SpanSet®

02

Fall Protection
Lifting
Cargo Control
Safety Management

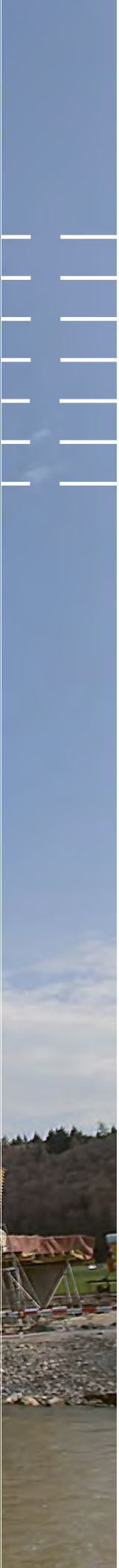
ROUND SLINGS
WEB SLINGS

SpanSet GROUP

50 YEARS

SpanSet Certified Safety


HECTOR EGGER
HOLZBAU



Lifting

How SpanSet makes lifting loads safe and effective

When heavy loads are moved, safety and care are the top priority. This means the highest level of protection for the goods and for all persons involved. SpanSet is one of the pioneers when it comes to lifting with textile lifting gear. With our lifting gear and the expert advice of our application engineers, you can effectively prevent hazards and accidents, while ensuring that you fully meet the requirements stipulated by law.

In the late 1960s, unwieldy chains or hemp ropes were used to lift heavy loads. At this time, SpanSet began to develop new solutions made of hard-wearing artificial fibers. Today, SpanSet's textile flat slings and round slings are used throughout the world to tackle difficult tasks. The ISO-certified flat slings and round slings from SpanSet have been used to lift antique works of art, whole roofs of sports stadiums and ships - after all, you can rely on the high-tech slings that are made in the USA. SpanSet became the market leader thanks to constant innovations and an ISO-certified quality assurance standard. Numerous patents and a constant flow of new, practical improvements are a clear sign of our unique knowledge and expertise in lifting.

100 % quality – 100 % safety
From the material selection to the quality test, from exact calculations to intelligent application we give 100% at every stage. We weave the majority of our flat slings and round sling sleeves ourselves – in the US. In order to ensure that you receive only completely reliable and practical lifting gear, we employ experts from the various sectors and develop new products in collaboration with universities of applied sciences and other institutions.

Tested and certified
Our quality management system involves ongoing tests of materials and end products. These materials and end products are subject to continuous checks in our in-house laboratory and in external test series. We test the maximum load, strength and durability

By choosing SpanSet quality products for lifting, you can move nearly any load – while protecting the material and ensuring the safety of the people.

SpanSet – Certified Safety

TWINTEX ® Endless Round Slings

Features:

- The most flexible style of sling
- Less rigging weight
- Easy handling
- Wear points can be shifted to extend life
- Color-coded capacity indication
- RED core warning fibers
- All models feature polyester covers and core yarns
- E30 through E180 - Max Length 50' increased abrasion resistance
- E240 and up Max Length 98'

TWINTEX® Endless Round Sling Features

The TWINTEX® Roundsling, developed by SpanSet, Inc. is manufactured from a continuous loop of high-tenacity polyester yarn encased in a smooth, double-wall tightly woven cover without any edge seam. Because the load-bearing core yarns are encased by the cover, they are protected from cuts, abrasion, and the harmful effects of ultra-violet rays. Removal from service can be determined if the red-striped white core yarns can be seen through any holes or cuts in the cover.
Most TWINTEX® Roundslings feature a cover made from the same type of yarn as the core, permitting a quick external examination to reveal any possible chemical damage that may have also affected the load-bearing core yarn which might require the slings' removal from service.

Endless Roundslings

Size	Part#	Color	Vertical WLL (LBS)	Choker WLL (LBS)	90º Basket WLL (LBS)	Min Length (ft)	Weight (per ft)	Body Dia (relaxed)	Width at Load
1	**E30**	Purple	2,600	2,100	5,200	1.5	0.2	.50	1.375
2	**E60**	Green	5,300	4,200	10,600	1.5	0.3	0.62	1.68
3	**E90**	Yellow	8,400	6,700	16,800	2.0	0.5	0.87	1.75
4	**E120**	Tan	10,600	8,500	21,200	3.0	0.6	1.12	2.00
5	**E150**	Red	13,200	10,600	26,400	3.0	0.7	1.25	2.50
6	**E180**	White	16,800	13,400	33,600	3.0	0.9	1.50	2.75
7	**E240**	Blue	21,200	17,000	42,400	3.0	0.9	1.75	3.25
8	**E300**	Orange	25,000	20,000	50,000	3.0	1.3	2.25	3.75
9	**E360**	Grey	31,000	24,800	62,000	3.0	1.5	2.32	4.00
10	**E480**	Maroon	40,000	32,000	80,000	4.0	2.0	2.50	4.25
11	**E600**	Brown	53,000	42,000	106,000	4.0	2.7	2.75	4.62
12	**E800**	Olive	66,000	52,800	132,000	4.0	3.1	3.00	5.25
13	**E1000**	Black	90,000	72,000	180,000	4.0	4.4	3.62	6.00

TWINTEX® Bridle Slings

Available in single, double, triple, and quadruple leg configurations. TWINTEX® multi-leg bridle slings are easy to use and provide better load control and balance.

Features:

- Include all the basic features of the TWINTEX® roundsling
- Easier to handle than chain or wire rope slings
- Sling hooks quickly connect to loads having hoist rings or eye bolts
- Hardware avoids abrasion and cutting of the sling at bearing points Hoist Hooks available with or without safety latch
- SpanSet J hooks can be added for more versatility.

Single Leg Bridles

Endless Leg Part#	Part#	Leg Color	Vertical Capacity (LBS)	Minimum Leg Length (LBS)	Oblong Master Link (in.)	Hook Size (tons)
E30	**EY30**	Purple	2,600	4	0.50	1.5
E60	**EY60**	Green	5,300	4	0.75	3.0
E90	**EY90**	Yellow	8,400	4	0.75	7.0
E120	**EY120**	Tan	10,600	4	1.00	7.0
E150	**EY150**	Red	13,200	4	1.00	11.0
E180	**EY180**	White	16,800	8	1.00	11.0

Double Leg Bridles

Endless Leg Part#	Eye & Eye Part#	Leg Color	Capacity at Horizontal Angle (LBS)			Minimum Leg Length (LBS)	Oblong Master Link (in.)	Hook Size (tons)
			60	45	30			
E30	**EY30**	Purple	4,500	3,700	2,600	4	0.75	1.5
E60	**EY60**	Green	9,200	7,500	5,300	4	1.00	3.0
E90	**EY90**	Yellow	14,500	11,800	8,400	4	1.00	7.0
E120	**EY120**	Tan	18,300	14,900	10,600	4	1.00	7.0
E150	**EY150**	Red	22,800	18,600	13,200	4	1.25	11.0
E180	**EY180**	White	29,000	23,700	16,800	8	1.25	11.0
E240	**EY240**	Blue	36,700	29,900	21,200	8	1.50	15.0

Triple (3) Leg Bridles

Endless Leg Part#	Eye & Eye Part#	Leg Color	Capacity at Horizontal Angle (LBS)			Minimum Leg Length (LBS)	Oblong Master Link (in.)	Hook Size (tons)
			60	45	30			
E30	**EY30**	Purple	6,750	5,520	3,900	4	0.75	1.5
E60	**EY60**	Green	13,800	11,250	7,950	4	1.00	3.0
E90	**EY90**	Yellow	21,750	17,700	12,600	4	1.25	7.0
E120	**EY120**	Tan	27,450	22,350	15,900	4	1.25	7.0
E150	**EY150**	Red	34,200	27,900	19,800	4	1.50	11.0

Quad (4) Leg Bridles

Endless Leg Part#	Eye & Eye Part#	Leg Color	Capacity at Horizontal Angle (LBS)			Minimum Leg Length (LBS)	Oblong Master Link (in.)	Hook Size (tons)
			60	45	30			
E30	**EY30**	Purple	9,000	7,360	5,200	4	1.00	1.5
E60	**EY60**	Green	18,400	15,000	10,600	4	1.00	3.0
E90	**EY90**	Yellow	29,000	23,600	16,800	4	1.25	7.0
E120	**EY120**	Tan	36,600	29,800	21,200	4	1.50	7.0

How to order Bridle Slings:

Example: DOS – E90 x 6' is a double leg bridle, oblong master link, with sling hooks attached to endless TWINTEX® Roundslings. Assembly length is 6 ft.

(Sling Configuration) **DOS** – (Leg Type Code) **E90** x (Sling Length B to B) **06**

Sling configuration codes:

1st Letter = Number of legs
- **S** = Single (1) leg
- **D** = Double (2) legs
- **T** = Triple (3) legs
- **Q** = Quad (4) legs

2nd Letter = Master link type
- **O** = Oblong (standard)

3rd Letter = End Fitting or Loop
- **S** = Sling Hook
- **O** = Oblong
- **L** = Loop Eye (w/eye & eye type leg)
- **E** = Endless (E-type leg)

Twintex® Eye & Eye Roundslings

The TWINTEX® Eye & Eye Roundslings can be used where abrasion to the sling body is a problem. An additional cover of abrasion-resistant webbing is sewn to the body of the TWINTEX® Roundsling forming a color-coded lifting eye at each end. They may be used in a vertical, choker or basket hitch.

Eye & Eye Roundslings

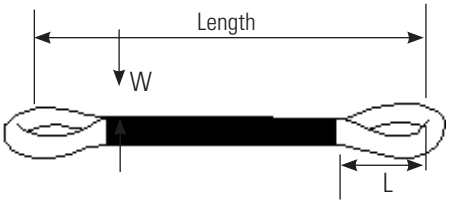
Part#	Eye Color	Rated Capacity (lbs.)*			Min Length (ft)	Weight (lbs./ ft)	Approx. Body Width at Load (W) (in.)	Approx. Standard Eye Length (L) (in.)
		Vertical	Choker	Vertical Basket				
EY30	Purple	2,600	2,100	5,200	3	0.3	1.7	10
EY60	Green	5,300	4,200	10,600	3	0.4	2.2	10
EY90	Yellow	8,400	6,700	16,800	3	0.6	2.5	12
EY120	Tan	10,600	8,500	21,200	3	0.7	2.5	12
EY150	Red	13,200	10,600	26,400	4	0.8	3.2	14
EY180	White	16,800	13,400	33,600	4	1.0	3.3	16
EY240	Blue	21,200	17,000	42,400	4	1.0	3.7	16

Higher capacities available by special order.

Features:

- Eye & Eye Roundslings have the same basic features as the TWINTEX® Roundsling
- Saves money by extending the life of the body of the sling
- Double-wall cover under the body cover to protect load bearing yarn

Length = Bearing to Bearing



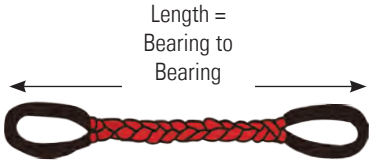
Warning!
*Do not exceed rated capacities. Ratings must be reduced when slings are used at angles of less than 90° from horizontal.

Twintex® Braided Roundslings

Constructed of three (6 parts) or four (8 parts) individual roundslings, the Braided TWINTEX® offers greater security and higher capacities than standard round-slings. If used for a special one-time lift, they can be returned to SpanSet, disassembled, inspected, proof tested, and tagged for individual general lifting applications.

Features:

- Superior strength-to-weight ratio
- Repairable (by SpanSet) by replacing damaged component(s)
- Increased surface to load contact point



Warning!

*Do not exceed rated capacities. Ratings must be reduced when slings are used at angles of less than 90° from horizontal.

6-Part Braided Roundslings

Part#	Color	Straight Lift (lbs.)	Choke Lift (lbs.)	Parallel Basket up to 7° (lbs.)	Minimum Length Single (ft.)	Standard Eye Length (in.)	Approx. Weight (lbs./ft.)	Approx. Width Under Load (in.)
6BR30	Purple	6,700	5,300	13,400	5	14	0.9	3.25
6BR60	Green	13,500	10,800	27,000	5	15	1.2	3.75
6BR90	Yellow	21,400	17,100	42,800	6	18	1.5	4.25
6BR120	Tan	27,000	21,600	54,000	6	18	2.1	4.50
6BR150	Red	33,600	26,800	67,200	7	25	2.4	5.25
6BR180	White	42,800	34,200	85,600	7	25	3.0	5.50
6BR240	Blue	54,000	43,200	108,000	9	30	3.6	6.75
6BR360	Grey	80,800	64,600	161,600	10	30	6.3	8.25
6BR600	Brown	134,900	107,900	269,800	11	30	10.2	11.00

8-Part Braided Roundslings

Part#	Color	Straight Lift (lbs.)	Choke Lift (lbs.)	Parallel Basket up to 7° (lbs.)	Minimum Length Single (ft.)	Standard Eye Length (in.)	Approx. Weight (lbs./ft.)	Approx. Width Under Load (in.)
8BR30	Purple	9,000	7,200	18,000	5	14	1.2	3.50
8BR60	Green	18,000	14,400	36,000	5	15	1.6	4.00
8BR90	Yellow	28,500	22,800	57,000	6	18	2.0	4.75
8BR120	Tan	36,000	28,800	72,000	6	18	2.8	5.00
8BR150	Red	44,900	35,900	89,800	7	25	3.2	6.00
8BR180	White	57,100	45,600	114,200	7	25	4.0	6.25
8BR240	Blue	72,000	57,600	144,000	9	30	4.8	7.50
8BR360	Grey	107,800	86,200	215,600	10	30	8.4	10.00
8BR600	Brown	179,800	143,800	359,600	11	30	13.6	13.00

Length = Bearing to Bearing

Twintex® – Stage Sling Order Codes

Code	Minimum Length (ft.)	Capacity WLL (lbs.)			Approx. Weight (lbs./ft.)	Approx. Body Dia. Relaxed (in.)	Approx. Width at Load (in.)
		Vertical	Choker	Vertical Basket			
SS30	1.5	2,600	2,100	5,200	0.3	0.50	1.375
SS60	1.5	5,300	4,200	10,600	0.4	0.62	1.68
SS90	1.5	8,400	6,700	16,800	0.5	0.87	1.75

Other sizes available on request

Steel-Tex™ Stage Slings

Code	Minimum Length (ft.)	Capacity WLL (lbs.)			Approx. Weight (lbs./ft)	Approx. Body Dia. Relaxed (in.)	Approx. Width at Load (in.)
		Vertical lbs.	Choker	Vertical Basket			
ST60	1.5	5,300	4,200	10,600	0.7	0.50	1.25
ST90	3	8,400	6,700	16,800			

Twintex® Polyester Stage Slings - When bright colors won't do.

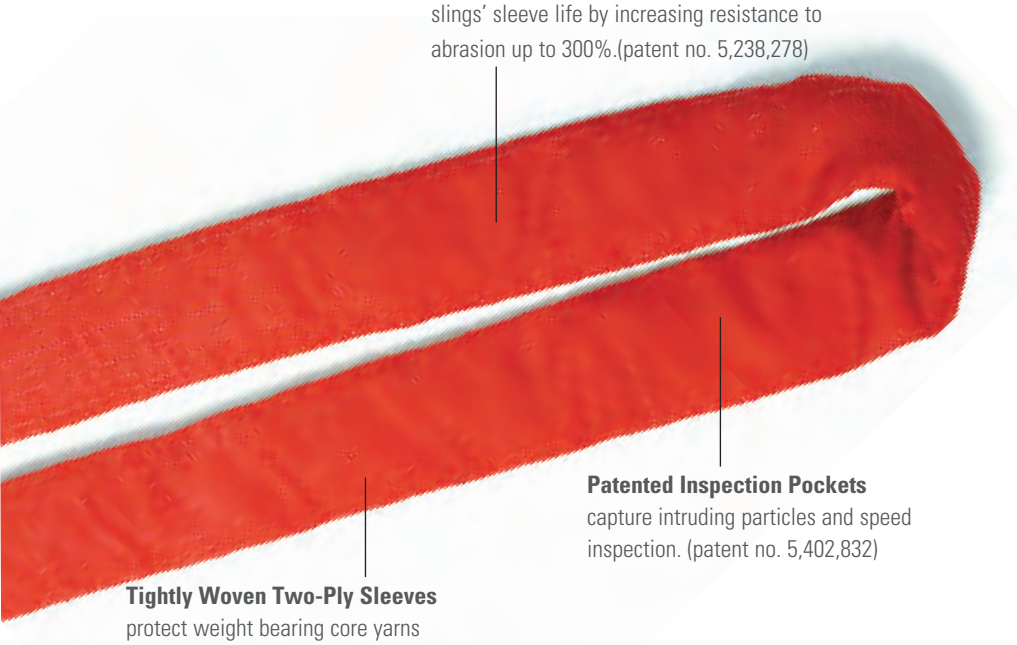
Features:

- Black double-wall cover
- Consistently matched lengths
- Lightweight, soft, and pliable
- Same features as the basic TWINTEX® roundsling (except color)
- A standard in the concert and theatrical industries
- Ideal for inconspicuous suspension of sound and lighting equipment
- Dark color capacity tag
- "SpanSet" the first name in Roundslings

Steel-Tex™ High Heat Resistant Round Slings
Features:

- 400º F temperature rating on core fiber
- Velcro window allows complete core inspection
- No backup rigging required
- Superior flexibility makes rigging easy
- Capacity tag confirms wire core
- Black color tag is inconspicuous for stage settings
- Maximum length for Steel-Tex™ is 9ft*


U.S. PIPELINE, INC.
HOUSTON, TX



Rigger's Choice® – Stage Sling Order Codes

Part#	Color	Size	Straight Lift (lbs.)	Choke Lift (lbs.)	Parallel Basket up to 7° (lbs.)	Minimum Length	Approx. Weight (lbs./ft.)	Approx. Width Under Load (in.)
RCE30	Purple	1	2,600	2,100	5,200	1 1/2	.2	1
RCE60	Green	2	5,300	4,200	10,600	1 1/2	.3	1 3/8
RCE90	Yellow	3	8,400	6,700	16,800	3	.5	1 3/4
RCE120	Tan	4	10,600	8,500	21,200	3	.6	1 7/8
RCE150	Red	5	13,200	10,600	26,400	3	.8	2
RCE180	White	6	16,800	13,400	33,600	3	.9	2 1/8
RCE240	Blue	7	21,200	57,600	42,400	3	1.3	2 5/8

Rigger's Choice® Roundslings

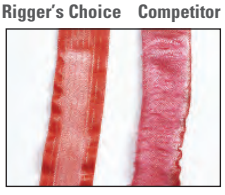
The Rigger's Choice Roundsling delivers an even greater level of performance for your overhead lifting needs.

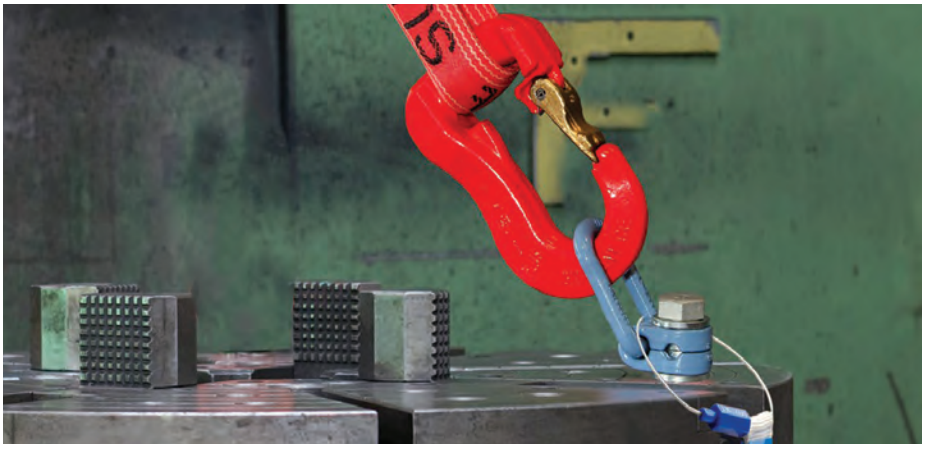
The advantages start with patented nylon wear bars on the exterior polyester sleeve, proven to slow the deterioration of cover fabrics up to 300% in hex bar abrasion tests. Wear bars also offer the user a visible indication when harmful chemicals contact the roundsling.

Maintaining safe lifting is simplified with patented inspection pockets every two inches on the sling. These pockets trap and let the user quickly locate any dangerous metal shards or fragments that have penetrated the outer ply of the cover sleeve. SpanSet uses only the highest quality core yarns for strength, reliability and reduced risk.

HEX BAR ABRASION TEST

The evidence is unmistakable. Patented nylon wear bars on the exterior polyester sleeve help the Rigger's Choice roundsling cover perform up to 300% better after 5,000 cycles of the Hex Bar abrasion test than a standard roundsling.





Joker Hooks

Joker Hooks have been designed so that their characteristics make them ideally suited to combine with textile slinging gear. The objective: easy to handle and reliable in use. Intelligent details such as the specially shaped tip of the hook make it easier to insert in fixed lifting points. The raised side cheeks on the hook guide the textile lifting gear as if in a groove. This prevents abrasion on the edges.

The special quality steel (8 Plus) is forged and thus particularly robust. The construction of the Joker Hook according to the Skeletto principle saves weight on the 1, 2 and 3t Jokers and makes for easy handling. And in order to exclude any errors, the hooks are painted the same color as the textile slings with the same lifting capacity. This way, you can identify the right hook for your use at a glance.

Part	Load Limit (WLL) lbs		1	2	3	4	5	6	7	Weight (lbs)
ASH 1	2600		2.85	1.13	1.25	1.17	.59	0.78	4.29	1.32
ASH 2	5300		3.63	1.33	1.64	1.48	.82	1.01	5.58	3.52
ASH 3	8400		4.33	1.33	1.95	1.79	1.01	1.25	5.89	4.84
ASH 5	13200		5.07	1.91	2.34	2.15	1.21	1.37	7.02	7.26

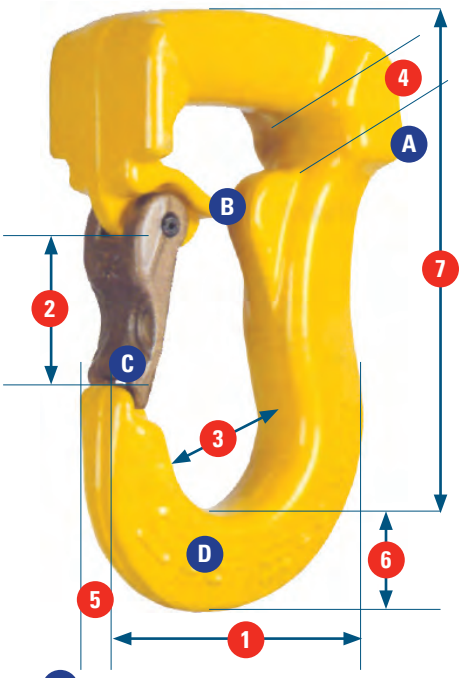
ASH 1

ASH 2

ASH 3

ASH 5

Joker Hooks are the ideal complement to your round and flat slings. After all, they are all-rounders: They can either be used to extend the length of slinging gear or as terminal hooks which guarantee a secure connection at anchor points. Combined with one or more roundslings, multi-leg suspension gear can be created on the spot.



- **A** Enlarged shoulder areas to protect slings from chaffing
- **B** Throat opening to accept roundslings and webslings
- **C** Forged hook and safety catch
- **D** Color coded to the lifting sling

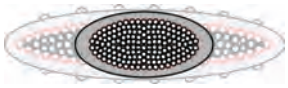
Magnum Force® High Performance Round Slings

– Up to 50% lighter than conventional round slings for even better manual handling
– Up to 50% slimmer than conventional round slings
– Can be laid against tighter edge radii than conventional PES slings
– Shackle and hardware interface is therefore less crowded
– Variable load bearing point for more even wear
– Ideal for choke lifting cylindrical objects without creasing
– Less creasing means less wear
– Lifts smooth objects without damage
– High strength to weight ratio
– Reinforced high performance woven cover
– WLL data woven into sleeve for unmistakeable capacity identification (available in most sizes)
– Wide range of capacities from 10,000 to 600,000 lbs (and larger upon request)
– Available in lengths up to 98 ft
– Roundslings are repairable upon manufacturers inspection and recertification

Magnum Force® High Performance Round Sling Features

Compact

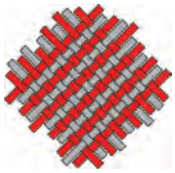
The innovative construction with a high performance polyester fiber and a compact protective cover partially woven with the same material make the Magnum Force Roundsling up to 50% slimmer than comparable roundslings with the same load bearing capacity. At the same time, it produces greater stiffness within the sling along both axis. The roundsling is not bunched even in smaller crane hooks and attachment points and it is easy to suspend the sling overhead.



Cross-section under load (WLL) by comparison

Wear Resistant

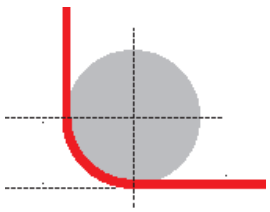
Outer protective cover is reinforced with an extremely abrasion and tear resistant high performance polyester. In addition, the special design reduces the formation of bunching at the attachment point, which again significantly improves the wear behavior. Magnum Force Roundsling exhibits the greatest reliability and longest durability even under the harshest operating conditions – an economic factor you can count on.



Compact outer cover with high performance polyester

Resilient

The new, high performance fiber has a significantly greater capacity. Consequently, less material is needed in the sling, which makes the Magnum Force Roundsling up to 50% lighter than conventional roundslings. With the same load capacity, this high performance roundsling can be laid against tighter edge radii than conventional polyester slings. Work becomes more efficient, quicker and safer.



Compliant

Magnum Force inner load bearing core is made from the same material as the outer sleeve. This is to ensure any chemical damage indications are consistent with both inner and outer materials. ASME B30.9-2014

Identifiable

The Magnum Force has an extra sleeve with a raised, woven-in load capacity indicator (in most sizes)- a safety feature that has proven to be a success. The load capacity is clearly identifiable even from a distance in the dirtiest conditions. Confusing the roundslings is therefore effectively avoided, protecting people and material from accidents.

Raised woven-in load capacity


LARAMIE
Manitowoc
2250

Magnum Force® High Performance Roundslings Chart

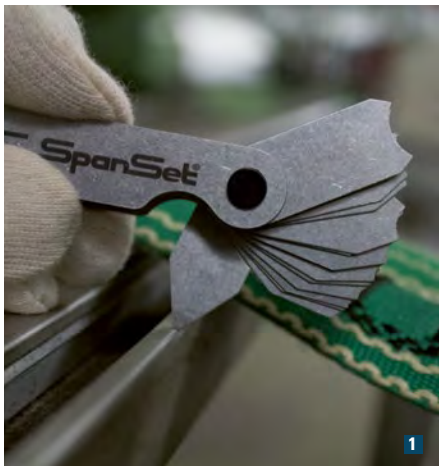
Magnum Force® High Performance Roundslings Lifting Capacities

Available up to 98 ft

Part#	Vertical WLL (LBS)	Choker WLL (LBS)	90º Basket WLL (LBS)	60º Basket WLL (LBS)	45º Basket WLL (LBS)	Min Length (ft.)	Weight (per ft)	Body Dia (relaxed)	Width at Load	Shackle Size (T.)	Min. Bow Diam. (in.)
RCHPE10	10,000	8,000	20,000	17,320	14,140	3	0.3	1	1 3/4	6.5	2 9/32
RCHPE20	20,000	16,000	40,000	34,640	28,280	3	0.6	1 1/4	2 1/4	12	3 9/32
RCHPE30	30,000	24,000	60,000	51,960	42,420	3	1.1	1 1/2	2 1/2	17	3 29/32
RCHPE40	40,000	32,000	80,000	69,280	56,560	3	1.3	1 3/4	2 3/4	25	4 31/32
RCHPE50	50,000	40,000	100,000	86,600	70,700	4	1.5	1 7/8	3 1/4	25	4 31/32
RCHPE60	60,000	48,000	120,000	103,920	84,840	4	1.7	2	3 1/2	35	5 7/16
RCHPE70	70,000	56,000	140,000	121,240	98,980	4	1.9	2 1/8	4	35	5 7/16
RCHPE80	80,000	64,000	160,000	138,560	113,120	4	2.1	2 1/4	4 1/4	42.5	6 5/16
RCHPE90	90,000	72,000	180,000	155,880	127,260	4	2.4	2 1/2	4 1/2	55	7 3/32
RCHPE100	100,000	80,000	200,000	173,200	141,400	4	2.6	2 3/4	5	55	7 3/32
RCHPE125	125,000	100,000	250,000	216,500	176,750	4	3.0	3	5 1/4	85	7 15/32
RCHPE150	150,000	120,000	300,000	259,800	212,100	4	3.5	3 1/4	5 1/2	85	7 15/32
RCHPE175	175,000	140,000	350,000	303,100	247,450	4	4.1	3 1/2	6	120	9 3/8
RCHPE200	200,000	160,000	400,000	346,400	282,800	4	4.6	4	7 1/2	120	9 3/8
RCHPE250	250,000	200,000	500,000	433,000	353,500	8	6.0	6	10 1/2	120	9 3/8
RCHPE300	300,000	240,000	600,000	519,600	424,200	8	7.0	6 1/2	12	150	10 13/16
RCHPE350	350,000	280,000	700,000	606,200	494,900	8	8.2	7	13	150	10 13/16
RCHPE400	400,000	320,000	800,000	692,800	565,600	8	9.5	8	14	200	11 13/32
RCHPE450	450,000	360,000	900,000	779,400	636,300	8	11.0	10	17	250	12
RCHPE500	500,000	400,000	1,000,000	866,000	707,000	8	12.0	12	20	250	12
RCHPE550	550,000	440,000	1,100,000	952,600	777,700	8	13.2	14	23	300	12
RCHPE600	600,000	480,000	1,200,000	1,039,200	848,400	8	14.6	16	26	300	12

Larger sizes available upon request

Sharp edge



Definition: Sharp edge

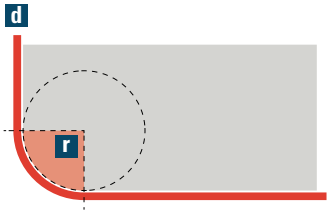
In addition to external factors, such as temperature or mechanical stress, "sharp edges" still represent one of the main causes of damage to the lifting gear itself and are therefore a frequent cause of accidents. The most damages on sharp or rough edges occur by moving the load transversely to the lifting gear. If the edge is "sharp", it can, in the worst case, cut through the lifting gear. If the load moves to the side, a cutting motion occurs at the edge. Being comparable with the blade of a knife, the edge can cut through unprotected lifting gear.

A sharp edge already exists if the edge radius "r" is smaller than the thickness of the material "d" of the lifting gear. If the edge radius is under 2 mm, experts already consider this a "razor-sharp edge". The definition of "sharp edges" was originally devised for wire rope attachments, but was not adapted to the development of round slings. This problem was examined by SpanSet in cooperation with the trade association and DEKRA in an extensive series of tests.

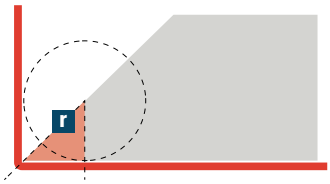
Tools for measuring radii
In order to assess the sharp edge, "tools" are required. The following tools can be used to determine radii: radius gauge **1**, vernier caliper **2**, folding ruler.

The different versions of a sharp edge:

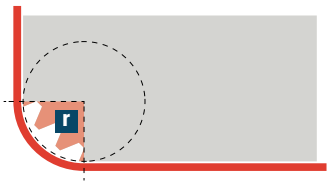
Sharp edge: Edge radius
If the edge radius **r** is smaller than the thickness of the flat sling/round sling **d**, the edge is considered "sharp". Lateral movements or surface pressure can already be enough to sever the lifting gear.

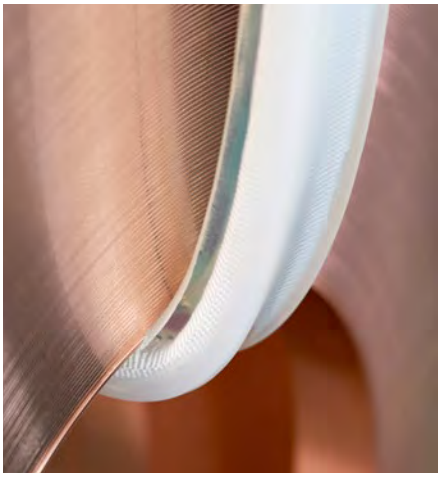


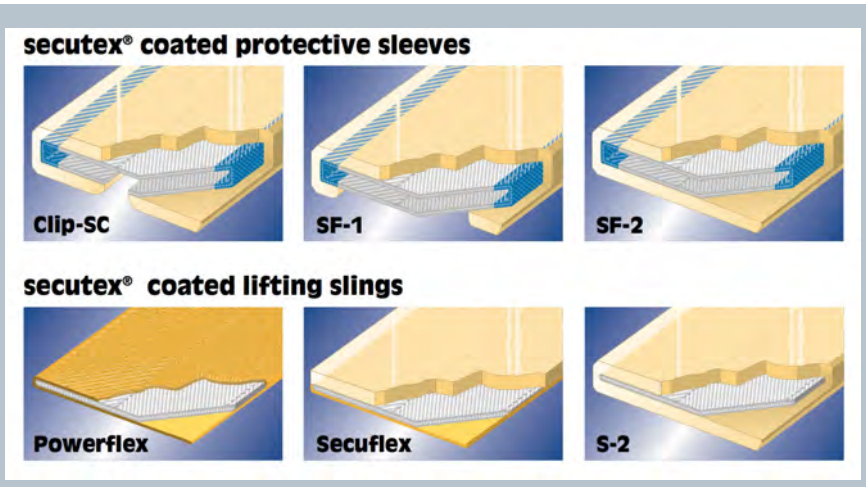
Sharp edge: Edge angle
In addition to loads with rectangular edges, there are goods with deviating shapes. These include loads with protruding edges and with sharp or jagged outer contours, such as cogwheels, turbine blades etc. These edges cannot be determined by the general rule.



Sharp edge: Edge shape
The shape and surface finish of the edges have a significant impact on the durability of the lifting gear. Very rough surfaces, such as those of a prefabricated concrete component, can very quickly damage textile lifting gear or a wire rope.







Secutex® in detail

Extreme cut- resistance

Secutex® coated protective sleeves and lifting slings are very flexible, to form around the sharp edges of the load. The extreme structural resistance of Secutex® material prevents the lifting sling from being cut.

Wear and abrasion resistance

Secutex® coatings protect the lifting slings against premature wearing when used against rough surfaces and sharp edges, making Secutex® protective sleeves and direct coatings the most economical solution.

Smooth goods handling

The Secutex® protective layer forms softly around the load and increases the radius in the critical edges so that the lifting forces are more evenly distributed over a wide area and the freight remains undamaged.

Lightweight for excellent handling

Secutex® coated lifting slings and protective sleeves are considerably lighter than metal products of comparable lifting performance. Due to their light weight and flexibility, the lifting accessories can be fitted easily and quickly to the load.

Optimum work safety

Even difficult lifting situations can be carried out safely. Secutex® coated lifting slings and protective sleeves adhere to the load, reducing slippage, thus protecting both goods and personnel.

Need some advice?

Telephone: 800-334-7505
Email: ssales@spanset-usa.com

Secutex® The Ultimate Solution Protection Against Sharp Edges

View and print out

SpanSet has developed a brochure and a poster all about the subject of "sharp edges". The PDF versions of these documents can be downloaded free of charge at **www.spanset-usa.com**

Sharp Edges

Also see our **Lifting Technical Information** available for download at **www.spanset-usa.com**

PowerPlus® Web Slings
PowerLift® Web Slings
Technical Information

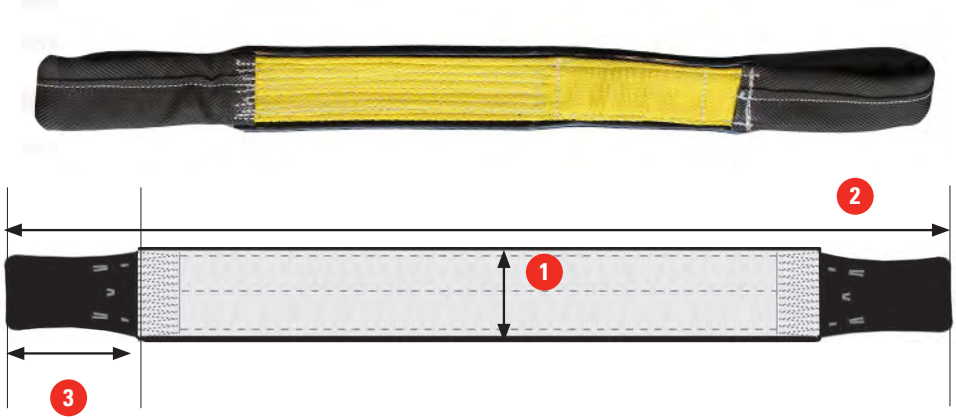
PowerPlus® Web Slings

The PowerPlus Web Slings brings the height of today's lifting technology to the job. This sling is another European engineering success, introduced to the United States by SpanSet.

With thermoplastic beading, your sling's edges are protected against cuts and tears when lifting abrasive loads in the harshest environments. Cordura™ reinforced eyes prevent damage from lifting hooks. We also extend the length of the reinforcement a full six inches. This stiffens the eyes and makes passing the sling under your cargo and up to your overhead rigging faster and safer. An optional abrassive resistant chemical coating is also available by contacting SpanSet.

With the strength of premium SpanSet web-bing, made and tested in our own factory, PowerPlus Web Slings will help tackle even the roughest lifting jobs with confidence. Rely on SpanSet quality to get the job done safely and reduce risk.

PowerPlus® - High Tech Series reduces risk.



PowerPlus™ Web Slings Technical Data

Color / Code	Vertical Rated WLL (lbs)	Choker Rated WLL (lbs)	Vertical Basket Rated WLL (lbs)	1 Width (in)	2 Min Sling Length (ft)	3 Min Eye Length (in)
EE2902	6,400	5,120	12,800	2"	3	9"
EE2903	9,300	7,440	18,600	3"	6	13"
EE2904	11,500	9,200	23,000	4"	6	18"
EE2906	16,500	13,200	33,000	6"	6	24"
EE2908	22,700	18,160	45,400	8"	6	24″
EE2910	28,400	22,720	56,800	10"	6	30″
EE2912	34,100	27,280	68,200	12"	6	36″

PowerPlus® Web Slings
PowerLift® Web Slings
Technical Information

PowerLift™ Type 1 (TC) Type 2 (TT)

Triangle nylon slings can be used in a vertical hitch or basket hitch only. If a choker hitch is required, a type 1 triangle choker sling is a better choice as it has a slotted triangle on one end which allows the other end to pass through for use with a choker hitch. Our triangle lifting slings (sometimes also called type 2 slings) are extremely durable and made in the USA. All widths are available with either one or two plys, so you can choose the strength you need.

PowerLift™ Type 3 (EE) Type 4 (EE)

Type 3 flat eye & eye nylon lifting slings are designed with a flat eye on each end that make them versatile enough for use in a basket hitch, choker hitch, or vertical hitch.

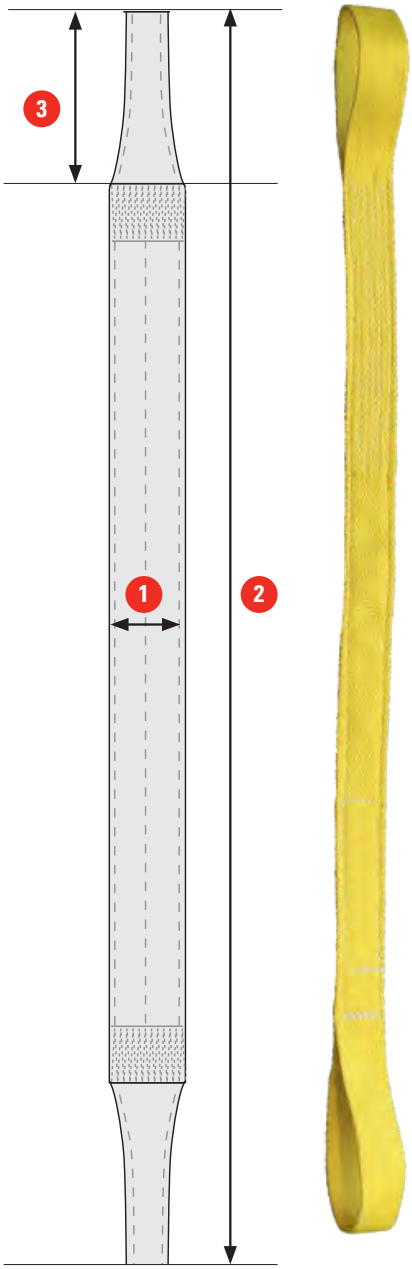
Type 4 twisted eye & eye nylon lifting slings have eyes on each end like a type 3 sling, but the loops have a twisted design, which creates a right angle to the body of the sling. This twist allows the sling to fit more snug against crane hooks. While this twisted eye sling works well with a basket hitch and vertical hitch, it's most suitable for use with choker hitches.

PowerLift™ Type 1 (TC) Triangle and Choker- Type 2 (TT) Triangle and Triangle Technical Data

	Type 1	Type 2	Vertical Rated WLL (lbs)	Choker Rated WLL (lbs)	Vertical Basket Rated WLL (lbs)	1 Width (in)	2 Min Sling Length (ft)	3 Min Eye Length (in)
One Ply	TC1702	TT1702	3,200	2,560	6,400	2"	3	8"
	TC1703	TT1703	4,700	3,760	9,400	3"	6	13"
	TC1704	TT1704	6,400	5,120	12,800	4"	6	15"
	TC1706	TT1706	9,300	7,440	18,600	6"	6	17"
	TC1708	TT1708	11,800	9,440	23,600	8"	6	20"
	TC1710	TT1710	14,700	11,760	29,400	10"	6	24"
	TC1712	TT1712	17,600	14,080	35,200	12"	6	28"
Two Ply	TC2702	TT2702	6,400	5,120	12,800	2"	3	8"
	TC2703	TT2703	8,800	7,040	17,600	3"	6	13"
	TC2704	TT2704	11,500	9,200	23,000	4"	6	15"
	TC2706	TT2706	16,500	13,200	33,000	6"	6	17"
	TC2708	TT2708	22,700	18,160	45,400	8"	6	20"
	TC2710	TT2710	28,400	22,720	56,800	10"	6	24"
	TC2712	TT2712	34,100	27,280	68,200	12"	6	28"

PowerLift™ Type 3 (EE) Flat Eye and Eye - Type 4 (EE) Twisted Eye Technical Data

	Type 3	Type 4	Vertical Rated WLL (lbs)	Choker Rated WLL (lbs)	Vertical Basket Rated WLL (lbs)	1 Width (in)	2 Min Sling Length (ft)	3 Min Eye Length (in)
One Ply	EE1701	EE1701T	1,600	1,280	3,200	1"	3	12"
	EE1702	EE1702T	3,200	2,560	6,400	2"	6	12"
	EE1703	EE1703T	4,700	3,760	9,400	3"	6	20"
	EE1704	EE1704T	6,400	5,120	12,800	4"	6	23"
	EE1706	EE1706T	9,300	7,440	18,600	6"	6	26"
	EE1708	EE1708T	11,800	9,440	23,600	8"	6	30"
	EE1710	EE1710T	14,700	11,760	29,400	10"	6	36"
	EE1712	EE1712T	17,600	14,080	35,200	12"	6	42"
Two Ply	EE2701	EE2701T	3,100	2,480	6,200	1"	3	12"
	EE2702	EE2702T	6,400	5,120	12,800	2"	6	12"
	EE2703	EE2703T	9,300	7,440	18,600	3"	6	20"
	EE2704	EE2704T	11,500	9,200	23,000	4"	6	23"
	EE2706	EE2706T	16,500	13,200	33,000	6"	6	26"
	EE2708	EE2708T	22,700	18,160	45,400	8"	6	30"
	EE2710	EE2710T	28,400	22,720	56,800	10"	6	36"
	EE2712	EE2712T	34,100	27,280	68,200	12"	6	42"
Four Ply	EE4701	EE4701T	5,500	4,400	11,000	1"	3	12"
	EE4702	EE4702T	11,000	8,800	22,000	2"	3	12"
	EE4703	EE4703T	16,400	13,120	32,800	3"	6	20"
	EE4704	EE4704T	20,400	16,320	40,800	4"	6	23"
	EE4706	EE4706T	30,600	24,480	61,200	6"	6	26"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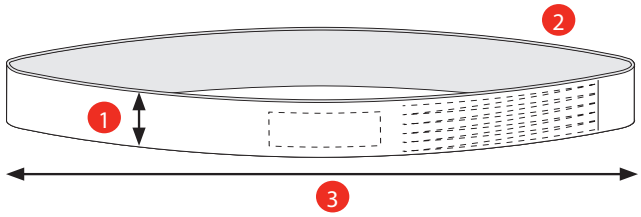
PowerLift™ Type 5 Endless



PowerLift™ Type 5 (EN) Endless Technical Data

	Type 5	Vertical Rated WLL (lbs)	Choker Rated WLL (lbs)	Vertical Basket Rated WLL (lbs)	1 Width (in)	2 Min Sling Length (ft)	3 Min Eye Length (in)
One Ply	EN1701	3,200	2,560	6,400	1"	3	12"
	EN1702	6,200	5,000	12,400	2"	6	12"
	EN1703	9,400	7,520	18,800	3"	6	20"
	EN1704	12,400	9,920	24,800	4"	6	23"
	EN1706	18,600	14,800	37,200	6"	6	26"
	EN1708	21,200	16,960	42,400	8"	6	30"
	EN1710	26,500	21,200	53,000	10"	6	36"
	EN1712	31,800	25,440	63,600	12"	6	42"
Two Ply	EN2701	6,200	4,960	12,400	1"	3	12"
	EN2702	12,400	9,920	24,800	2"	6	12"
	EN2703	17,600	14,080	35,200	3"	6	20"
	EN2704	22,000	17,600	44,000	4"	6	23"
	EN2706	33,000	26,400	66,000	6"	6	26"
	EN2708	42,300	33,840	84,600	8"	6	30"
	EN2710	52,900	42,320	105,800	10"	6	36"
	EN2712	63,500	50,800	127,000	12"	6	42"
Four Ply	EN4701	11,000	8,800	22,000	1"	3	12"
	EN4702	22,000	17,600	44,000	2"	3	12"
	EN4703	32,900	26,320	65,800	3"	6	20"
	EN4704	40,800	32,640	81,600	4"	6	23"
	EN4706	61,200	48,960	122,400	6"	6	26"

PowerLift™ Type 6 (RE) Reverse Eye Technical Data

	Type 5	Vertical Rated WLL (lbs)	Choker Rated WLL (lbs)	Vertical Basket Rated WLL (lbs)	1 Width (in)	2 Min Sling Length (ft)	3 Min Eye Length (in)
One Ply	RE1702	3,200	2,560	6,400	2"	6	12"
	RE1704	6,400	5,120	12,800	4"	6	23"
	RE1706	9,300	7,440	18,600	6"	6	26"
Two Ply	RE2702	6,400	5,120	12,800	2"	6	12"
	RE2704	11,500	9,200	23,000	4"	6	23"
	RE2706	16,500	13,200	33,000	6"	6	26"

PowerLift™ Type 7 (WL) Continuous Eye / Wide Lift Technical Data

	Type 5	Vertical Rated WLL (lbs)	Choker Rated WLL (lbs)	Vertical Basket Rated WLL (lbs)	1 Width (in)	2 Min Sling Length (ft)	3 Min Eye Length (in)
One Ply	WL1716	-	-	38,000	16"	6	12"
	WL1720	-	-	45,000	20"	6	23"
	WL1724	-	-	52,000	24"	6	26"
Two Ply	WL2716	-	-	61,500	16"	6	12"
	WL2720	-	-	63,000	20"	6	23"
	WL2724	-	-	70,000	24"	6	26"

PowerLift™ Type 5 Reverse Eye

Sling Angle Capacities

If you know the lifting angle of the sling being used, you can apply the Capacity Reduction Factor Ⓐ or the Load Multiplier Ⓑ in the Sling Angle Chart. If you don't know the angle:

- Attach the sling(s)
- Apply lift until the slings are taut and the load is ALMOST ready to leave the ground (BUT DO NOT LIFT THE LOAD OFF THE GROUND!!)
- Measure the length of the sling between the lift point and the load
- Measure the height between the lift point and the load (See Fig. 1)

Situation 1: Capacity Reduction Factor

When you know the appropriate rated capacity of the sling, and you need to calculate its actual capacity (based on the sling angle), follow the instructions below: (The Example uses a measured length of 12 feet and a measured height of 8 feet.)
Measured Length (L): 12 feet
Measured Height (H): 8 feet
Reduction Factor (RF) = H ÷ L = 8 ÷ 12 = 0.667
Rated Capacity* of sling = 1,000 lbs.
Actual Capacity of sling = Rated Capacity x RF = 1,000 X 0.667 = 667 lbs.

Situation 2: Load Multiplier

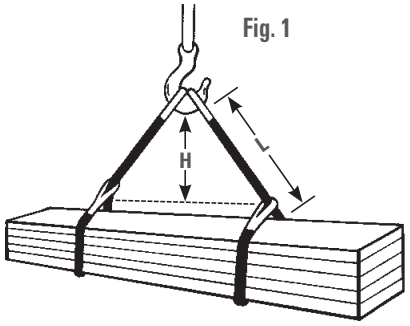
When you know the actual weight of the load, and you need to calculate the appropriate rated capacity (based on the sling angle) of the sling to lift the load, follow the instructions below:
(The Example uses a measured length of 12 feet and a measured height of 8 feet.)
Measured Length (L): 12 feet
Measured Height (H): 8 feet
Load Multiplier (LM) = L ÷ H = 12 ÷ 8 = 1.5
Load weight: 1,000 lbs.
Necessary Rated Capacity* of sling = Load Weight x LM = 1,000 X 1.5 = 1,500 lbs.

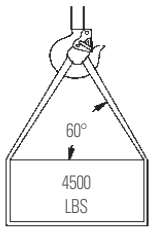
*** Make sure the "capacity" is appropriate for the hitch you are going to use.**

Sling Angle Chart

Angle from Horizontal	Ⓐ Capacity Reduction Factor	Ⓑ Load Multiplier
90°	1.000	1.000
85°	0.996	1.005
80°	0.985	1.016
75°	0.966	1.036
70°	0.940	1.064
65°	0.906	1.104
60°	0.866	1.155
55°	0.819	1.222
50°	0.766	1.306
45°	0.707	1.415
40°	0.643	1.556
35°	0.574	1.743
30°	0.500	2.000

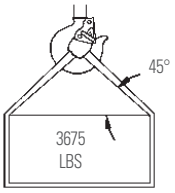
Fig. 1

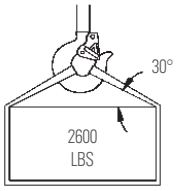


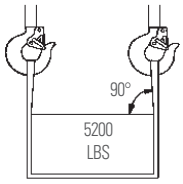


Example:
Polyester roundsling size no. 1 (purple) without fittings, 5,200 lb. vertical basket hitch rating used in a basket hitch at a 60° angle.

5200 LBS	x	0.866	=	4500 LB Rated Capacity
Roundsling Rating Vertical Basket		Factor from Sling Angle Chart		Rated Capacity







Chemical Resistance Chart

Chemical	Polyester	Nylon
Acid	*	NO
Alcohols	OK	OK
Aldehydes	NO	OK
Strong Alkalis	**	OK
Bleaching Agents	OK	NO
Dry Cleaning Solvents	OK	OK
Ethers	NO	OK
Halogenated Hydrocarbons	OK	OK
Hydrocarbons	OK	OK
Ketones	OK	OK
Oils, Crude	OK	OK
Oils, Lubricating	OK	OK
Soap and Detergents	OK	OK
Water and Seawater	OK	OK
Weak Alkalis	OK	OK

THIS IS A GENERAL GUIDELINE ONLY
* Disintergrated by concentrated sulphuric acid.
** Degraded by strong alkalis at elevated temperatures

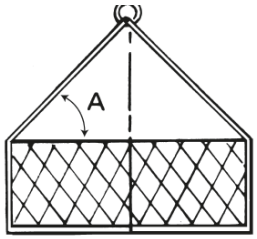
Inspection Criteria for Twintex® Roundslings:

Remove from service when:

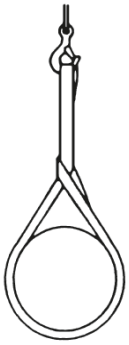
- Cuts to sling cover expose red or white core yarns
- Holes, tears, snags or abrasions expose red or white core yarns
- End fittings are pitted or corroded, cracked, distorted or broken
- The sling shows signs of melting, charring, or chemical damage
- Capacity tag is illegible or missing
- Other visible damage which causes doubt as to the strength of the sling

Note: Do not expose roundslings to temperatures exceeding 194°F

Sling Angle Chart	
Angle from Horizontal	Capacity Reduction Factor
90°	1.000
85°	0.996
80°	0.985
75°	0.966
70°	0.940
65°	0.906
60°	0.866
55°	0.819
50°	0.766
45°	0.707
40°	0.643
35°	0.574
30°	0.500

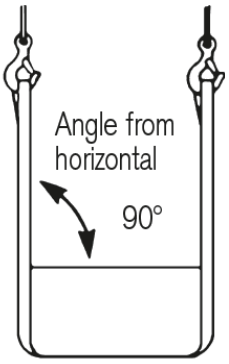


Sling Angle Chart
Reduction in lifting capacity when lifting with basket hitch due to sling angle. Sling capacity decreases as angle increases.



Choker Hitch

Vertical Hitch



Vertical Basket Hitch

Chemical Resistance Chart		
Chemical	Polyester	Nylon
Acid	*	NO
Alcohols	OK	OK
Aldehydes	NO	OK
Strong Alkalis	**	OK
Bleaching Agents	OK	NO
Dry Cleaning Solvents	OK	OK
Ethers	NO	OK
Halogenated Hydrocarbons	OK	OK
Hydrocarbons	OK	OK
Ketones	OK	OK
Oils, Crude	OK	OK
Oils, Lubricating	OK	OK
Soap and Detergents	OK	OK
Water and Seawater	OK	OK
Weak Alkalis	OK	OK

THIS IS A GENERAL GUIDELINE ONLY
* Disintergrated by concentrated sulphuric acid.
** Degraded by strong alkalis at elevated temperatures

Contact SpanSet for further information on Inspection Care and Use of Synthetic Web Slings.

For more information please download our **Lifting Technical Information**
http://spanset-usa.com.cyber-factory.info/fileadmin/spanset_usa/images/Technical_Information.pdf

Inspection Criteria:

Remove synthetic Web Slings from service when:
- Capacity tag is missing or illegible
- Red core warning yarns are visible
- Sling shows signs of melting, charring, or chemical damage
- End fittings are excessively pitted, corroded, distorted, cracked or broken
- Cuts on the face or edge of webbing are visible
- Holes, tears, snags or crushed webbing are visible
- Broken or worn threads in the stitch patterns
- Any other visible damage which causes doubt in its strength

Exposed red core yarns warn of dangerous sling damage. All Nylon and polyester Web Slings shown in this catalog have this warning feature. When red yarns are visible, the sling should be removed from service immediately. The red core yarns become exposed when the sling surface is cut or worn through the woven face yarns. This feature is only a partial aid for sling inspection. All other sling inspection procedures should be followed.

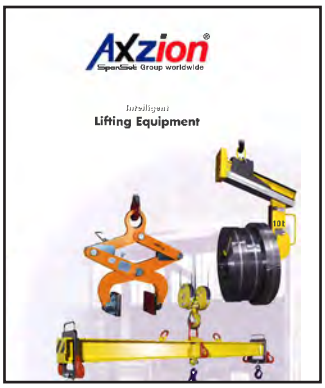
Environmental Considerations:

- Nylon and polyester are seriously degraded at temperatures above 194°F.
- Prolonged exposure to ultraviolet light adversely affects nylon and polyester. Slings become bleached and stiff when exposed to sunlight or arc welding.
- Many chemicals have an adverse effect on nylons and polyester. (See chemical chart at left.)

Other Products

Fall Protection

Lifting



Cargo Control

SpanSet has been an industry leader in lifting and cargo control products for over 30 years. SpanSet's quality control, with ISO 9001:2008 certified registration, and testing capabilities ensure that a quality product is produced with safety in mind.

www.spanset-usa.com

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Warranty

SpanSet, Inc. agrees (at its option) to repair, replace or credit the cost of any product which it has manufactured and which
is found to be defective in materials or workmanship provided that written notice of such defect is received by SpanSet, Inc. within 90 days from the date of shipment. SpanSet will accept return of its products only upon its prior written authorization after receiving such notice. No authorization or allowance for repairs or alterations of any product will be given by SpanSet except by its written acknowledgment. Items not manufactured by SpanSet, Inc. will carry their manufacturer's warranties and none other.
The foregoing is in lieu of all warranties, expressed or implied, and all other obligations or liabilities on the part of SpanSet, including the warranties of merchantability and fitness. In no event shall SpanSet, Inc. be liable for consequential or special damages or for transportation, installation, adjustment or other expenses which may arise in connection with such products.

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