

the **Crosby** group,
INC.

Sling Saver[®]

Accessories for Web
Slings, Round Slings and
High Performance Slings

Introducing the
S-237
High Performance
Sling Connector
See Page 10



... lifting the world
into the the future!

Crosby Group Products Distributed By:

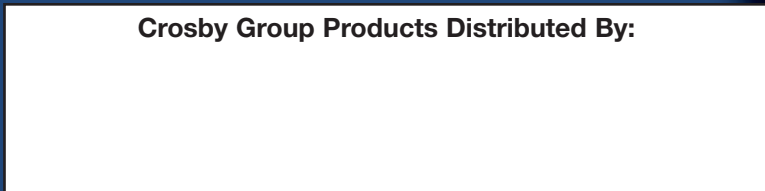


Table of Contents

... LIFTING THE WORLD INTO THE FUTURE!

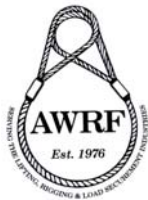
When you're connecting synthetic slings, either webbing or round sling, to pad eyes, other hardware, chain or to another synthetic sling, Crosby now has the fittings you need.

Crosby's new Sling Saver line is the first broad line of fittings developed exclusively for use with synthetic slings. Combined with additional Crosby products currently offered, a complete system has now been developed.

Application Information	1
S-280 Web Connector	2
S-281 Web Sling Shackle	3
S-252 / S-253	4
S-255 / S-256	5
WS-320	6
S-282 / S-287	7
G-2160	8
A-344 / A-347	9
S-237 High Performance Sling Connector	10 - 11
Web System	12
Synthetic Sling System	13
Inspection Information	14
Inspection of Fittings	15
Inspection of Round Slings	16
Inspection of Web Slings	17



Member of














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Application Information

WITH CROSBY'S NEW SLING SAVER LINE OF HARDWARE, YOU WILL GET THE FULL RATED STRENGTH OF THE SLING AND EXTEND ITS LIFE

Recommended Application Chart		
Application	Use	Comments
Web Slings, connect to Pad Eye, Eye Bolt, or Lifting Lug.	S-281 Sling Saver Web Sling Shackle 	Always Insure Rated Working Load Limits are greater than the load placed on the fitting.
Web Slings or Roundslings, connecting to Pad Eye, Eye Bolt, or Lifting Lug.	S-253 or S-252 Sling Saver Shackle 	
Connect two S-252 or S-253 Sling Saver shackles together	S-256 Link Plate 	
To keep the load centered on the Pin, thus keeping the sling positioned correctly in the shackle bow.	S-255 Spool 	
Web Slings or Roundslings connecting to Master Links, Rings, or Crosby 320N Eye Hooks.	S-280 Sling Saver Web Connector with spool 	
Web Slings or Roundslings connecting to Grade 8 Chain.	S-282 Sling Saver Chain Connector with spool. 	
High Strength, High Capacity Web or Roundslings	WS-320A Web Sling Hook. 	
Choking with Web Slings or Roundslings	S-287 Sliding Choker Hook 	
Master Links or Master Link Assembly to be sewn into eye of Web Sling or attached utilizing web connector.	Welded Master Link A-344 and Master Link Assembly A-347 	
Web Sling being used to lift die blocks, or other equipment where standard Hoist Rings are used.	HR-125 W 	
Connecting High Performance slings to master links or eye hooks.	S-237 	
Crosby Sling Saver hardware meets the requirements for minimum stock diameter or thickness and effective contact width shown in the recommended standard specification for synthetic Polyester Roundslings by the Web Sling and Tie Down Association. WSTDA-RS1 (revised 2001).		

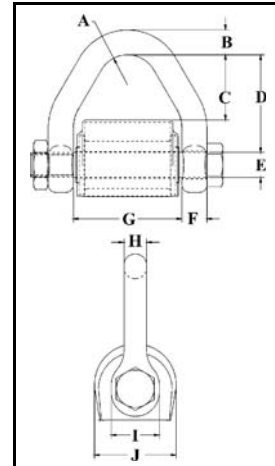
Sling Saver Web Connector

Sling Saver Load Rated **"QT"**
QUENCHED & TEMPERED

S-280



- All Alloy construction.
- Durable vinyl cover that:
 - Protects sling at eye
 - Keeps sling positioned correctly on spool.
- Design Factor of 5 to 1.
- Connects Synthetic Web and Synthetic Round Slings to conventional Crosby hardware including:
 - 320N Eye Hook
 - Additional Crosby Grade 8 Fittings
 - Master Links
 - Rings
 - Shackles
- Makes a field assembled bridle quick and easy.
- No cotter pin to snag sling material.
- Increased radius of spool gives wider sling bearing surface resulting in an increased area for load distribution, thus:
 - Increasing Synthetic Sling efficiency by at least 15% as compared to standard anchor and chain shackle bows and conventional eye hooks. This allows 100% of the slings rated Working Load Limit to be achieved.
 - Allowing better load distribution on internal fibers.
- Replacement kit for spool and web cover available.
- Designed for use with Type III (Eye & Eye), Class 7, 2 ply webbing & Synthetic Round Slings. Also accommodates single ply and endless slings.



WARNING

- A falling load may cause serious injury or death.
- Read, understand and follow all instructions and chart information before using web connector.
- Before use, tighten bolt first, then tighten nut.

S-280 Web Connector

Round Sling Size (No.)	Web Slings*			Working Load Limit (Tons)†	S-280 Stock No.	Weight Each (lbs.)	Dimensions (in.)									
	Webbing Width (in.)	Eye Width (in.)	Ply				A	B	C	D	E	F	G	H	I	J
1 & 2	2	2	2	3-1/4	1021681	1.5	.75	.62	1.63	2.44	.63	.62	2.69	.56	1.19	2.02
3	3	1.5	2	4-1/2	1021690	1.9	.75	.69	1.10	2.01	.75	.69	2.19	.60	1.38	2.34
4	4	2	2	6-1/4	1021700	2.9	.75	.81	1.66	2.56	.88	.75	2.69	.69	1.62	2.46
5 & 6	6	3	2	8-1/2	1021709	5.1	1.00	.94	2.47	3.50	1.00	.88	3.69	.88	1.88	2.84

* Designed for use with Type III, (Eye & Eye), Class 7, 2 Ply web slings. For 3" and larger webbing width, tapered eye is required
 † Maximum Proof Load is 2-1/2 times the Working Load Limit. Minimum Ultimate strength is 5 times the Working Load Limit.

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 Roundslings by the Web Sling & Tie Down Association. WSTDA-RS1 (revised 2001)

Sling Saver Web Sling Shackles

Sling Saver® Load Rated **"QT"**
QUENCHED & TEMPERED

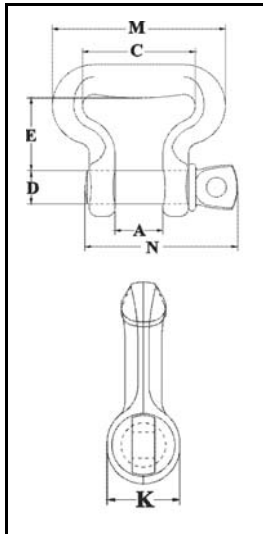
S-281



Web Sling Shackle is designed to connect Synthetic Web Slings and Synthetic Round Slings to eyebolts, pad eyes, and lifting lugs.

- 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.
- Incorporates same ear spread and pin dimensions as conventional Crosby Shackles. Allows easy connection to pad eyes, eye bolts, and lifting lugs.
- Increased radius of bow gives wider sling bearing surface resulting in an increased area for load distribution, thus:
 - Increasing Synthetic Sling efficiency by at least 15% as compared to standard anchor and chain shackle bows and conventional eye hooks. This allows 100% of the slings rated Working Load Limit to be achieved.
 - Allows better load distribution on internal fibers.
- Crosby products meet or exceed all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, Crosby products meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.
- Look for the Red Pin® ... The mark of genuine Crosby Quality.

S-281 Web Sling Shackle



Round Sling Size (No.)	Web Slings*			Working Load Limit (Tons)†	S-281 Stock No.	Weight Each (lbs.)	Dimensions (in.)						
	Webbing Width (in.)	Eye Width (in.)	Ply				A	C	D	E	K	M	N
1 & 2	2	2	2	3-1/4	1021048	1.2	1.06	2.50	.75	1.62	1.22	3.84	3.34
3	3	1.5	2	4-1/2	1021057	1.5	1.25	2.00	.88	1.50	1.41	3.38	3.97
4	4	2	2	6-1/4	1021066	2.5	1.44	2.50	1.00	2.00	1.62	4.22	4.50
5&6	6	3	2	8-1/2	1021075	4.3	1.69	3.62	1.13	2.75	1.84	5.64	5.13

* NOTE: Designed for use with Type III, (Eye & Eye), Class 7, 2 Ply web slings. For 3" and larger webbing width, tapered eye is required.
 † Maximum Proof Load is 2-1/2 times the Working Load Limit. Minimum Ultimate strength is 5 times the Working Load Limit.

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 Roundslings by the Web Sling & Tie Down Association. WSTDÄ-RS1 (revised 2001)

Sling Saver Web Sling Shackles

Sling Saver® Fatigue Rated Load Rated



S-252 BOLT TYPE SLING SHACKLE

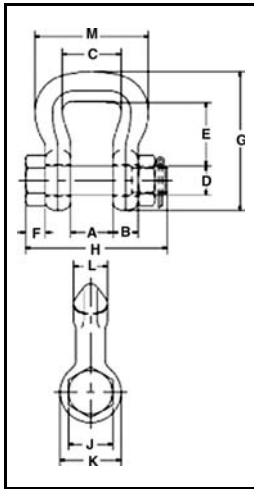


S-253 SCREW PIN SLING SHACKLE



- Shackles available in size 3-1/4 to 50 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 by at least 15% as compared to standard anchor and chain shackle bows and conventional hooks. This allows 100% of the slings rated Working Load Limit to be achieved.
 - Allows better load distribution on internal fibers.
- Shackles available in both a Screw Pin and Bolt, Nut and cotter pin configuration.
- Crosby products meet or exceed all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, Crosby products meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.
- Bolt (Pin) has a larger diameter that provides better load distribution.
- Look for the Red Pin®. . . the mark of Genuine Crosby quality.

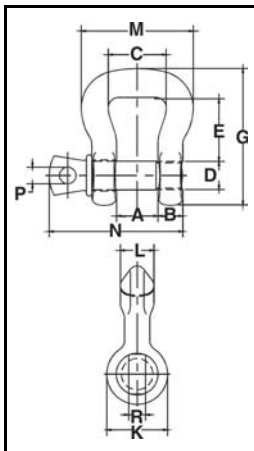
S-252 Bolt Type Sling Shackle



Web Sling Eye Width (in.)	Round Sling Size (No.)	Working Load Limit (Tons)*	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 (Tons)*	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.

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 Roundslings by the Web Sling & Tie Down Association. WSTDA-RS1 (revised 2001)

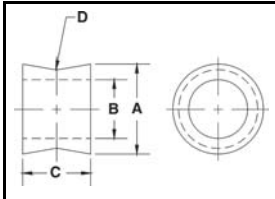
Sling Saver Shackle Accessories

Sling Saver®

S-255 SPOOL



S-256 LINK PLATE

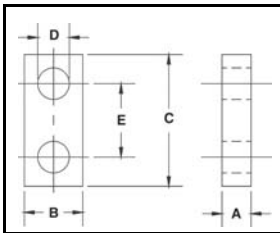


S-255 Spool

- 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 (Tons)*	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

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

Working Load Limit (Tons)*	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	3.00	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 Web Sling Hooks

Sling Saver[®] Fatigue Rated[®]

Load Rated[®]



SEE APPLICATION AND WARNING INFORMATION

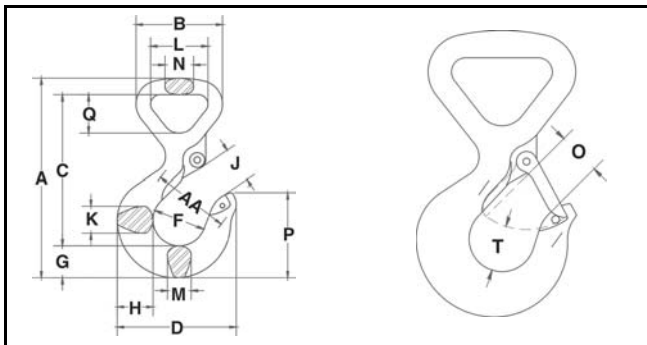
Para Español: www.thecrosbygroup.com

in General Catalog

**WS-320A
WEB SLING HOOK**



- Hook capacities available: 1-1/2, 3, and 5 tons.
- All Alloy construction.
- Design factor of 5 to 1.
- Each hook has a Product Identification Code (PIC) for material traceability along with a working load limit and the name Crosby forged into it.
- Originally designed for 2-Ply Web slings, the Crosby Web Sling hook can also be used with Round Slings as long as the Working Load Limit ratings are compatible. The new hook incorporates the following features:
 - Eye is designed with a wide beam surface which:
 - Eliminates bunching effects.
 - Reduces sling tendency to slide.
 - Allows a better load distribution on internal fibers.
- All hooks feature Crosby's patented **QUIC-CHECK[®]** indicators.
- Hook Web Sling Eye width available: 1", 2", and 3".
- Fatigue rated to 20,000 cycles at 1-1/2 times the Working Load Limit.



**WS-320 A
Web Sling Hooks**

Web Sling Eye Width (in.)	Round Sling Size (No.)	Working Load Limit (Tons)	WS-320A Stock No.	WSL-320A with Latch	Weight Each (lbs.)	Hook I.D. Code	S-4320 Rep. Latch
1"	1	1-1/2	1022701	1022706	1.10	FA	1096374
2"	2	3	1022712	1022717	2.86	HA	1096468
3"	3	5	1022723	1022728	6.60	IA	1096515

Hook ID Code	Working Load Limit (Tons)*	Dimensions (in.)																
		A	B	C	D	F	G	H	J	K	L	M	N	O	P	Q	T	AA
FA	1-1/2	5.25	2.26	3.98	3.11	1.38	.84	.94	.93	.71	1.50	.63	.75	.91	2.24	1.01	.98	2.00
HA	3	7.11	3.66	5.31	3.97	1.63	1.13	1.32	1.13	.94	2.50	.85	1.13	1.09	2.82	1.69	1.16	2.00
IA	5	9.33	5.13	7.06	4.81	2.00	1.44	1.63	1.47	1.31	3.75	1.13	1.63	1.36	3.51	2.59	1.53	2.50

* Maximum Proof Load is 2-1/2 times the Working Load Limit. Average straightening load (ultimate load) is 5 times the Working Load Limit.

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 Roundslings by the Web Sling & Tie Down Association. WSTDA-RS1 (revised 2001)

Sling Saver Fittings / Accessories

Sling Saver® Load Rated "QT" QUENCHED & TEMPERED

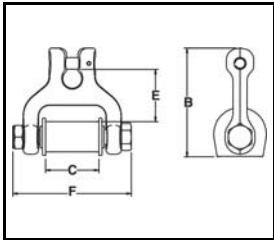
S-282 WEB / CHAIN CONNECTOR



Designed around the same concept as our S-280 Web Connector, the S-282 Chain Connector makes the connection from your web sling to existing chain quick and easy.

- Available in three sizes:
 - 3-1/4 ton Working Load Limit - 2" Webbing to 3/8" (10mm) chain.
 - 4-1/2 ton Working Load Limit - 1-1/2" (3" Tapered Webbing) to 1/2" (13mm) chain.
 - 6-1/2 ton Working Load Limit - 2" (4" Tapered Webbing) to 5/8" (16mm) chain.
- Alloy Steel (Quenched and Tempered)
- Each Connector has a Product Identification Code (PIC) for material traceability along with a Working Load Limit and the name Crosby forged into it.
- Uses same spool and cover as S-280 Web Connector.
 - Replacement Kit for Spool and Web Cover available.

S-282 Web / Chain Connector



Round Sling Size (No.)	Web Slings*			Chain Size	Working Load Limit (Tons) †	S-282 Stock No.	Weight Each (lbs.)	Dimensions (in.)			
	Webbing Width (in.)	Eye Width (in.)	Ply					B	C	E	F
1 & 2	2	2	2	3/8	3-1/4	1021084	1.9	4.33	2.13	2.11	4.77
3	3	1.5	2	1/2	4-1/2	1021093	2.8	5.04	1.63	2.44	4.54
4	4	2	2	5/8	6-1/4	1021100	4.3	5.69	2.13	2.54	5.31

* NOTE: Designed for use with Type III, (Eye & Eye), Class 7, 2 Ply web slings.

† Maximum Proof Load is 2-1/2 times the Working Load Limit. Minimum Ultimate Strength is 4 times the Working Load Limit.

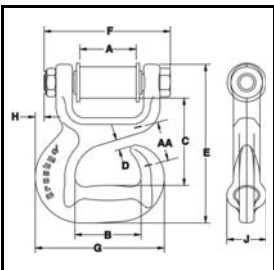
Sling Saver® Load Rated "QT" QUENCHED & TEMPERED QUIC-CHECK®

S-287 WEB SLING CHOKER HOOK



- Available in 2 sizes: 3-1/4 tons (2" webbing) and 4-1/2 tons (3" webbing)
- Forged Alloy steel.
- Design factor of 5 to 1.
- Each Connector has a Product Identification Code (PIC) for material traceability along with a Working Load Limit and the name Crosby forged into it.
- Special design of hook protects the synthetic sling when dropped or dragged.
- Designed to reduce friction, abrasion, and fraying in choker area.
- Uses same spool and cover as S-280 Web Connector.
 - Replacement Kit for Spool and Web Cover available.

S-287 Sliding Choker Hook



Round Sling Size (No.)	Web Slings*			Working Load Limit (Tons) †	S-287 Stock No.	Weight Each (lbs.)	Dimensions (in.)									
	Webbing Width (in.)	Eye Width (in.)	Ply				A	B	C	D	E	F	G	H	J	AA
1 & 2	2	2	2	3-1/4	1021909	3.7	2.13	2.50	3.32	.38	6.03	4.77	4.88	.34	1.50	1.50
3	3	1.5	2	4-1/2	1021918	6.1	1.63	3.50	3.67	.38	7.06	4.53	6.51	1.36	1.88	—

* NOTE: Designed for use with Type III, (Eye & Eye), Class 7, 2 Ply web slings.

† Maximum Proof Load is 2-1/2 times the Working Load Limit. Average straightening load (ultimate load) is 5 times the Working Load Limit.

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 Roundslings by the Web Sling & Tie Down Association. WSTDA-RS1 (revised 2001)

Sling Saver Fittings / Accessories

Load Rated

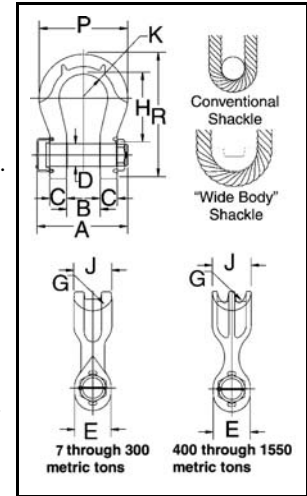


**G-2160 / S-2160
"WIDE BODY"
SHACKLES**



Patented

- All sizes Quenched and Tempered for maximum strength.
- Forged alloy steel from 30 through 300 metric tons.
- Cast alloy steel from 400 through 1000 metric tons.
- Sizes 300 tons and smaller are proof tested to 2 times the Working Load Limit.
- Sizes 400 tons and larger are tested to 1.33 times Working Load Limit.
- All ratings are in metric tons, embossed on side of bow.
- Sizes 30 - 55 tons are painted red.
- Sizes 75 tons and larger, bows and pins are furnished Dimetcoted. All Pins are Dimetcoted then painted red.
- Greatly improves wearability of wire rope slings.
- Can be used to connect HIGH STRENGTH Synthetic Web Slings, HIGH STRENGTH Synthetic Round Slings or Wire Rope Slings.
- Increase in shackle bow radius provides minimum 58% gain in sling bearing surface and eliminates need for a thimble.
- Increases usable sling strength minimum of 15%.
- Pin is non-rotating, with weld on handles for easier use (300t and larger).
- All 2160 shackles are individually proof tested and magnetic particle inspected. Crosby certification available at time of order.
- Crosby products meet or exceed all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, Crosby products meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.
- Shackles requiring ABS, DNV, Lloyds and other certifications are available upon special request and must be specified at time of order.
- Shackles are produced in accordance with certified lifting appliance requirements.
 - Non Destructive Testing
 - Serialization / Identification
 - Material Testing (Physical / Chemical / Charpy)
 - Proof Testing



Working Load Limit (t)*	G-2160 Stock No.	Weight Each (lbs.)	Dimensions (in.)										
			A	B +/- .25	C	D +/- .02	E	G	H	J	K	P	R
† 30**	1021575	25	7.73	2.37	1.38	1.63	3.50	2.50	7.00	3.13	2.50	8.50	11.38
† 40**	1021584	35	9.32	2.88	1.75	2.00	4.00	1.75	8.13	3.75	3.00	10.62	13.62
† 55**	1021593	71	10.41	3.25	2.00	2.27	4.63	2.00	9.42	4.50	3.50	12.26	15.63
† 75	1021290	99	14.37	4.13	2.12	2.75	5.00	2.55	11.60	4.75	3.64	12.28	18.41
† 125	1021307	161	16.51	5.12	2.56	3.15	5.71	3.15	14.43	5.91	4.33	14.96	22.65
† 200	1021316	500	20.67	5.91	3.35	4.12	7.28	4.33	18.98	8.07	5.41	19.49	29.82
† 300	1021325	811	24.20	7.38	4.00	5.25	9.25	5.47	23.69	10.38	6.31	23.38	37.26
†† 400	1021334	1041	30.06	8.66	5.16	6.30	11.81	6.30	22.71	12.60	7.28	27.17	38.78
†† 500	1021343	1378	32.99	9.84	5.59	7.09	12.52	6.69	24.88	13.38	8.86	31.10	42.71
†† 600	1021352	1833	35.39	10.83	6.04	7.87	13.78	7.28	27.64	14.56	9.74	34.06	47.24
†† 700	1021361	2446	38.91	11.81	6.59	8.46	14.80	7.87	29.04	15.74	10.63	37.01	50.17
†† 800	1021254	3016	43.50	12.80	7.19	9.06	15.75	8.27	29.62	16.54	10.92	38.39	52.09
†† 900	1021389	3436	43.60	13.78	7.78	9.84	16.93	8.66	30.02	17.32	11.51	40.35	54.04
††1000	1021370	4022	45.98	14.96	8.33	10.63	17.72	9.06	30.02	18.12	12.11	43.32	55.32
††1250	1021272	5706	49.86	16.93	9.15	11.81	21.00	10.43	36.61	20.87	12.70	46.26	65.35
††1550	1021281	7025	54.24	17.72	10.58	12.80	23.82	15.92	42.22	22.82	13.28	49.41	73.43

* Ultimate Load is 5 times the Working Load Limit. ** Painted Red - Not Dimetcoted.

† Forged Alloy Steel. Proof Load is 2 times the Working Load Limit.

†† Cast Alloy Steel. Proof Load is 1.33 times the Working Load Limit.

Welded Master Links



A-344

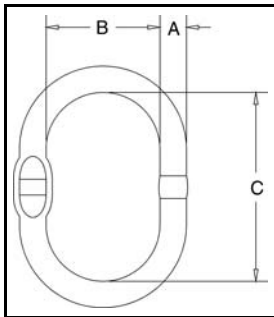


- Alloy Steel - Quenched and Tempered.
- Design Factor of 4 to 1 for chain and 5 to 1 for wire rope.
- Individually proof tested to 2 times the Working Load Limit (4:1), unless otherwise noted, with certification.
- Proof tested with fixture sized to prevent localized point loading per ASTM A952.
- Crosby products meet or exceed all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements.
- Each link has a Product Identification Code (PIC) for material traceability, along with the size and the name Crosby & U.S.A.
- Larger inside width and length for use with thimble.
- Engineered Flat for use with S-1325A coupler link.

A-347



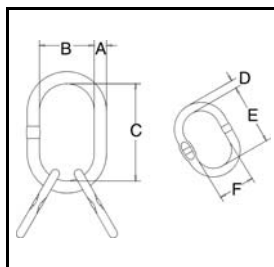
**A-344
Welded Master Link
with Engineered Flat**



Size (in.)	A-344 Stock No.	Working Load Limit (lbs.)*		Weight Each (lbs.)	Dimensions (in.)				Engineered Flat Size for S-325A (in.) - (mm)
		4:1	5:1		A	B	C	G	
7/16	1256857	3500	2800	.5	.47	2.36	3.94	.24	1/4"-5/16", 7-8mm
1/2	1256927	6100	4900	.7	.55	2.36	3.94	.30	1/4"-5/16", 7-8mm
11/16	1256997	8800	7100	1.6	.67	3.54	6.30	.33	3/8", 10mm
3/4	1257067	14300	11500	2.6	.79	3.54	6.30	.41	1/2", 13mm
7/8	1257207	18100	14500	3.6	.87	3.94	7.09	.53	No Flat
1	1257277	25300	20300	4.8	.98	3.94	7.09	.65	5/8", 16mm
1-1/8	1257377	26000	20800	8.5	1.10	5.51	10.63	-	No Flat
1-1/4	1257417	35300	28300	10.6	1.26	5.51	10.63	-	No Flat

* Ultimate Load is 4 times the Working Load Limit. Based on 90 degree included angle or smaller. For included angles greater than 90 degrees, the Working Load Limit must be de-rated.

**A-347
Welded Master Link Assembly**



Chain Size (in.)	A-347 Stock No.	Working Load Limit (lbs.)*		Weight Each (lbs.)	Dimensions (in.)							Engineered Flat Size for S-325A (in.) - (mm)
		4:1	5:1		A	B	C	D	E	F	G	
1/2	1257690	5300	4300	1.30	.55	2.36	3.94	.47	3.35	1.57	.24	No Flat
5/8	1257760	7100	5700	3.65	.67	3.54	6.30	.55	3.94	2.36	.30	No Flat
3/4	1257830	11000	8800	4.00	.79	3.54	6.30	.55	3.94	2.36	.30	1/4"-5/16", 7-8mm
7/8	1257970	17600	14100	6.90	.87	3.94	7.09	.67	5.91	2.76	.33	3/8", 10mm
1-1/8	1258140	26500	21200	16.31	1.10	5.51	10.63	.87	6.30	3.54	.53	1/2", 13mm
1-1/4	1258180	38400	30720	22.50	1.26	5.51	10.63	.98	7.09	3.94	.65	5/8", 16mm

* Ultimate Load is 4 times the Working Load Limit. Bases on 90 degree included angle or smaller. For included angles greater than 90 degrees, the Working Load Limit be de-rated.

Sling Saver Fittings / Accessories

Sling Saver Load Rated **"QT"**
QUENCHED & TEMPERED

S-237

High Performance Sling Connector is designed to connect High Performance Synthetic Slings of all materials.



- Allows easy connection to master links or eye hooks, and is ideal for bridles.
- 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 master links, shackle bows and conventional eye hooks. This allows 100% of the slings rated Working Load Limit to be achieved.
 - Allows better load distribution on internal fibers.
- All Alloy Construction
- Design Factor of 5 to 1 for wire rope and 4 to 1 for chain.
- Individually Proof Tested at 2.5 times the Working Load Limit.
- Each connector has a Product Identification Code (PIC) for material traceability, along with a frame size, and the name Crosby and USA in raised letters.

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 Roundslings by the Web Sling & Tie Down Association. WSTDA-RS1 (revised 2001)

S-237

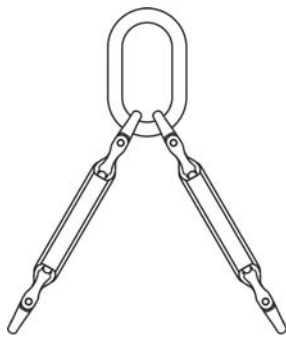
High Performance Sling Connector

Working Load Limit 4:1 (lbs.)*	Working Load Limit 5:1 (lbs.)	S-237 Stock No.	Frame No.	Nominal Sling Body Width (in.)	Lok-A-Loy Size	Weight Each (lbs.)	Dimensions (in.)									
							A	C	E	H	L	N	P	R	S	W
12500	10000	1020704	10	3"	5/8"	3.0	1.41	2.75	4.13	.98	5.67	1.72	.47	3.94	.75	1.75
18750	15000	1020713	15	3"	3/4"	4.8	1.62	2.75	4.38	1.10	6.49	2.04	.60	4.46	.93	1.88
31250	25000	1020722	25	4"	7/8"	8.6	2.00	3.75	6.00	1.41	7.99	2.26	.66	5.52	1.06	2.25
37500	30000	1020731	30	4"	7/8"	8.6	2.00	3.75	6.00	1.41	7.99	2.26	.66	5.52	1.06	2.25
50000	40000	1020740	40	5"	1"	14.6	2.25	4.75	7.13	1.78	9.45	2.53	.78	6.45	1.22	3.09
75000	60000	1020759	60	6"	1-1/4"	26.0	2.56	5.75	9.00	1.86	11.20	3.07	.95	7.84	1.50	3.16

* Maximum Proof Load is 2 times the Working Load Limit at 4:1 design factor. Minimum Ultimate strength is 5 times the Working Load Limit.

Typical Applications

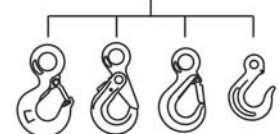
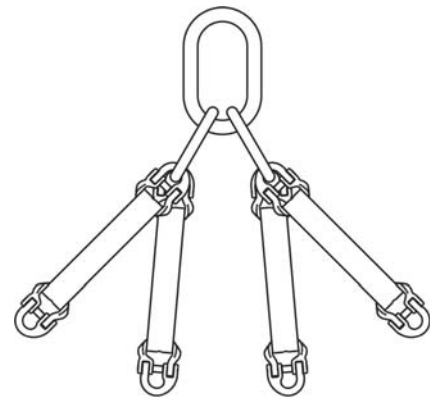
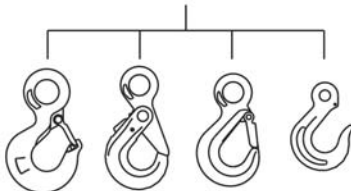
The S-237 Connector has been designed to easily adapt Crosby fittings in the development of complete systems for high performance Synthetic Slings.



Join two Slings



Connect to other hardware



Sling Saver Components

S-237 High Performance Sling Connector Working Load Limit - 5 to 1 Design Factor

		90°	60°	45°	30°	60°	45°	30°
Frame	Grade 80 Chain	Single Leg	Double Leg			Triple & Quad Leg		
10	5/8	10000	17400	14000	10000	26100	21000	15000
15	3/4	15000	26100	21000	15000	39150	31500	22500
25	7/8	25000	43500	35000	25000	65250	52500	37500
30	7/8	30000	52200	42000	30000	78300	63000	45000
40	1	40000	69600	56000	40000	104400	84000	60000
60	1-1/4	60000	104400	84000	60000	—	—	—

Single Leg Sling

Frame	Grade 80 Chain	S-237 Sling Connector	A-342 Master Link	A-345 A-1345 Master Link Assy.	S-1320 S-320 Eye Sling Hook	S-1316 SHUR-LOC® Eye Hook	S-315 Latching Eye Hook	A-327 Eye Sling Hook
10	5/8	1020704	1014324	—	1025848	1022941	1029840	1003791
15	3/4	1020713	1014342	—	1022441	1022942	—	1003808
25	7/8	1020722	1014360	—	1022452	1022943	—	1003817
30	7/8	1020731	1014360	—	1022452	1022943	—	1003817
40	1	1020740	1014388	—	1022465	1022944	—	—
60	1-1/4	1020759	1014404	—	1023546	—	—	—

Double Leg Sling

Frame	Grade 80 Chain	S-237 Sling Connector	A-342 Master Link	A-345 A-1345 Master Link Assy.	S-1320 S-320 Eye Sling Hook	S-1316 SHUR-LOC® Eye Hook	S-315 Latching Eye Hook	A-327 Eye Sling Hook
10	5/8	1020704	1014342	—	1025848	1022941	1029840	1003791
15	3/4	1020713	1014360	—	1022441	1022942	—	1003808
25	7/8	1020722	1014360	—	1022452	1022943	—	1003817
30	7/8	1020731	1014388	—	1022452	1022943	—	1003817
40	1	1020740	1014404	—	1022465	1022944	—	—
60	1-1/4	1020759	1014422	—	1023546	—	—	—

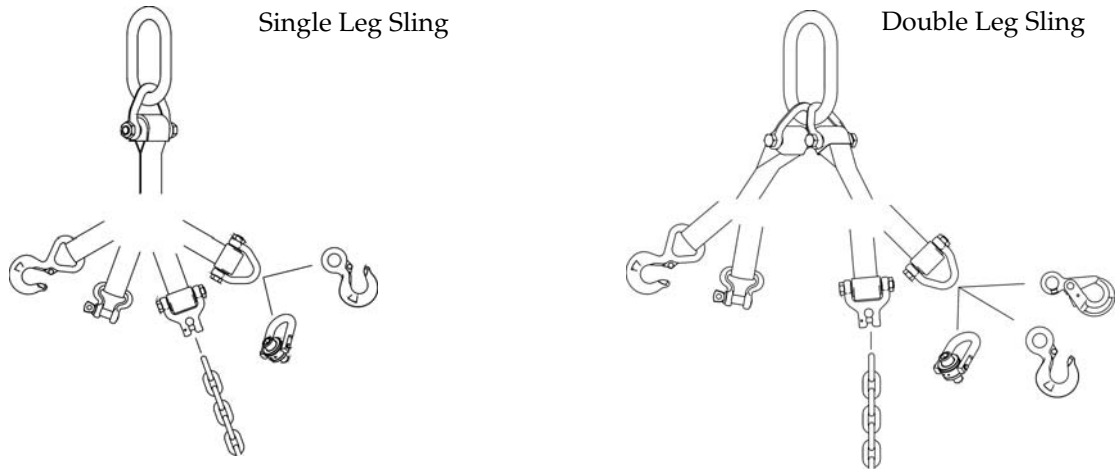
Triple and Quadruple Leg Sling

Frame	Grade 80 Chain	S-237 Sling Connector	A-342 Master Link	A-345 A-1345 Master Link Assy.	S-1320 S-320 Eye Sling Hook	S-1316 SHUR-LOC® Eye Hook	S-315 Latching Eye Hook	A-327 Eye Sling Hook
10	5/8	1020704	—	1014798	1025248	1022941	1029840	1003791
15	3/4	1020713	—	1014814	1022441	1022942	—	1003808
25	7/8	1020722	—	1014832	1022452	1022943	—	1003817
30	7/8	1020731	—	1014832	1022452	1022943	—	1003817
40	1	1020740	—	1011565*	1022465	1022944	—	—
60	1-1/4	1020759	—	—	1023546	—	—	—

* A-1345N, Grade 100 Master Link Assembly

Sling Saver Web Sling System

This easy-to-use chart is designed to allow you to quickly determine the fitting required to create the Web Sling or Round Sling you need.



SINGLE AND DOUBLE LEG SLINGS

Component Recommendations based on Type III, (Eye & Eye), Class 7, 2 Ply web slings.

S-280 Web Connector S-281 Web Sling Shackle S-282 Chain Connector					S-280 Web Connector						
Web Sling											
Round Sling Size (No.)	Web Width (in.)	Eye Width (in.)	Ply.	S-280 S-281 S-282 Working Load Limit (tons)	Web Sling Hook WS-320 (tons)	Spectrum 8® Chain Size (in.) - (mm)	Eye Hoist Hook S-320 AN (t)	Eye SHUR-LOC® S-1316 (in.)	Swivel Hoist Ring HR-125 (lbs.)	Master Link A-342 Single Leg (in.)	Master Link A-342 Double Leg (in.)
1 & 2	2	2	2	3-1/4	3	3/8 - 10	3	1/2	7,000	5/8	3/4
3	3	1.5	2	4-1/2	5	1/2 - 13	5	5/8	10,000	3/4	1
4	4	2	2	6-1/2	—	5/8 - 16	7	5/8	15,000	1	1
5 & 6	6	3	2	8-1/2	—	—	11	—	24,000	1	1-1/4

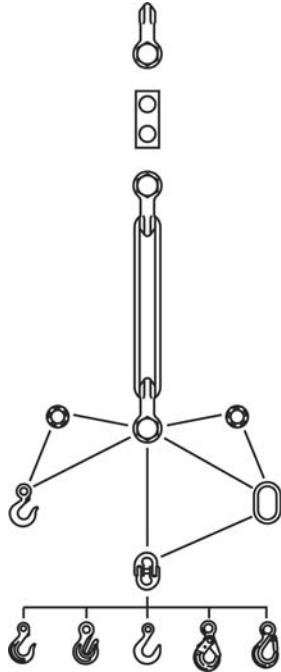
TRIPLE AND QUAD LEG SLINGS

Component Recommendations based on Type III, (Eye & Eye), Class 7, 2 Ply web slings.

S-280 Web Connector S-281 Web Sling Shackle S-282 Chain Connector					S-280 Web Connector						
Web Sling											
Round Sling Size (No.)	Web Width (in.)	Eye Width (in.)	Ply.	S-280 S-281 S-282 Working Load Limit (tons)	Web Sling Hook WS-320 (tons)	Spectrum 8® Chain Size (in.) - (mm)	Eye Hoist Hook S-320AN (t)	Eye SHUR-LOC® S-1316 (in.)	Swivel Hoist Ring HR-125 (lbs.)	Master Link A-342 Single Leg (in.)	Master Link A-342 Double Leg (in.)
1 & 2	2	2	2	3-1/4	3	3/8 - 10	3	1/2	7,000	1	1
3	3	1.5	2	4-1/2	5	1/2 - 13	5	5/8	10,000	1	1-1/4
4	4	2	2	6-1/2	—	5/8 - 16	7	5/8	15,000	1-1/4	1-1/2
5 & 6	6	3	2	8-1/2	—	—	11	—	24,000	1-1/2	1-3/4

Sling Saver Synthetic Sling Saver

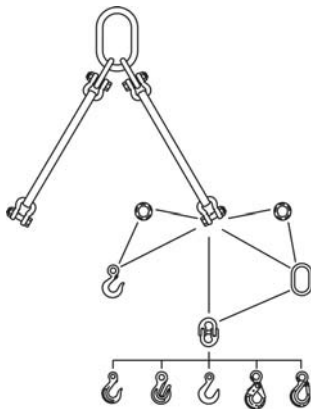
EASILY INTEGRATED INTO "SYNTHETIC SLING SYSTEM"



SINGLE LEG SLING

Sling Saver Shackle		LOK-A-LOY® Link* A-1337									
Web Sling Eye Width (in.)	Working Load Limit (tons)	Sling Saver Shackle Spool S-255 (in.)	Sling Saver Shackle Link Plate S-256 (in.)	Eye Hoist Hook S-320AN† S-320A (t)	Alloy Master Link A-342 (in.)	Master Link Assy. A-345 (in.)	Sling Hook A-327 (in.)	Eye Grab Hook A-328 (in.)	Eye Foundry Hook A-329 (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.



DOUBLE LEG SLING

Sling Saver Shackle		LOK-A-LOY® Link* A-1337									
Web Sling Eye Width (in.)	Working Load Limit (tons)	Sling Saver Shackle Spool S-255 (in.)	Sling Saver Shackle Link Plate S-256 (in.)	Eye Hoist Hook S-320AN† S-320A (t)	Alloy Master Link A-342 (in.)	Master Link Assy. A-345 (in.)	Sling Hook A-327 (in.)	Eye Grab Hook A-328 (in.)	Eye Foundry Hook A-329 (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.

Sling Saver Inspection Information

WEB SLING

WEB SLINGS SHALL NOT BE CONSTRICTED OR BUNCHED BETWEEN THE EARS OF A CLEVIS OR SHACKLE, OR IN A HOOK.

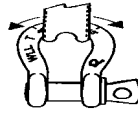
ROUND SLINGS

THE ROUND SLING SHALL NOT BE CONSTRICTED OR BUNCHED BETWEEN THE EARS OF A CLEVIS OR SHACKLE, OR IN A HOOK.

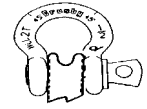
THE OPENING OF FITTINGS SHALL BE PROPER SHAPE AND SIZE TO ENSURE THAT THE FITTING WILL SEAT PROPERLY ON THE ROUND SLING

SYNTHETIC SLINGS RATED LOAD

FOLDING BUNCHING OR PINCHING OF SYNTHETIC SLINGS, WHICH OCCURS WHEN USED WITH SHACKLES, HOOKS OR OTHER APPLICATIONS WILL REDUCE THE RATED LOAD.



BUNCH-



PINCHING

The Round Sling shall not be constricted or bunched between the ears of a clevis or shackle, or in a hook. When a Round Sling is used with a shackle, it is recommended that it be used (rigged) in the bow of the shackle.

When connecting web or round slings, use conventional fittings with:

1. Large Radius
2. Straight Pins
3. Pads or use special fittings designed for synthetic slings.

SYNTHETIC SLING CONNECTIONS AND HITCHES

WEB SLING IDENTIFICATION INCLUDES:

SLING TYPE:

TC - TRIANGLE CHOKER,
TT - TRIANGLE TRIANGLE,
EE - EYE AND EYE,
EN - ENDLESS

NUMBER OF PLYS: 1 OR 2

WEBBING GRADE: 9 OR 6

SLING WIDTH (INCH)

EE 2-9 04 X 12 ← SLING LENGTH (INCH)

ROUND SLING IDENTIFICATION INCLUDES:

SLING NUMBER: 1-13

SLING NUMBERS ARE FOR REFERENCE ONLY. SOME ROUND SLINGS HAVE DIFFERENT RATINGS.

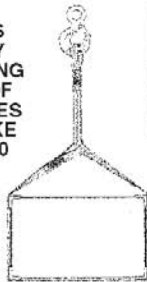
SLING COLOR: PURPLE, GREEN, YELLOW, TAN, RED, WHITE, BLUE, ORANGE
SLING COLOR IS NOT FOLLOWED BY ALL MANUFACTURERS AND SOME COLORS HAVE MORE THAN ONE RATED LOAD.

FOLDING, BUNCHING OR PINCHING OF SYNTHETIC SLINGS, WHICH OCCURS WHEN USED WITH SHACKLES, HOOKS OR OTHER APPLICATION WILL REDUCE THE RATED LOAD.



CHOKER CAPACITY

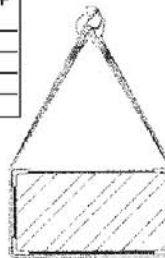
A CHOKER HITCH HAS 80% OF THE CAPACITY OF A SINGLE LEG SLING ONLY IF THE ANGLE OF CHOKE IS 120 DEGREES OR GREATER. A CHOKE ANGLE LESS THAN 120 DEGREES WILL RESULT IN A CAPACITY AS LOW AS 40% OF THE SINGLE LEG.



BASKET HITCH CAPACITY

HORIZONTAL ANGLE	CAPACITY % OF SINGLE LEG
90	200 %
60	170 %
45	140 %
30	100 %

A TRUE BASKET HITCH HAS TWICE THE CAPACITY OF A SINGLE LEG ONLY IF THE LEGS ARE VERTICAL.




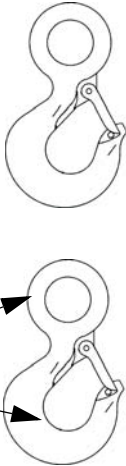








MULTIPLE LEG SLINGS

TRIPLE LEG SLINGS HAVE 50% MORE CAPACITY THAN DOUBLE LEG SLINGS (AT SAME SLING ANGLE) ONLY IF THE CENTER OF GRAVITY IS IN CENTER OF CONNECTION POINTS AND LEGS ADJUSTED PROPERLY (THEY MUST HAVE AN EQUAL SHARE OF THE LOAD).

QUAD (4LEG) SLINGS OFFER IMPROVED STABILITY BUT PROVIDE INCREASED CAPACITY ONLY IF ALL LEGS SHARE AN EQUAL SHARE OF THE LOAD.

ALWAYS SELECT AND USE WEB SLINGS AND ROUND SLINGS BY THE RATED LOAD SHOWN ON THE SLING IDENTIFICATION, NEVER BY WIDTH, COLOR OR SLING NUMBER

Sling Saver Inspection of Fittings

<p>INSPECTION FITTINGS</p> <div style="text-align: center;">  </div> <ul style="list-style-type: none"> - WEAR - DEFORMATION - CRACKS OR SHARP NICKS - MODIFICATION - WIRE ROPE AT TERMINATION 	<p>The inspection of fittings:</p> <ol style="list-style-type: none"> 1. Initial, upon purchase 2. Frequent, Prior to each use 3. Periodic, at least annually <p>More frequent inspection is required if type of service requires it. Records are not required by federal OSHA unless fittings are part of chain sling.</p> <p>OSHA and ANSI allow 15% increase in throat openings of hooks. However Crosby recommends that hooks be removed from service if any significant deformation exists.</p> <p>Wear of hook is limited to 5% in the two critical areas shown.</p> <div style="text-align: right;">  </div> <p>Cracks can form if a properly made fitting is repeatedly overloaded. A crack can form if heat treated fittings are used in frequently cycled loads that are within the Working Load Limit.</p> <p>Never modify a shackle by substituting the shackle pin. Use only genuine Crosby shackle pins with Crosby Shackles. All alloy shackles must have pins that are marked with HT.</p> <p>Any modification will mean that the Working Load Limit is no longer valid. The person modifying the fitting is responsible.</p>
<p>INSPECTION OF FITTINGS DEFORMATION</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p style="text-align: center; font-size: small;">ANY SIGNIFICANT PERMANENT DEFORMATION, OR CHANGE IN SHAPE, INDICATES IT HAS BEEN OVERLOADED AND MUST BE REMOVED FROM SERVICE</p>	
<p>INSPECTION OF FITTINGS WEAR</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p style="text-align: center; font-size: small;">NO MORE THAN 10% WEAR OF ANY SECTIONAL DIMENSION, MEASURE BY COMPARING TO A SECTION OF FITTING THAT HAS NO WEAR, OR TO THE CATALOG DIMENSIONS</p>	
<p>INSPECTION OF FITTINGS MODIFICATION</p> <div style="display: flex; justify-content: space-around; align-items: center;">  <div style="font-size: x-small;">BOLT SUBSTITUTION</div>  </div> <p style="text-align: center; font-size: small;">ANY MODIFICATION OF ANY FITTING IS CAUSE FOR REMOVAL FROM SERVICE: WELDING OR HEATING NO SUBSTITUTION OF PARTS NO BENDING</p>	
<p>INSPECTION OF FITTINGS MODIFICATION</p> <div style="display: flex; justify-content: space-around; align-items: center;">  <div style="font-size: x-small;">BOLT SUBSTITUTION</div>  </div> <p style="text-align: center; font-size: small;">ANY MODIFICATION OF ANY FITTING IS CAUSE FOR REMOVAL FROM SERVICE: WELDING OR HEATING NO SUBSTITUTION OF PARTS NO BENDING</p> <p style="font-size: x-small;">(90HS47)</p>	

Sling Saver Inspection of Round Slings

INSPECTION OF POLYESTER ROUND SLINGS: WEB SLING AND TIE DOWN ASSOCIATION

Type of Inspection

- a. **Initial Inspection** - Before any polyester round sling is placed into service it shall be inspected by a designated person to ensure that the correct round sling is being used, as well as to determine that the round sling meets the requirements of this specification.
- b. **Frequent Inspection** - This inspection shall be made by a qualified person handling the polyester round sling each time the round sling is used.
- c. **Periodic Inspection** - This inspection shall be conducted by a designated person.
- d. **Frequency of inspection should be based on:**
 1. Frequency of use.
 2. Severity of service conditions.
 3. Experience gained on service life of polyester round sling used in similar applications.
 4. Periodic inspection should be conducted at least monthly.

Removal from Service

A polyester round sling shall be removed from service if any of the following is visible:

- a. If polyester round sling identification is missing or unreadable.
- b. Melting, charring or weld spatter on any part of the polyester round sling.
- c. Holes, tears, cuts, embedded particles, abrasive wear, or snags that expose the core fibers of the polyester round sling.
- d. Broken or worn stitching in the cover which exposes the core fibers.
- e. Fittings when damaged, stretched or distorted in any way.
- f. Polyester round sling that is knotted.
- g. Acid or alkali burns of the polyester round sling.
- h. Any conditions which cause doubt as to the strength of the polyester round sling.

OPERATION OF POLYESTER ROUND SLINGS: WEB SLING AND TIE DOWN ASSOCIATION

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|--|---|
| <ul style="list-style-type: none">✓ Determine weight of the load. The weight of the load shall be within the rated capacity of the polyester round slings(s).✓ Select a polyester round sling having suitable characteristics for the type of load, hitch and environment.✓ Polyester round slings shall not be loaded in excess of the rated capacity. Consideration shall be given to the round sling to load angle which affects rated capacities. (See WSTDA-RS1 Section 2.10.5)✓ Polyester round slings with fittings which are used in a choking hitch shall be sufficient length to assure that the choking action is on the round sling, and never on the fittings.✓ Polyester round slings used in a basket hitch shall have the load balanced to prevent slippage.✓ The opening in fittings shall be the proper shape and size to ensure that the fittings will seat properly in the polyester round sling, crane hook, or other attachments.✓ Polyester round slings shall always be protected from being cut by sharp corners, sharp edges, protrusions, or abrasive surfaces.✓ Polyester round slings shall not be dragged on the floor or over an abrasive surface.✓ Polyester round slings shall not be twisted, shortened, lengthened, tied into knots, or joined by knotting.✓ Polyester round slings shall not be pulled from under loads when the load is resting on the polyester round sling.✓ Do not drop polyester round slings equipped with metal fittings. | <ul style="list-style-type: none">✓ Polyester round slings that appear to be damaged shall not be used unless inspected and accepted as useable under WSTDA-RS1 Section 4.4 and 4.5✓ The polyester round sling shall be hitched in a manner providing control of the load.✓ Personnel, including all portions of the human body, shall be kept from between the polyester round sling and the load, and from between the polyester round sling and the crane hook or hoist hook. Personnel shall stand clear of the suspended load.✓ Personnel shall not ride the polyester round sling.✓ Shock loading shall be avoided.✓ Twisting the leg (branches) shall be avoided.✓ Load applied to a hook shall be centered in the bowl of the hook to prevent point loading.✓ During lifting, with or without the load, personnel shall be alert for possible snagging of the polyester round sling.✓ The polyester round slings shall be long enough so the rated capacity is adequate when the sling to load angle is taken into consideration. (See WSTDA-RS1 Section 2.10.5)✓ Only Polyester round slings with legible identification tags shall be used.✓ Tags and labels should be kept away from the load, hook and point of choke.✓ The polyester round sling shall not be constricted or bunched between the ears of the clevis or shackle, or in a hook. When a polyester round sling is used with a shackle, it is recommended that it be used (rigged) in the bow of the shackle.✓ Place blocks under load prior to setting down the load, to allow removal of the polyester round slings, if applicable. |
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Sling Saver Inspection of Web Slings

INSPECTION OF SYNTHETIC WEB SLING ASME B30.9C 1994

Type of Inspection

- a. **Frequent inspection** - This inspection should be made by the person handling the sling each day the sling is used.
- b. **Periodic inspection** - This inspection should be conducted by designated personnel.
- c. **Frequency of inspection should be based on:**
 1. Frequency of sling use;
 2. Severity of service conditions; and
 3. Experience gained on the service life of slings used in similar applications.
 4. Periodic inspection should be conducted at least annually.

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

Removal Criteria. A sling shall be removed from service if damage such as the following is visible and shall be returned to service when approved by a designated person.

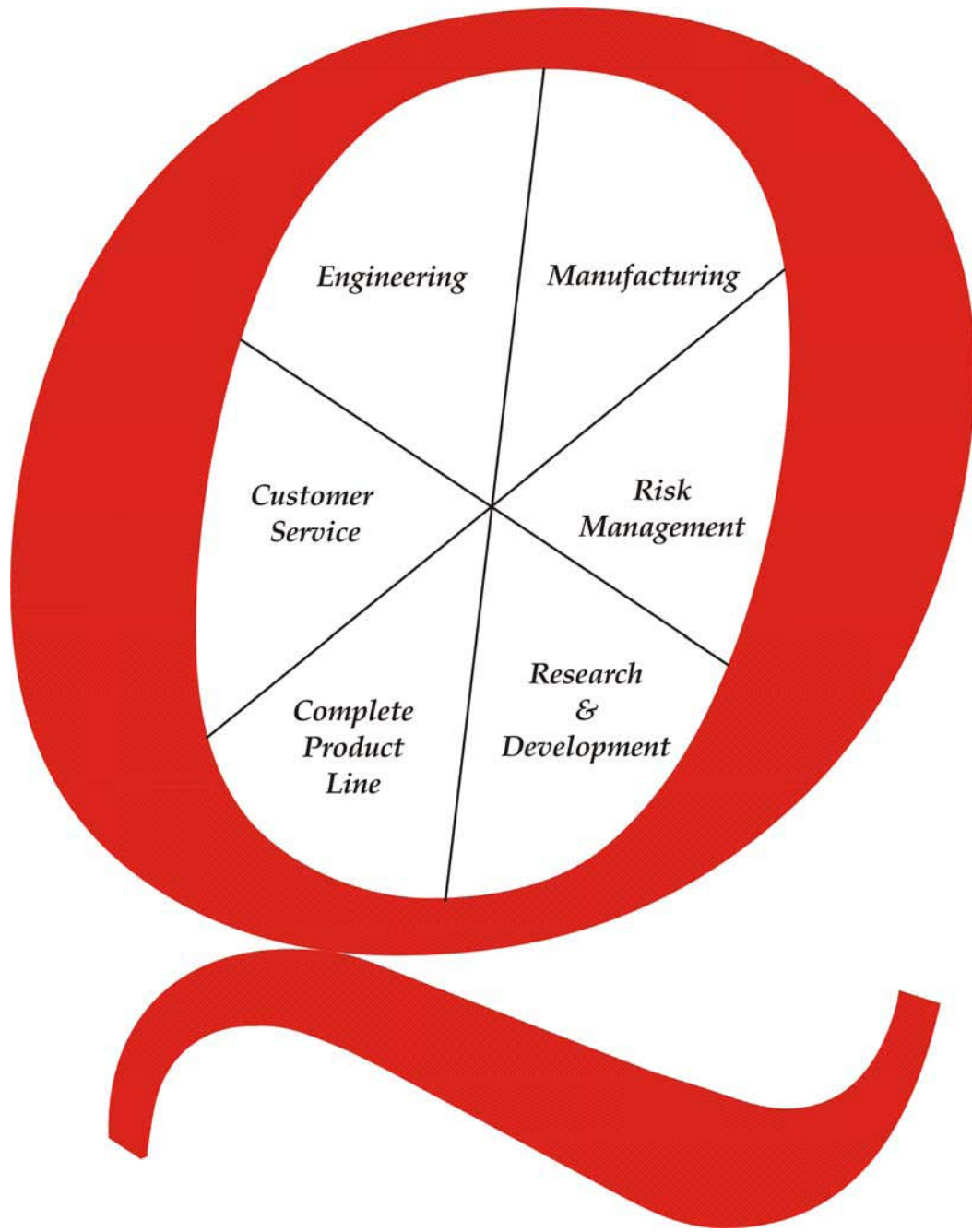
- a. Acid or charring burns
- b. Melting or charring of any parts of the sling
- c. Holes, tears, cuts or snags
- d. Broken or worn stitching in load bearing splices
- e. Excessive abrasive wear
- f. Knots in any parts of the sling
- g. Excessive pitting or corrosion, or cracked, distorted or broken fittings
- h. Other visible damage that cause doubt as to the strength of the sling.

OPERATION OF SYNTHETIC WEB SLING: ASME B 30.9C 1994

Operating Practices

- ✓ Slings having suitable characteristic for the type of load, hitch and environment shall be selected in accordance with appropriate table.
- ✓ The weight of load shall be within the rated load of the sling.
- ✓ Slings shall be shortened, lengthened, or adjusted only by methods approved by the sling manufacturer.
- ✓ Slings shall not be shortened or lengthened by knotting.
- ✓ Sharp corners in contact with the sling should be padded with material of sufficient strength to minimize damage to the sling.
- ✓ Portions of the human body should be kept from between the sling and the load, and from between the sling and the crane hook or hoist hook.
- ✓ Personnel should stand clear of the suspended load.
- ✓ Personnel shall not ride the sling.
- ✓ Shock loading should be avoided.
- ✓ Slings should not be pulled from under a load when the load is resting on the sling.
- ✓ Slings should be stored in a cool, dry, and dark place to prevent environmental damage.
- ✓ Twisting and kinking the legs shall be avoided.
- ✓ Load applied to the hook should be centered in the base (bowl) of hook to prevent point loading on the hook.
- ✓ During lifting, with or without load, personnel shall be alert for possible snagging.
- ✓ In a basket hitch, the load should be balanced to prevent slippage.
- ✓ The sling's legs should contain or support the load from the side above the center of gravity when using a basket hitch.
- ✓ Sling should be long enough so that the rated load is adequate when the angle of the legs is taken into consideration.
- ✓ Slings should not be dragged on the floor or over an abrasive surface.
- ✓ In a choker hitch, slings shall be long enough so the choker fitting chokes on the webbing and never on the other fittings.
- ✓ Nylon and polyester slings shall not be used at temperatures in excess of 194° F (90° C), or a temperature below -40° F (-40° C).
- ✓ When extensive exposure to sunlight or ultraviolet light is experienced by nylon or polyester web slings, the sling manufacturer should be consulted for recommended inspection procedures.

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