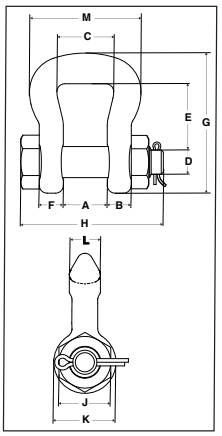
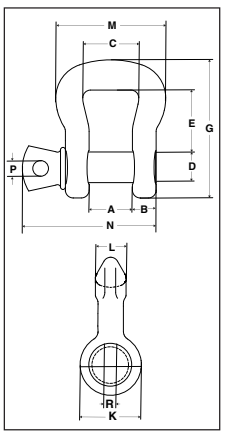
Sling Saver® Web Sling Shackles

S-252
BOLT TYPE
SLING SHACKLE



- Shackles available in size 3-1/4 to 50 metric tons.
- All Alloy construction.
- Design factor of 5 to 1.
- Each shackle has a Product Identification Code (PIC) for material traceability along with a Working Load Limit and the name Crosby forged into it.
- Increased radius of bow gives wider sling bearing surface resulting in an increased area for load distribution, thus:
  - Increasing Synthetic Sling efficiency as compared to standard anchor and chain shackle bows and conventional hooks. This allows 100% of the sling's rated Working Load Limit to be achieved.
  - Allows better load distribution on internal fibers.
- Meets or exceeds all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, these shackles meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.
- Shackles available in both a Screw Pin and Bolt, Nut and Cotter Pin configuration.
- Bolt (Pin) has a larger diameter that provides better load distribution.
- Look for the Red Pin®... the mark of Genuine Crosby quality.

S-253
SCREW PIN
SLING SHACKLE



Sling Saver® Fatigue Rated® Load Rated® "QT"®

Crosby Sling Saver hardware meets the requirements for minimum stock diameter or thickness, and effective contact width shown in the Recommended Standards Specification for Synthetic Polyester Round Slings by the Web Sling & Tie Down Association. WSTDA-RS1 (revised 2010)

S-252 Bolt Type Sling Shackle

Web Sling Eye Width (in.)	Round Sling Size (No.)	Working Load Limit (t)*	S-252 Stock No.	Weight Each (lbs.)	Dimensions (in.)											
					A	B	C	D	E	F	G	H	J	K	L	M
1	1 & 2	3-1/4	1020485	1.4	1.06	.58	1.38	.75	1.50	.44	3.38	3.68	1.12	1.50	.75	2.69
1.5	3 & 4	6-1/2	1020496	2.4	1.25	.75	1.75	.88	1.88	.50	4.15	4.25	1.31	1.81	1.00	3.38
2	5 & 6	8-3/4	1020507	4.1	1.38	.88	2.25	1.00	2.81	.56	5.50	4.72	1.50	2.09	1.12	4.19
3	7 & 8	12-1/2	1020518	8.0	1.62	1.12	3.25	1.25	3.06	.75	6.34	5.88	1.88	2.62	1.38	5.62
4	9 & 10	20-1/2	1020529	16.9	2.12	1.38	4.50	1.50	5.25	.88	9.45	7.19	2.25	3.12	1.75	7.50
5	11 & 12	35	1020540	35.0	2.50	1.75	5.50	2.00	6.34	1.12	11.50	9.31	3.00	4.19	2.25	9.19
6	13	50	1020551	57.5	3.00	2.12	6.50	2.25	7.70	1.25	13.75	10.38	3.38	4.75	2.75	11.00

* Maximum Proof Load is 2.5 times the Working Load Limit. Minimum Ultimate strength is 5 times the Working Load Limit.

S-253 Screw Pin Sling Shackle

Web Sling Eye Width (in.)	Round Sling Size (No.)	Working Load Limit (t)*	S-253 Stock No.	Weight Each (lbs.)	Dimensions (in.)											
					A	B	C	D	E	G	K	L	M	N	P	R
1	1 & 2	3-1/4	1020575	1.4	.88	.62	1.38	.75	1.50	3.38	1.50	.75	2.69	3.22	.44	1.00
1.5	3 & 4	6-1/2	1020584	2.2	1.25	.75	1.75	.88	1.88	4.15	1.81	1.00	3.38	4.03	.50	1.19
2	5 & 6	8-3/4	1020593	3.8	1.38	.88	2.25	1.00	2.81	5.50	2.09	1.12	4.19	4.50	.50	1.44
3	7 & 8	12-1/2	1020602	7.3	1.62	1.12	3.25	1.25	3.06	6.34	2.62	1.38	5.62	5.59	.62	1.81
4	9 & 10	20-1/2	1020611	15.2	2.12	1.38	4.50	1.50	5.25	9.45	3.12	1.75	7.50	6.88	.75	2.13
5	11 & 12	35	1020620	30.8	2.50	1.75	5.50	2.00	6.34	11.50	4.19	2.25	9.19	8.66	1.00	2.88
6	13	50	1020629	52.0	3.00	2.12	6.50	2.25	7.70	13.75	4.75	2.75	11.00	10.22	1.22	3.19

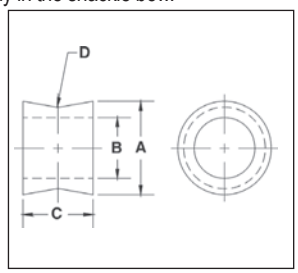
* Maximum Proof Load is 2.5 times the Working Load Limit. Minimum Ultimate strength is 5 times the Working Load Limit.

S-255
SPOOL

S-255 Spool

- The "Spool" is designed to keep the load centered on the pin, thus keeping the sling positioned correctly in the shackle bow.

Working Load Limit (t)*	S-255 Stock No.	Weight Each (lbs.)	Dimensions (in.)			
			A	B	C	D
3-1/4	1020903	.33	1.25	.81	.75	.19
6-1/2	1020912	.57	1.50	.94	1.00	.25
8-3/4	1020921	.89	1.75	1.05	1.19	.31
12-1/2	1020930	1.45	2.00	1.31	1.50	.38
20-1/2	1020939	2.79	2.50	1.63	1.88	.44
35	1020948	2.40	3.25	2.13	2.25	.50
50	1020957	4.06	3.75	2.38	2.75	.62



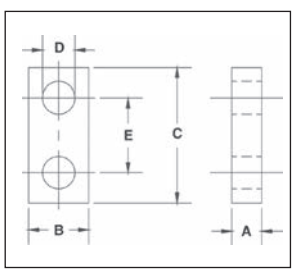
* Maximum Proof Load is 2.5 times the Working Load Limit. Minimum Ultimate strength is 5 times the Working Load Limit.

S-256
LINK PLATE

S-256 Link Plate

- The "Link Plate" is designed to connect two (2) S-252 or S-253 "Sling Saver" Shackles together.

Working Load Limit (t)*	S-256 Stock No.	Weight Each (lbs.)	Dimensions (in.)				
			A	B	C	D	E
3-1/4	1020785	.83	.75	1.50	3.38	.81	1.88
6-1/2	1020796	1.62	1.00	1.75	4.12	.94	2.25
8-3/4	1020807	2.71	1.25	2.00	4.75	1.06	2.62
12-1/2	1020818	5.18	1.50	2.50	6.00	1.31	3.37
20-1/2	1020829	8.19	1.75	3.00	7.00	1.62	3.75
35	1020840	17.19	2.00	4.00	9.25	2.12	5.00
50	1020851	37.40	2.88	5.00	10.50	2.38	5.75



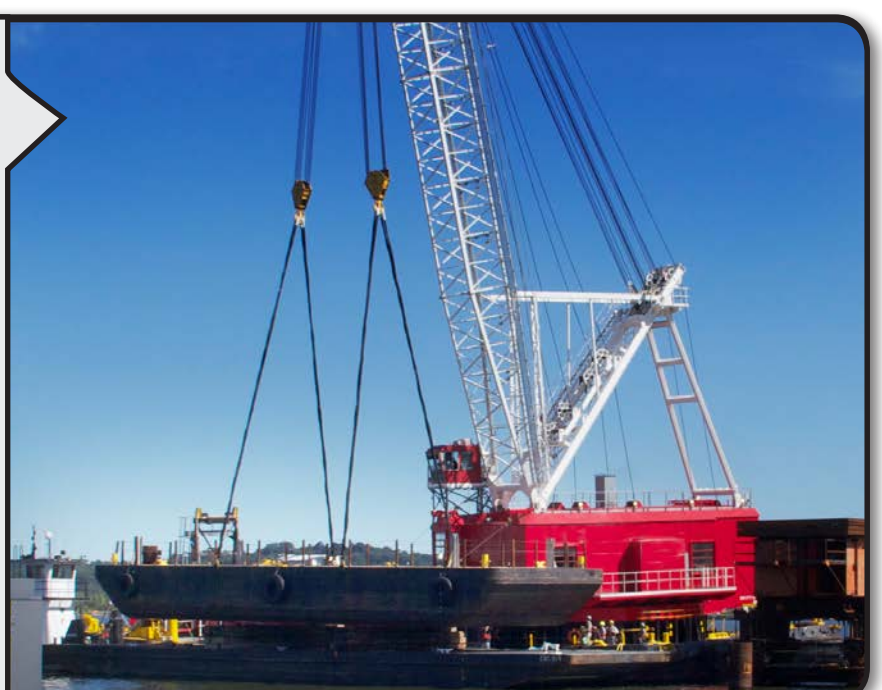
* Maximum Proof Load is 2.5 times the Working Load Limit. Minimum Ultimate strength is 5 times the Working Load Limit.

Sling Saver®

See page 105 for more imformation on the above products and how these products are integrated into synthetic sling systems.

The Rigging Triangle

An important aspect of rigging safety is knowing how to form a proper rigging triangle. The rigging triangle is formed any time two or more slings are connected to a load and load hook. It is important to remember that as the rigging triangle becomes flatter, the horizontal sling angles become smaller, which increases sling tension. To avoid this, ***a horizontal sling angle of 60 degrees or greater is considered optimal for all hitches.*** *At a* 60 degree *angle, the sling tension multiplier is only 1.15, the side or angular loading is limited, and the crushing load is 50 percent of the sling tension, which is considered minimal.* ***A helpful tip to verify that the slings are rigged at 60 degrees is to remember that a 60-degree sling angle is formed when an equilateral triangle is created.*** *This means that the sling length will be equal to the distance between pick points.*



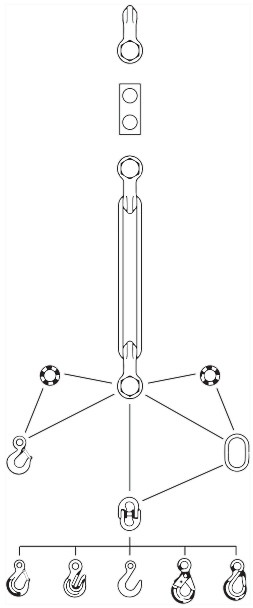
Easily Integrated into "Synthetic Sling System"

The "Synthetic Sling Saver" shackles line has been designed to easily adapt Crosby Sling fittings in the development of complete systems for synthetic slings.

Single Leg Slings

Sling Saver Shackle							LOK-A-LOY® Link* A-1337				
Web Sling Eye Width (in.)	Working Load Limit (T)	Sling Saver Shackle Spool S-255 (in.)	Sling Saver Shackle Link Plate S-256 (in.)	Eye Hoist Hook L-320AN† L-320A (t)	Alloy Master Link A-342 (in.)	Master Link Assy. A-345 (in.)	Sling Hook L-1327 (in.)	Eye Grab Hook A-1328 (in.)	Eye Foundry Hook A-1329 (in.)	Eye SHUR-LOC® S-1316A (in.)	Eye Latching S-315A (in.)
1	3-1/4	1	1	†5	3/4	—	3/8	3/8	3/8	3/8	3/8
1.5	6-1/2	1.5	1.5	†7	1	—	5/8	5/8	5/8	5/8	5/8
2	8-3/4	2	2	†11	1	—	5/8	5/8	5/8	5/8	5/8
3	12-1/2	3	3	†15	1-1/4	—	3/4	3/4	3/4	—	3/4
4	20-1/2	4	4	†22	1-3/4	—	—	3/4	—	3/4	—
5	35	5	5	37	2	—	—	3/4	—	—	—
6	50	6	6	60	2-1/4	—	—	3/4	—	—	—

* LOK-A-LOY® size same as hook size. † New 320N Eye Hook.

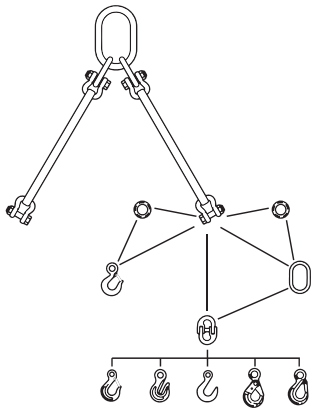


Single Leg Sling

Double Leg Slings

Sling Saver Shackle							LOK-A-LOY® Link* A-1337				
Web Sling Eye Width (in.)	Working Load Limit (T)	Sling Saver Shackle Spool S-255 (in.)	Sling Saver Shackle Link Plate S-256 (in.)	Eye Hoist Hook L-320AN† L-320A (t)	Alloy Master Link A-342 (in.)	Master Link Assy. A-345 (in.)	Sling Hook L-1327 (in.)	Eye Grab Hook A-1328 (in.)	Eye Foundry Hook A-1329 (in.)	Eye SHUR-LOC® S-1316A (in.)	Eye Latching S-315A (in.)
1	3-1/4	1	1	†5	3/4	1	3/8	3/8	3/8	3/8	3/8
1.5	6-1/2	1.5	1.5	†7	1	1-1/4	5/8	5/8	5/8	5/8	5/8
2	8-3/4	2	2	†11	1	1-1/4	5/8	5/8	5/8	5/8	5/8
3	12-1/2	3	3	†15	1-1/4	1-1/2	3/4	3/4	3/4	—	3/4
4	20-1/2	4	4	†22	1-3/4	1-3/4	—	3/4	—	—	—
5	35	5	5	37	2	—	3/4	—	—	—	—
6	50	6	6	60	2-1/4	—	3/4	—	—	—	—

* LOK-A-LOY size same as hook size. † New 320N Eye Hook.



Double Leg Sling