



877-STRENFLEX

1-877-787-3635

WIRE ROPE SLINGS

ASME B30.9

- (1) Minimum 10 times the rope diameter between splices or sleeves.
- (2) Horizontal sling angles less than 30 deg. should not be used.
- (3) All swaged socket and poured socket assemblies shall be proof tested.
- (4) Consult manufacturer if temperatures are below 60 deg. F or above 400 deg. F.
- (5) Welded end attachments shall be proof tested.
- (6) Eyes shall not be formed using knots.
- (7) Wire rope clips shall not be used to fabricate slings.
- (8) Remove from service if: abrasion, kinking, crushing, heat damage, broken wires (10 in one lay or 5 in one strand in one lay), distortion, damaged end attachments, hooks with 15% spread or 10 deg. twist.
- (9) Slings shall not be used at load greater than rated capacity.

ALLOY STEEL CHAIN SLINGS

ASME B30.9

- (1) Slings shall not be used at load greater than rated capacity.
- (2) All welded slings shall be proof tested by the sling manufacturer.
- (3) Mechanically assembled slings shall be comprised entirely of proof tested components.
- (4) Slings shall have permanently affixed identification stating size, grade, rated load and angle on which the rating is based, reach, number of legs, and sling manufacturer.
- (5) Consult mfg. if temperatures are below -40 deg. F or above 600 deg. F.
- (6) Attachments or components shall have a rated load equal to the alloy chain.
- (7) Slings shall be inspected for damage by a designated person making a record of the conditions, at least annually.
- (8) Repairs shall be made only by the chain mfg. or qualified personnel.
- (9) Removal Criteria: missing or illegible sling identification, wear, nicks and gouges, cracked or broken, bent, weld splatter, heat damage and throat opening or twist in hooks.

SYNTHETIC WEB SLINGS

ASME B30.9

- (1) Slings shall not be used at load greater than shown on its tag.
- (2) Horizontal angles less than 30 deg. should not be used.
- (3) Each sling shall be permanently marked to show: name of the manufacturer, code or stock number, rated loads for the type of hitches used, any type of synthetic web material.
- (4) Reused or welded fittings shall be proof tested 2 times the rated load.
- (5) Slings shall be repaired only by a sling manufacturer or qualified person.
- (6) Temporary repairs shall not be permitted.
- (7) Repaired sling shall be proof tested to two times the rated load.
- (8) Periodic inspections should be conducted at least annually, with written inspection records.
- (9) Removal Criteria: acid or caustic burns, melting or charring, holes, tears, cuts, or snags, broken or worn stitching, excessive abrasive wear, knots, damaged, cracked or broken fittings, missing or illegible tag.

SAFE OPERATING PRACTICES

29CFR 1910.184

Whenever any sling is used, the following practices shall be observed.

- (1) Slings that are damaged or defective shall not be used.
 - (2) Slings shall not be shortened with knots or bolts or other makeshift devices.
 - (3) Sling legs shall not be kinked.
 - (4) Slings shall not be loaded in excess of their rated capacities.
 - (5) Slings used in a basket hitch shall have the loads balanced to prevent slippage.
 - (6) Slings shall be securely attached to their loads.
 - (7) Slings shall be padded or protected from the sharp edges of their loads.
 - (8) Suspended loads shall be kept clear of all obstructions.
 - (9) All employees shall be kept clear of loads about to be lifted.
 - (10) Hands and fingers shall be kept clear of loads about to be lifted.
 - (11) Shock loading is prohibited.
 - (12) A sling shall not be pulled from under a load when the load is resting on the sling.
- (d) Inspections: Each day before being used, the sling and all fastenings, and attachments shall be inspected for damage or defects by a competent person designated by the employer. Additional inspections shall be performed during sling use, where service conditions warrant. Damaged or defective slings shall be immediately removed from service.

RIGGING HARDWARE CAPACITIES

Rated Capacity
(lbs.)

Size in Inches	5-1 Shackle SP Anchor	5-1 Shoulder Vertical	5-1 Eye bolts 45 Deg	5-1 Tumbuckle Eye/Jaw	Min. Clips	WIRE ROPE CLIP Turnback in Inches	Torque in Ft. Lbs.
1/4"	1,000	500	125	500	2	4 3/4"	15
5/16"	1,500	800	200	800	2	5 1/4"	30
3/8"	2,000	1,200	300	1,200	2	6 1/2"	45
1/2"	4,000	2,200	550	2,200	3	11 1/2"	65
9/16"					3	12"	95
5/8"	6,500	3,500	875	3,500	3	12"	95
3/4"	9,500	5,200	1,300	5,200	4	18"	130
7/8"	13,000	7,200	1,800	7,200	4	19"	225
1"	17,000	10,000	2,500	10,000	5	26"	225
1-1/8"	19,000				6	34"	225
1-1/4"	24,000	15,200	3,800	15,200	7	44"	360

WIRE ROPE SLINGS

EYE & EYE 6 x 19 & 6 x 37 • IWRC

ANSI B30.9 -
Design factor 5/1
Rated Capacity (lbs.)

Rope Dia. in.	Vertical	Choker	Vertical Basket	60°	45°	30°
1/4"	1,300	960	2,600	2,200	1,820	1,300
3/8"	2,800	2,200	5,600	5,000	4,000	2,800
1/2"	5,000	3,800	10,000	8,800	7,200	5,000
5/8"	7,800	5,800	15,600	13,600	11,000	7,800
3/4"	11,200	8,200	22,400	19,400	15,800	11,200
7/8"	15,200	11,200	30,400	26,000	22,000	15,200
1"	19,600	14,400	39,200	34,000	28,000	19,600
1-1/8"	24,000	18,200	48,000	42,000	34,000	24,000
1-1/4"	30,000	22,000	60,000	52,000	42,000	30,000
1-1/2"	42,000	32,000	84,000	74,000	60,000	42,000

CHAIN SLINGS

GRADE 80 ALLOY STEEL

ANSI B30.9 -
Design factor 4/1
Rated Capacity (lbs.)

Size of Chain (in.)	(mm.)	90° Single	60° Double Chain Slings	45° Double Chain Slings	30° Double Chain Slings	Triple and Quad.	Chain Slings
9/32	7	3,500	6,100	4,900	3,500	9,100	7,400
3/8	10	7,100	12,300	10,000	7,100	18,400	15,100
1/2	13	12,000	20,800	17,000	12,000	31,200	25,500
5/8	16	18,100	31,300	25,600	18,100	47,000	38,400
3/4	20	28,300	49,000	40,000	28,300	73,500	60,000
7/8	22	34,200	59,200	48,400	34,200	88,900	72,500
1	26	47,700	82,600	67,400	47,700	123,900	101,200
1-1/4	32	72,300	125,200	102,200	72,300	187,800	153,400

WEB SLINGS

EYE & EYE • TYPE III & IV

ANSI B30.9 -
Design factor 5/1
Rated Capacity (lbs.)

EYE & EYE TYPE III & IV	Vertical	Choker	Vertical Basket	60°	45°	30°
EE 1-91	1,600	1,200	3,200	2,700	2,200	1,600
EE 2-91	3,200	2,800	6,400	5,400	4,500	3,200
EE 1-92	3,100	2,500	6,200	5,300	4,300	3,100
EE 2-92	6,200	5,000	12,400	10,500	8,600	6,200
EE 1-93	4,700	3,700	9,400	7,900	6,500	4,700
EE 2-93	9,400	7,500	18,800	15,900	13,100	9,400
EE 1-94	6,200	5,000	12,400	10,500	8,600	6,200
EE 2-94	12,400	10,000	24,800	21,000	17,300	12,400
EE 1-96	9,300	7,400	18,600	15,800	13,000	9,300
EE 2-96	18,600	14,800	37,200	31,600	26,000	18,600

ROUND SLINGS

POLYESTER • ENDLESS

ANSI B30.9 -
Design factor 5/1
Rated Capacity (lbs.)

Size	STD Color	Approx. DIA/Inch	Approx. WT/Foot	Vertical	Choker	Basket
1	PURPLE	0.60	0.30	2,600	2,100	5,200
2	GREEN	0.80	0.40	5,300	4,200	10,600
3	YELLOW	1.00	0.50	8,400	6,700	16,800
4	TAN	1.20	0.60	10,600	8,500	21,200
5	RED	1.30	0.80	13,200	10,600	26,400
6	WHITE	1.40	0.90	16,800	13,400	33,600
7	BLUE	1.55	1.20	21,200	17,000	42,400
8	ORANGE	1.75	1.50	25,000	20,000	50,000
9	ORANGE	1.95	2.00	31,000	24,800	62,000
10	ORANGE	2.35	2.80	40,000	32,000	80,000