4-906	6	30,600	24,480	59,600
EE4-908	8	39,700	31,700	61,200
EE4-910	10	49,600	39,600	99,200
EE4-912	12	59,500	47,600	119,000

BRIDLE SLINGS

Special purpose slings with various combinations of hardware and loops. Available in Single leg and multiple leg combinations. Available in nylon and polyester.



STOCK CODE NO.	LEG WIDTH	PLY	VERTICAL POUNDS	ANGLE		
				60°	45°	30°
SINGLE LEG						
EE1-901SOH	1"	1	1,600	*	*	*
EE2-901SOH	1"	2	3,100	*	*	*
EE1-902SOH	2"	1	3,100	*	*	*
EE2-902SOH	2"	2	6,200	*	*	*
DOUBLE LEG						
EE1-901DOH	1"	1	*	2,771	2,262	1,600
EE2-901DOH	1"	2	*	5,369	4,383	3,100
EE1-902DOH	2"	1	*	5,369	4,383	3,100
EE2-902DOH	2"	2	*	10,738	8,767	6,200
THREE LEG						
EE1-901TOH	1"	1	*	4,156	3,393	2,400
EE2-901TOH	1"	2	*	8,053	6,575	4,650
EE1-902TOH	2"	1	*	8,053	6,575	4,650
EE2-902TOH	2"	2	*	16,107	13,150	9,300
FOUR LEG						
EE1-901QOH	1"	1	*	4,160	3,360	2,400
EE2-901QOH	1"	2	*	8,320	6,720	4,800
EE1-902QOH	2"	1	*	8,320	6,720	4,800
EE2-902QOH	2"	2	*	16,640	13,440	9,600

⚠ WARNING MAXIMUM RATED CAPACITIES FOR NEW SLINGS. **⚠ DO NOT EXCEED**

WEB SLING INSPECTION CRITERIA

It is important to inspect your web slings after purchase.

TYPES OF INSPECTION

A. Initial Inspection - Before any new or repaired web sling is placed in service, it shall be inspected by a designated competent person to ensure that the correct web sling is being used, as well as to determine that the web sling meets the requirements of this specification.

B. Frequent Inspection - This inspection should be conducted by the person handling the sling each time the sling is used.

C. Periodic Inspection - This inspection shall be conducted by designated personnel. Frequency of inspection should be based on; Frequency of web sling use, Severity of service conditions, experience gained on the service life of web slings used in similar applications. Inspections should be conducted at least annually.

Often riggers confuse a cut sling for a broken sling. View the pictures below to see the difference. The cut sling has come into contact with something sharp that has sliced the sling in half. (You can tell by the clean edge). The broken sling has been pulled to destruction on our test bed. The ends are frayed and melted from heat friction.



CUT SLING



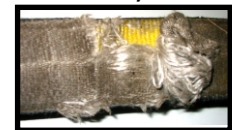
BROKEN SLING

Remove the sling from service if any of the following is visible:

- If sling rated capacity or sling material identification is missing or not legible
- Acid or alkalis burns
- Melting, charring or weld spatters on any part of the web sling
- Holes, tears, cuts, snags or embedded particles
- Broken or worn stitching in load bearing splices
- Excessive abrasive wear
- Knots in any part of the web sling
- Excessive pitting, or corrosion, or cracked, or distorted, or broken fittings
- Any other visible damage that causes doubt as to the strength of the sling



Cut Eye



Snag



Illegible Tag

Inspection Records

Written inspection records, utilizing the identification for each sling as established by the user, should be kept on file for all web slings. These records should show a description of the sling and its condition on each periodic inspection.

Repair of Web Slings

Web slings with structural damage shall never be repaired. Web slings utilizing hardware may be rewebbed. The fittings must be visually inspected and proof tested before they can be used.