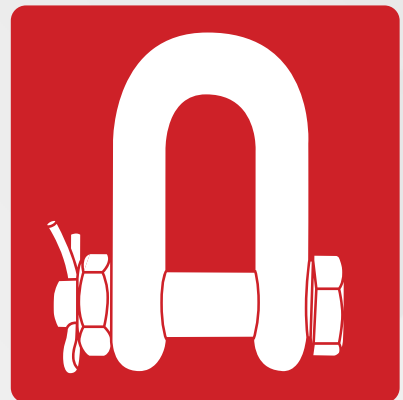


# SHACKLES

Forged, heat treated, and tested for unmatched strength and performance.



## SHACKLES

### DESIGN

The theoretical reserve capability of carbon shackles should be at a minimum 5 to 1, and alloy shackles a minimum of 4 to 1. Known as the Design Factor, it is usually computed by dividing the catalog Ultimate Load by the Working Load Limit.

The Ultimate Load is the average load or force at which the product fails or no longer supports the load.

The Working Load Limit is the maximum mass or force which the product is authorized to support in general service. The Design Factor is generally expressed as a ratio such as 5 to 1, or 5:1.

Also important to the design of shackles is the selection of proper steel to support fatigue, ductility, and impact properties.

#### Questions to ask your rigging provider

*What is the Working Load Limit and Design Factor for shackles?*

*Is deformation upon overloading a critical consideration in their design?*

*Do they jeopardize other properties by having high hardness in order to increase Working Load Limit or Design Factor?*

#### Why choose Crosby

Crosby carbon shackles have the highest design factor (6 to 1) in the industry. All of Crosby's Design Factors are documented.

Crosby purchases only special bar forging quality steel with cleanliness and guaranteed hardenability. All material chemistry is independently verified prior to manufacturing.

The design of Crosby shackles assures that strength, ductility, and fatigue properties are met.

### CLOSED DIE FORGING

The proper performance of premium shackles depends on good manufacturing techniques that include proper forging and accurate machining. Closed-die forging of shackles assures clear lettering, superior grain flow, and consistent dimensional accuracy.

A closed-die forged bow allows for an increased cross section that, when coupled with quench and tempering, enhances strength and ductility.

Closed-die bow forgings combined with close tolerance pin holes assures good fatigue life. Close pin-to-hole tolerance has been proven to be critical for good fatigue life, particularly with screw pin shackles.

#### Questions to ask your rigging provider

*Are their shackles closed-die forged with close tolerance pin holes?*

*Do their shackles have good fatigue life?*

*Do their shackles have a fatigue life that meets the new world standards?*

Many forge bows utilize an open die forging process which allows for inconsistent dimensional accuracy and increased pin hole clearance, thus jeopardizing the fatigue life of the shackle in actual use.

#### Why choose Crosby

Each shackle is closed-die forged. Closed-die forging produces consistent dimensions. A closed-die forged bow allows for an increased cross section that, when coupled with quench and tempering, enhances strength and ductility.

Close tolerance holes and concentric pins with good surface finishes are provided by Crosby and are proven to provide improved fatigue life in actual use.

Crosby shackles are fatigue rated as well as load rated. Close pin to hole tolerance has been proven to be critical for good fatigue life, particularly with screw pin shackles.

### FATIGUE PROPERTIES

The mechanical properties of steel when a load is repeatedly applied is known as its fatigue strength. Fatigue testing determines the ability of a material to withstand repeated applications of a load. The load by itself may be too small to produce a failure. There are three factors involved when considering fatigue strength: the number of cycles at which a crack initiates, the number of cycles at which the crack starts to grow, and the number of cycles at which the fitting fails. One accepted method of fatigue rating fittings is to test them to 1-1/2 times the working load limit for 20,000 cycles, without failure. This standard test is accepted as indicating indefinite life when used within the working load limit under normal circumstances.

#### Questions to ask your rigging provider

*Does the material selection process recognize fatigue properties?*

*Do they have an active program to design and test fatigue properties?*

*Is there a program in place to fatigue rate all load-bearing products that are used in critical applications?*

#### Why choose Crosby

Crosby has an active program to determine fatigue properties. Included in this program is the use of finite element design methods to predict possible weak areas, which in turn allows us to design in superior fatigue properties.

Crosby specifies material of specific cleanliness and guaranteed hardenability which enhances fatigue. We design and manufacture products with fatigue in mind and ensure all load-bearing products used in critical applications being fatigue rated.

### QUENCHED & TEMPERED

Quench and tempering assures the uniformity of performance and maximizes the properties of the steel. This means that each shackle meets its rated strength and has required ductility, toughness, impact, and fatigue properties.

The requirements of your job demand this reliability and consistency. This process develops a tough material that reduces the risk of brittle, catastrophic failure.

The shackle bow will deform if overloading occurs, giving warning before ultimate failure.

#### Questions to ask your rigging provider

*Are their bows and pins quenched and tempered?*

*If not, are they willing to accept inferior impact toughness, product deformation, and the increased risk of inconsistency?*

*Why do many manufacturers not recommend non-heat-treated shackles for overhead lifting?*

*Why do some recommend quench and tempering for alloy but not carbon grades?*

Many normalize the shackle bows. As a result, desired properties are not achieved. A few even provide bows in an 'as-forged' condition, resulting in the possibility of brittle failure.

#### Why choose Crosby

All Crosby shackle bows and pins are quenched and tempered, which enhances their performance under cold temperatures and adverse field conditions. Crosby's carbon shackles are recommended for all critical applications including overhead lifting. Alloy shackles are recommended when specific dimensional requirements dictate a size that requires higher working load limits. Crosby shackles provide the tensile strength, ductility, impact, and fatigue properties that are essential if they are to perform time after time in adverse conditions.

These properties assure that the inspection criteria set forth by ANSI will effectively monitor the ability of the shackles to continue in service.

Watch our video on the Quench & Tempered process at [thecrosbygroup.com/QT](http://thecrosbygroup.com/QT).



### IDENTIFICATION & APPLICATION INFO

The proper application of shackles requires that the correct type and size of shackle be used. The shackle's Working Load Limit, its size, a traceability code, and the manufacturer's name should be clearly marked in the bow.

Traceability of the material chemistry and properties is essential for total confidence in the product. Material chemistry should be independently verified prior to manufacturing.

#### Questions to ask your rigging provider

*Do they have an active traceability system used in manufacturing?*

*Is the material chemistry independently verified?*

*What training support is provided?*

#### Why choose Crosby

We forge the Crosby name or "CG," the Working Load Limit, and the Product Identification Code (PIC) into each bow, and the Crosby name or "CG," and the PIC into each pin of its full line of screw pin, round pin, and bolt type anchor and chain shackles. Crosby also provides training on the proper use of shackles.

Watch our training video on shackle identification at [thecrosbygroup.com/identification](http://thecrosbygroup.com/identification).

## CROSBY VALUE ADDED

- **Charpy impact properties:** Crosby shackles are quenched and tempered and have enhanced impact properties for greater toughness at all temperatures. If requested at the time of order, Crosby can provide Charpy impact properties.
- **Fatigue properties:** Fatigue properties are available for 1/3 to 55 metric ton shackles. These Crosby shackles are fatigue rated to 20,000 cycles at 1-1/2 times the Working Load Limit.
- **Ductility properties:** Typical ductility properties are available for all sizes upon special request.
- **Hardness levels and material tensile strengths:** Typical values are available for all sizes of shackles, and actual values can be furnished if requested at the time of order.
- **Proof Testing:** If requested at the time of order, shackles can be proof tested with certificates.
- **Mag Certification:** If requested at the time of order, shackles can be magnetic particle inspected with certificates.
- **Certification:** Certification to world class standards is available upon special request at the time of order; American Bureau of Shipping, Lloyds Register of Shipping, Det Norske Veritas, American Petroleum Institute, RINA, Nuclear Regulatory Commission, and several other worldwide standards.
- **Applications:** **Round pin shackles** can be used in tie down, towing, suspension or lifting applications where the load is strictly applied in-line. **Screw pin shackles** can be used in any application where a round pin shackle is used. In addition, screw pin shackles can be used for applications involving side-loading circumstances. Reduced working load limits are required for side-loading applications. **Bolt type shackles** can be used in any application where round pin or screw pin shackles are used. In addition, they are recommended for permanent or long-term installations and where the load may slide on the shackle pin causing the pin to rotate.
- **Material analysis:** Crosby can provide certified material (mill) analysis for each production lot, traceable by the Product Identification Code (PIC). Crosby, through its own laboratory, verifies the analysis of each heat of steel. Crosby purchases only **special bar** forging quality steel with specific cleanliness requirements and guaranteed hardenability.
- **Field inspection:** Written instructions for visual, magnaflux, and dye penetrant inspection of shackles are available from Crosby. In addition, acceptance criteria and repair procedures for shackles are available.
- **QUIC-CHECK®:** Shackles incorporate two marking indicators forged into the shackle bow at 45° angles from vertical. These are utilized to quickly check the approximate angle of a two-legged hitch or check the angle of a single leg hitch. If the load is off vertical or side loaded a reduction in the Working Load Limit of the shackle is required.

### G-213

Round pin anchor shackles meet the performance requirements of Federal Specification RR-C-271G, Type IVA, Grade A, Class 1, except for those provisions required of the contractor.



### G-209

Screw pin anchor shackles meet the performance requirements of Federal Specification RR-C-271G, Type IVA, Grade A, Class 2, except for those provisions required of the contractor.



### G-2130

Bolt type anchor shackles meet the performance requirements of Federal Specification RR-C-271G, Type IVA, Grade A, Class 3, except for those provisions required of the contractor.



### G-210

Screw pin chain shackles meet the performance requirements of Federal Specification RR-C-271G, Type IVB, Grade A, Class 2, except for those provisions required of the contractor.



### G-215

Round pin chain shackles meet the performance requirements of Federal Specification RR-C-271G, Type IVB, Grade A, Class 1, except for those provisions required of the contractor.



### G-2150

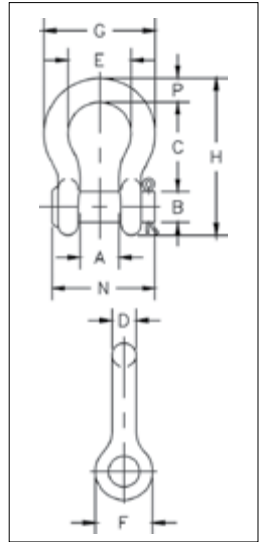
Bolt type chain shackles meet the performance requirements of Federal Specification RR-C-271G, Type IVB, Grade A, Class 3, except for those provisions required of the contractor.



### G-213/S-213



- Forged, Quenched & Tempered, with alloy pins.
- Working Load Limit permanently shown on every shackle.
- Hot-dip galvanized (G) or self colored (S).
- Sizes 3/8 inch and below are mechanically galvanized.
- Fatigue rated to 20,000 cycles at 1-1/2 times the Working Load Limit.
- Shackles can be furnished proof tested with certificates to designated standards, such as ABS, DNV, Lloyds, or other certification. Charges for proof testing and certification available when requested at the time of order.
- Shackles are Quenched & Tempered and can meet DNV impact requirements of 42 Joules (31 ft-lb) at -20° C (-4° F).
- G-213 Round pin anchor shackles meet the performance requirements of Federal Specification RR-C-271H, Type IVA, Grade A, Class 1, except for those provisions required of the contractor.
- **DO NOT SIDE LOAD ROUND PIN SHACKLES.**
- Look for the Red Pin®... the mark of genuine Crosby quality.



### G-213 / S-213 Round Pin Anchor Shackles

Nominal Size (in)	Working Load Limit (t)	Stock No.		Weight Each (kg)	Dimensions (mm)										Tolerance (+ / - mm)	
		G-213	S-213		A	B	C	D	E	F	G	H	N	P	C	A
1/4	0.5	1018017	1018026	.06	11.9	7.85	28.7	6.35	19.8	15.5	32.5	46.7	34.0	6.35	1.50	1.50
5/16	0.75	1018035	1018044	.08	13.5	9.65	31.0	7.85	21.3	19.1	37.3	53.0	40.4	7.85	1.50	1.50
3/8	1	1018053	1018062	.13	16.8	11.2	36.6	9.65	26.2	23.1	45.2	63.0	47.2	9.65	3.30	1.50
7/16	1.5	1018071	1018080	.17	19.1	12.7	42.9	11.2	29.5	26.9	51.5	74.0	54.0	11.2	3.30	1.50
1/2	2	1018099	1018106	.32	20.6	16.0	47.8	12.7	33.3	30.2	58.5	83.5	60.5	12.7	3.30	1.50
5/8	3.25	1018115	1018124	.68	26.9	19.1	60.5	16.0	42.9	38.1	74.5	106	74.0	17.5	3.30	1.50
3/4	4.75	1018133	1018142	1.05	31.8	22.4	71.5	19.1	51.0	46.0	89.0	126	87.0	20.6	6.35	1.50
7/8	6.5	1018151	1018160	1.58	36.6	25.4	84.0	22.4	58.0	53.0	102	148	96.5	24.6	6.35	1.50
1	8.5	1018179	1018188	2.27	42.9	28.7	95.5	25.4	68.5	60.5	119	167	115	26.9	6.35	1.50
1-1/8	9.5	1018197	1018204	3.16	46.0	31.8	108	28.7	74.0	68.5	131	190	130	31.8	6.35	1.50
1-1/4	12	1018213	1018222	4.42	51.5	35.1	119	32.8	82.5	76.0	146	210	140	35.1	6.35	1.50
1-3/8	13.5	1018231	1018240	6.01	57.0	38.1	133	36.1	92.0	84.0	162	233	156	38.1	6.35	3.30
1-1/2	17	1018259	1018268	7.82	60.5	41.4	146	39.1	98.5	92.0	175	254	165	41.1	6.35	3.30
1-3/4	25	1018277	1018286	13.4	73.0	51.0	178	46.7	127	106	225	313	197	57.0	6.35	3.30
2	35	1018295	1018302	20.8	82.5	57.0	197	53.0	146	122	253	348	222	61.0	6.35	3.30

6:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit.

Load Rated

Fatigue Rated

QUIC-CHECK®

QT &

MAX TOUGH®

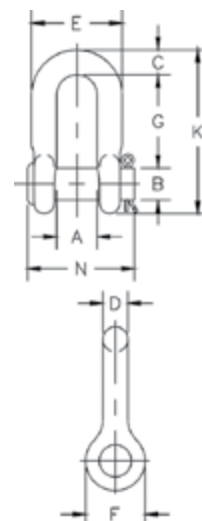
CE

APPLICATION AND WARNING INFORMATION  
SECTION 17

## G-215/S-215



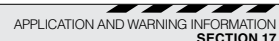
- Forged, Quenched & Tempered, with alloy pins.
- Working Load Limit permanently shown on every shackle.
- Hot-dip galvanized (G) or self colored (S).
- Sizes 3/8 inch and below are mechanically galvanized.
- Fatigue rated to 20,000 cycles at 1-1/2 times the Working Load Limit.
- Shackles can be furnished proof tested with certificates to designated standards, such as ABS, DNV, Lloyds, or other certification. Charges for proof testing and certification available when requested at the time of order.
- Shackles are Quenched and Tempered and can meet DNV impact requirements of 42 Joules (31 ft-lb) at -20° C (-4° F).
- G-215 Round pin chain shackles meet the performance requirements of Federal Specification RR-C-271H, Type IVB, Grade A, Class 1, except for those provisions required of the contractor.
- DO NOT SIDE LOAD ROUND PIN SHACKLES.
- DO NOT SIDE LOAD ROUND PIN SHACKLES.



## G-215 / S-215 Round Pin Chain Shackles

Nominal Size (in)	Working Load Limit (t)	Stock No.		Weight Each (kg)	Dimensions (mm)										Tolerance (+ / - mm)	
		G-215	S-215		A	B	C	D	E	F	G	K	N	G	A	
1/4	0.5	1018810	1018829	.05	11.9	7.85	6.35	6.35	24.6	15.5	22.4	40.4	34.0	1.50	1.50	
5/16	0.75	1018838	1018847	.08	13.5	9.65	7.85	7.85	29.5	19.1	26.2	48.5	40.4	1.50	1.50	
3/8	1	1018856	1018865	.11	16.8	11.2	9.65	9.65	35.8	23.1	31.8	58.5	47.2	3.30	1.50	
7/16	1.5	1018874	1018883	.18	19.1	12.7	11.2	11.2	41.4	26.9	36.6	67.5	54.0	3.30	1.50	
1/2	2	1018892	1018909	.23	20.6	16.0	12.7	12.7	46.0	30.2	41.4	77.0	60.5	3.30	1.50	
5/8	3.25	1018918	1018927	.55	26.9	19.1	15.7	16.0	58.5	38.1	51.0	95.5	74.0	3.30	1.50	
3/4	4.75	1018936	1018945	.91	31.8	22.4	20.6	19.1	70.0	46.0	60.5	115	87.0	6.35	1.50	
7/8	6.5	1018954	1018963	1.49	36.6	25.4	24.6	22.4	81.0	53.0	71.5	135	96.5	6.35	1.50	
1	8.5	1018972	1018981	2.15	42.9	28.7	25.4	25.4	93.5	60.5	81.0	151	115	6.35	1.50	
1-1/8	9.5	1018990	1019007	2.86	46.0	31.8	31.8	28.7	103	68.5	91.0	172	130	6.35	1.50	
1-1/4	12	1019016	1019025	4.08	51.5	35.1	35.1	31.8	115	76.0	100	191	140	6.35	3.30	
1-3/8	13.5	1019034	1019043	5.44	57.0	38.1	38.1	35.1	127	84.0	111	210	156	6.35	3.30	
1-1/2	17	1019052	1019061	7.33	60.5	41.4	41.1	38.1	137	92.0	122	230	165	6.35	3.30	
1-3/4	25	1019070	1019089	13.6	73.0	51.0	54.0	44.5	162	106	146	279	197	6.35	3.30	
2	35	1019098	1019105	19.6	82.5	57.0	51.0	53.3	184	122	172	312	222	6.35	3.30	

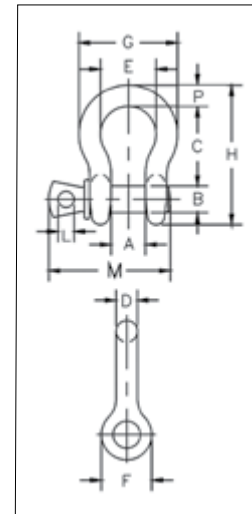
6:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit.



## G-209/S-209



- Meets performance requirements of Grade 6 shackles.
- Forged, Quenched & Tempered, with alloy pins.
- Working Load Limit and Grade 6 permanently shown on every shackle.
- Hot-dip galvanized (G) or self colored (S).
- Sizes 3/8 inch and below are mechanically galvanized.
- Fatigue rated at 1-1/2 times the Working Load Limit at 20,000 cycles.
- Shackles can be furnished proof tested with certificates to designated standards, such as ABS, DNV, Lloyds, or other certifications. Proof testing and certification available when requested at the time of order, charges will apply.
- Approved for use at -40° C (-40° F) to 204° C (400° F).
- All 209 and 210 shackles can meet charpy requirements of 42 Joules (31 ft-lb) avg. at -20° C (-4° F) upon special request.
- Meets or exceeds all requirements of ASME B30.26.
- Type Approval certification in accordance with ABS 2016 Steel Vessel Rules and ABS Guide for Certification of Lifting Appliances available. Certificates available when requested at time of order and may include additional charges.
- G-209 Screw pin anchor shackles meet the performance requirements of Federal Specification RR-C-271H, Type IVA, Grade A, Class 2, except for those provisions required of the contractor.
- Look for the Red Pin®... the mark of genuine Crosby quality.



## G-209 / S-209 Screw Pin Anchor Shackles

Nominal Size (in)	Working Load Limit (t)	Stock No.		Weight Each (kg)	Dimensions (mm)													Tolerance (+ / - mm)	
		G-209	S-209		A	B	C	D	E	F	G	H	L	M	P	C	A		
3/16	0.33	1018357	—	.03	9.7	6.4	22.4	4.8	15.2	14.2	24.9	37.3	4.1	29.0	4.8	1.50	1.50		
1/4	0.5	1018375	1018384	.05	11.9	7.9	28.7	6.4	19.8	15.7	32.5	46.7	4.8	36.3	6.4	1.50	1.50		
5/16	0.75	1018393	1018400	.09	13.5	9.7	30.7	7.9	21.3	19.1	37.1	53.1	5.6	43.4	7.9	3.30	1.50		
3/8	1	1018419	1018428	.14	16.8	11.2	36.8	9.7	26.2	23.4	45.5	63.5	6.4	52.3	9.7	3.30	1.50		
7/16	1.5	1018437	1018446	.17	19.1	12.7	42.9	11.2	29.5	26.9	51.8	73.9	7.9	60.2	11.2	3.30	1.50		
1/2	2	1018455	1018464	.33	20.6	15.7	47.8	12.7	33.3	30.0	58.7	83.3	9.7	68.3	12.7	3.30	1.50		
5/8	3.25	1018473	1018482	.62	26.9	19.1	60.5	15.7	42.9	38.1	74.4	106	11.2	84.8	17.5	6.35	1.50		
3/4	4.75	1018491	1018507	1.07	31.8	22.4	71.4	19.1	50.8	46.0	88.9	126	12.7	101	20.6	6.35	1.50		
7/8	6.5	1018516	1018525	1.64	36.6	25.4	84.1	22.4	57.9	53.3	103	148	12.7	114	24.6	6.35	1.50		
1	8.5	1018534	1018543	2.28	42.9	28.4	95.5	25.4	68.3	60.5	119	167	14.2	130	26.9	6.35	1.50		
1-1/8	9.5	1018552	1018561	3.36	46.0	31.8	108	29.5	73.9	68.1	131	190	16.0	152	31.8	6.35	1.50		
1-1/4	12	1018570	1018589	4.31	51.6	35.1	119	32.8	82.8	76.2	146	210	17.5	165	35.1	6.35	1.50		
1-3/8	13.5	1018598	1018605	6.14	57.2	38.9	133	36.1	91.9	84.1	162	233	19.1	176	38.1	6.35	3.30		
1-1/2	17	1018614	1018623	7.80	60.5	41.4	146	38.9	98.6	91.9	176	254	20.6	189	41.1	6.35	3.30		
1-3/4	25	1018632	1018641	12.6	73.2	50.8	178	46.7	127	106	224	313	25.4	233	57.2	6.35	3.30		
2	35	1018650	1018669	20.4	82.6	57.2	197	52.8	146	122	258	347	28.7	263	61.0	6.35	3.30		
2-1/2	55	1018678	1018687	38.9	105	69.9	267	69.1	184	148	324	455	35.1	335	79.5	6.35	6.35		

6:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit. For Working Load Limit reduction due to side loading applications, see Warnings & Applications.

Load Rated

Fatigue Rated

TA  
TYPE APPROVED

QUICK-CHECK®

QT  
QUENCHED & TEMPERED

MAXTOUGH®

CE

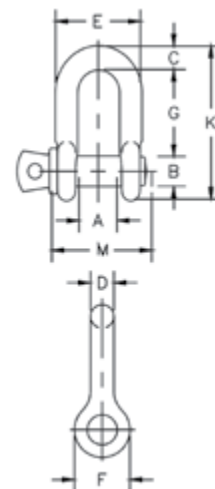
APPLICATION AND WARNING INFORMATION  
SECTION 17



## G-210 / S-210



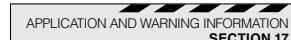
- Forged, Quenched & Tempered, with alloy pins.
- Working Load Limit and Grade 6 permanently shown on every shackle.
- Hot-dip galvanized (G) or self colored (S).
- Sizes 3/8 inch and below are mechanically galvanized.
- Fatigue rated at 1-1/2 times the Working Load Limit at 20,000 cycles.
- Shackles can be furnished proof tested with certificates to designated standards, such as ABS, DNV, Lloyds, or other certifications. Proof testing and certification available when requested at the time of order, charges will apply.
- Approved for use at -40° C (-40° F) to 204° C (400° F).
- All 209 and 210 shackles can meet charpy requirements of 42 Joules (31 ft-lb) avg. at -20° C (-4° F) upon special request.
- Meets or exceeds all requirements of ASME B30.26.
- Type Approval certification in accordance with ABS 2016 Steel Vessel Rules and ABS Guide for Certification of Lifting Appliances available. Certificates available when requested at time of order and may include additional charges.
- G-210 Screw pin anchor shackles meet the performance requirements of Federal Specification RR-C-271H, Type IVB, Grade A, Class 2, except for those provisions required of the contractor.
- Look for the Red Pin®... the mark of genuine Crosby quality.



## G-210 / S-210 Screw Pin Chain Shackles

Nominal Size (in)	Working Load Limit (t)	Stock No.		Weight Each (kg)	Dimensions (mm)											Tolerance (+ / - mm)	
		G-210	S-210		A	B	C	D	E	F	G	K	L	M	G	A	
1/4	0.5	1019150	1019169	.05	11.9	7.85	6.35	6.35	24.6	15.5	22.4	40.4	4.85	35.1	1.50	1.50	
5/16	0.75	1019178	1019187	.08	13.5	9.65	7.85	7.85	29.5	19.1	26.2	48.5	5.60	42.2	1.50	1.50	
3/8	1	1019196	1019203	.13	16.8	11.2	9.65	9.65	35.8	23.1	31.8	58.5	6.35	51.5	3.30	1.50	
7/16	1.5	1019212	1019221	.20	19.1	12.7	11.2	11.2	41.4	26.9	36.6	67.5	7.85	60.5	3.30	1.50	
1/2	2	1019230	1019249	.27	20.6	16.0	12.7	12.7	46.0	30.2	41.4	77.0	9.65	68.5	3.30	1.50	
5/8	3.25	1019258	1019267	.57	26.9	19.1	15.7	16.0	58.5	38.1	51.0	95.5	11.2	85.0	3.30	1.50	
3/4	4.75	1019276	1019285	1.20	31.8	22.4	20.6	19.1	70.0	46.0	60.5	115	12.7	101	6.35	1.50	
7/8	6.5	1019294	1019301	1.43	36.6	25.4	24.6	22.4	81.0	53.0	71.5	135	12.7	114	6.35	1.50	
1	8.5	1019310	1019329	2.15	42.9	28.7	25.4	25.4	93.5	60.5	81.0	151	14.2	129	6.35	1.50	
1-1/8	9.5	1019338	1019347	3.06	46.0	31.8	31.8	28.7	103	68.5	91.0	172	16.0	142	6.35	1.50	
1-1/4	12	1019356	1019365	4.11	51.5	35.1	35.1	31.8	115	76.0	100	191	17.5	156	6.35	3.30	
1-3/8	13.5	1019374	1019383	5.28	57.0	38.1	38.1	35.1	127	84.0	111	210	19.1	174	6.35	3.30	
1-1/2	17	1019392	1019409	7.23	60.5	41.4	41.1	38.1	137	92.0	122	230	20.6	187	6.35	3.30	
1-3/4	25	1019418	1019427	12.1	73.0	51.0	54.0	44.5	162	106	146	279	25.4	231	6.35	3.30	
2	35	1019436	1019445	19.2	82.5	57.0	60.0	51.0	184	122	172	312	31.0	263	6.35	3.30	
2-1/2	55	1019454	1019463	32.5	105	70.0	66.5	66.5	238	145	203	377	35.1	330	6.35	6.35	

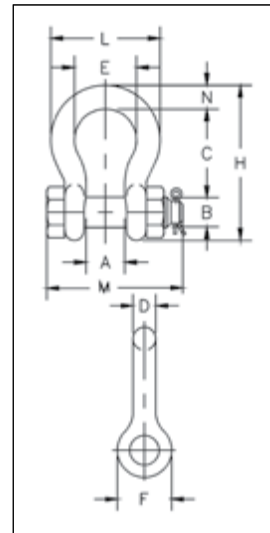
6:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit. For Working Load Limit reduction due to side loading applications, see Warnings & Applications.



## G-2130 / S-2130



- Working Load Limit and Grade 6 permanently shown on every shackle.
- Forged, Quenched & Tempered, with alloy bolts.
- Hot-dip galvanized (G) or self colored (S). 85, 120, and 150-metric ton shackles are all hot-dip galvanized bows and the bolts are Dimetcoated® and painted red.
- Sizes 3/8 and below are mechanically galvanized.
- Fatigue rated to 20,000 cycles at 1-1/2 times the Working Load Limit (1/3t - 55t).
- Approved for use at -40° C (-40° F) to 204° C (400° F).
- Meets or exceeds all requirements of ASME B30.26.
- Shackles 85 metric tons and larger are individually proof tested to 2.0 times the working load limit.
- Type Approval certification in accordance with ABS 2016 Steel Vessel Rules ABS Guide for Certification of Lifting Appliances available. Certificates available when requested at time of order and may include additional charges.
- 3.1 Certification as standard available for charpy and statistical proof test from 3.25t up to 25 tons to DNV 2.7-1 and EN13889.
- Crosby 3.25t through 25t G-2130OC anchor shackles are type approved to DNV Certification Notes 2.7-1-Offshore Containers. These Crosby shackles are statistical proof and impact tested to 42 Joules (31 ft-lb) min. avg. at -20° C (-4° F). The tests are conducted by Crosby and 3.1 test certification is available upon request.
- All other 2130 shackles can meet charpy requirements of 42 Joules (31 ft-lb) avg at -20° C (-4° F) when requested at time of order.
- Meets the performance requirements of Federal Specification RR-C-271H, Type IVA, Grade A, Class 3, except for those provisions required of the contractor.
- Look for the Red Pin®... the mark of genuine Crosby quality.

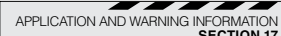


## G-2130 / S-2130 Bolt Type Anchor Shackles

Nominal Size (in)	Working Load Limit (t)	Stock No.			Weight Each (kg)	Dimensions (mm)										Tolerance (+ / - mm)	
		G-2130	S-2130	G-2130OC		A	B	C	D	E	F	H	L	M	N	C	A
3/16	0.33 ‡	1019464	-	-	.03	9.7	6.4	22.4	4.9	15.2	14.2	37.3	24.9	32.8	4.85		1.50
1/4	0.5	1019466	-	-	.05	11.9	7.9	28.7	6.4	19.8	15.5	46.7	32.5	39.6	6.35	1.50	1.50
5/16	0.75	1019468	-	-	.10	13.5	9.7	31.0	7.9	21.3	19.1	53.0	37.3	46.2	7.85	1.50	1.50
3/8	1	1019470	-	-	.15	16.8	11.2	36.6	9.7	26.2	23.1	63.0	45.2	55.1	9.65	1.50	1.50
7/16	1.5	1019471	-	-	.22	19.1	12.7	42.9	11.2	29.5	26.9	74.0	51.5	63.8	11.2	3.30	1.50
1/2	2	1019472	1019481	-	.36	20.6	16.0	47.8	12.7	33.3	30.2	83.5	58.5	71.1	12.7	3.30	1.50
5/8	3.25	1019490	1019506	1262013	.62	26.9	19.1	60.5	16.0	42.9	38.1	106	74.5	90.4	17.5	3.30	1.50
3/4	4.75	1019515	1019524	1262022	1.23	31.8	22.4	71.5	19.1	51.0	46.0	126	89.0	105	20.6	3.30	1.50
7/8	6.5	1019533	1019542	1262031	1.79	36.6	25.4	84.0	22.4	58.0	53.0	148	102	122	24.6	6.35	1.50
1	8.5	1019551	1019560	1262040	2.28	42.9	28.7	95.5	25.4	68.5	60.5	167	119	137	26.9	6.35	1.50
1-1/8	9.5	1019579	1019588	1262059	3.75	46.0	31.8	108	28.7	74.0	68.5	190	131	150	31.8	6.35	1.50
1-1/4	12	1019597	1019604	1262068	5.31	51.5	35.1	119	31.8	82.5	76.0	210	146	170	35.1	6.35	1.50
1-3/8	13.5	1019613	1019622	1262077	7.18	57.0	38.1	133	35.1	92.0	84.0	233	162	183	38.1	6.35	3.30
1-1/2	17	1019631	1019640	1262086	8.62	60.5	41.4	146	38.1	98.5	92.0	254	175	196	41.1	6.35	3.30
1-3/4	25	1019659	1019668	1262095	15.4	73.0	51.0	178	44.5	127	106	313	225	246	57.0	6.35	3.30
2	35	1019677	1019686	-	23.7	82.5	57.0	197	51.0	146	122	348	253	275	61.0	6.35	3.30
2-1/2	55	1019695	1019702	-	44.6	105	70.0	267	66.5	184	145	453	327	345	79.5	6.35	6.35
3	† 85	1019711	-	-	70	127	82.5	330	76.0	200	165	546	365	384	92.0	6.35	6.35
3-1/2	† 120 ‡	1019739	-	-	120	133	95.5	372	92.0	229	203	626	419	432	105	6.35	6.35
4	† 150 ‡	1019757	-	-	153	140	108	368	104	254	229	653	468	451	116	6.35	6.35

6:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit. For Working Load Limit reduction due to side loading applications, see Warnings & Applications..

† Individually Proof Tested with certification. ‡ Furnished with eye bolts for handling.



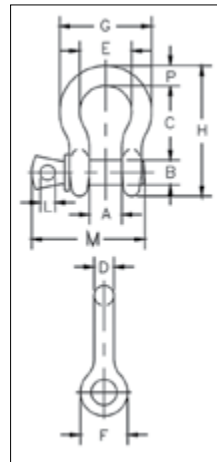




**G-209A**  
Grade 8



- Forged alloy steel, Quenched & Tempered, with alloy pins.
- Meets performance requirements of Grade 8 shackles.
- Working Load Limit permanently shown on every shackle.
- Hot-dip galvanized.
- Size 3/8 inch is mechanically galvanized.
- Shackles can be furnished proof tested with certificates to designated standards, such as ABS, DNV, Lloyds, or other certification. Charges for proof testing and certification available when requested at the time of order.
- Approved for use at -40° C (-40° F) to 204° C (400° F).
- 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 impact properties and material traceability, not addressed by ASME B30.26.
- G-209A Screw pin anchor shackles meet the performance requirements of Federal Specification RR-C-271H, Type IVA, Grade B, Class 2, except for those provisions required of the contractor.



## G-209A Alloy Screw Anchor Pin Shackles



APPLICATION AND WARNING INFORMATION  
SECTION 17

Nominal Size (in)	Working Load Limit (t)	Stock No.	Weight Each (kg)	Dimensions (mm)												Tolerance (+/- mm)	
				A	B	C	D	E	F	G	H	L	M	P	C	A	
3/8	2	1017450	.14	16.8	11.2	36.6	9.65	26.2	23.1	45.2	63.5	6.35	51.5	9.65	3.30	1.50	
7/16	2.67	1017472	.17	19.1	12.7	42.9	11.2	29.5	26.9	51.5	74.0	7.85	60.5	11.2	3.30	1.50	
1/2	3.33	1017494	.29	20.6	16.0	47.8	12.7	23.3	30.2	58.5	83.5	9.65	68.5	12.7	3.30	1.50	
5/8	5	1017516	.63	26.9	19.1	60.5	16.0	42.9	38.1	74.5	106	11.2	85.0	17.5	3.30	1.50	
3/4	7	1017538	1.02	31.8	22.4	71.5	19.1	51.0	46.0	89.0	126	12.7	101	20.6	6.35	1.50	
7/8	9.5	1017560	1.53	36.6	25.4	84.0	22.4	58.0	53.0	102	148	12.7	114	24.6	6.35	1.50	
1	12.5	1017582	2.41	42.9	28.7	95.5	25.4	68.5	60.5	119	167	14.2	129	26.9	6.35	1.50	
1-1/8	15	1017604	3.09	46.0	31.8	108	29.5	74.0	68.5	131	190	16.0	142	31.8	6.35	1.50	
1-1/4	18	1017626	4.31	51.5	35.1	119	32.8	82.5	76.0	146	210	17.5	156	35.1	6.35	1.50	
1-3/8	21	1017648	6.01	57.0	38.1	133	36.1	92.0	84.0	162	233	19.1	174	38.1	6.35	3.30	

4.5:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit (metric tons) and 2.2 times the Working Load Limit (short tons). For Working Load Limit reduction due to side loading applications, see Warnings & Applications.

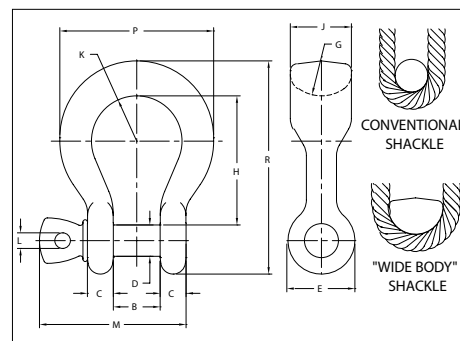
**G-2169**



**S-2169**



- Quenched & Tempered for maximum strength.
- Forged alloy steel.
- Available in galvanized (G) and self colored (S) finish.
- Can be individually proof tested and magnetic particle inspected upon request. Crosby certification available at time of order.
- 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.
- Look for the Red Pin®... the mark of genuine Crosby quality.



## G-2169 / S-2169 Alloy Screw Pin Wide Body Shackles



APPLICATION AND WARNING INFORMATION  
SECTION 17

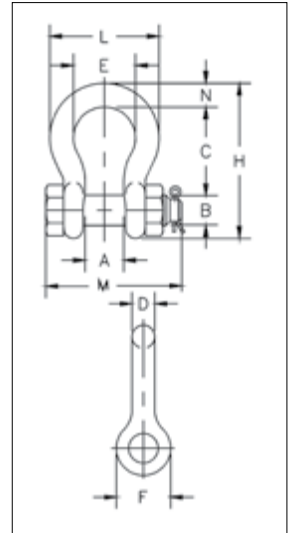
Working Load Limit (t)	G-2169 Stock No.	S-2169 Stock No.	Weight Each (kg)	Dimensions (mm)											
				B +/- .25	C	D +/- .02	E	G	H	J	K	L	M	P	R
7	1021655	1021664	1.6	31.8	17.5	22.4	46.2	31.8	90.4	40.6	31.8	12.7	101	104	149
12.5	1021673	1021682	4.0	42.9	23.4	28.7	60.5	34.8	118	54.1	41.4	14.2	130	140	194
18	1021691	1021699	5.9	51.6	29.5	35.1	68.3	38.1	148	63.5	50.8	17.5	159	172	238

5:1 Design Factor. Proof Load is 2 times the Working Load Limit.

## G-2130A Grade 8



- Forged alloy steel, Quenched & Tempered, with bow and bolt.
- Meets or exceeds all requirements of Grade 8 shackles.
- Working Load Limit permanently shown on every shackle.
- Hot-dip galvanized.
- Meets or exceeds all requirements of ASME B30.26, including identification, ductility, design factor, proof load, and temperature requirements. Importantly, G-2130A meet other critical performance requirements, including impact properties, and material traceability not addressed by ASME B30.26.
- Shackles can be furnished proof tested with certificates to designated standards, such as ABS, DNV, Lloyds, or other certification when requested at time of order.
- Type Approval and certification in accordance with DNV 2.7-1 offshore containers.
- Shackles are Quenched & Tempered and meet DNV impact requirements of 42 Joules (31 ft-lb) at -40° C (-40° F).
- G-2130A Bolt Type Anchor shackles with thin head bolt – nut with cotter pin. Meets the performance requirements of Federal Specification RR-C-271H, Type IVA, Grade B, Class 3, except for those provisions required of the contractor.



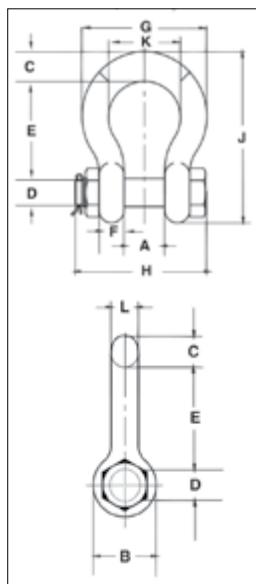
## G-2130A Alloy Bolt Type Anchor Shackles Grade 8

Nominal Size (in)	Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)										Tolerance (+ / - mm)	
				A	B	C	D	E	F	H	L	M	N	C	A
1/2	2	1219472	.36	20.6	16.0	47.8	12.7	33.3	30.2	83.5	58.5	71.1	12.7	3.30	1.50
5/8	3.25	1219491	.62	26.9	19.1	60.5	16.0	42.9	38.1	106	74.5	90.4	17.5	6.35	1.50
3/4	4.75	1219516	1.23	31.8	22.4	71.5	19.1	51.0	46.0	126	89.0	105	20.6	6.35	1.50
7/8	6.5	1219534	1.79	36.6	25.4	84.0	22.4	58.0	53.0	148	102	122	24.6	6.35	1.50
1	8.5	1219552	2.28	42.9	28.0	95.5	25.4	68.5	60.5	167	119	137	26.9	6.35	1.50
1-1/8	9.5	1219578	3.75	46.0	31.8	108	28.7	74.0	68.5	190	131	150	31.8	6.35	1.50
1-1/4	12	1219598	5.31	51.5	35.1	119	31.8	82.5	76.0	210	146	170	35.1	6.35	1.50
1-3/8	13.5	1219614	7.18	57.0	38.1	133	35.1	92.0	84.0	233	162	183	38.1	6.35	3.30
1-1/2	17	1219632	8.62	60.5	41.4	146	38.1	98.5	92.0	254	175	196	41.1	6.35	3.30

8:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit. For Working Load Limit reduction due to side loading applications, see Warnings & Applications..



### G-2140 / S-2140

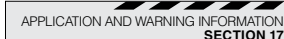


- Quenched & Tempered.
- Alloy bows, alloy bolts.
- Forged alloy steel 2 through 250 metric tons. Cast alloy steel 400 metric tons.
- Meets performance requirements of Grade 8 shackles.
- Working Load Limit is permanently shown on every shackle.
- 30, 40, 55, and 85 metric ton shackle bows are available galvanized (G) or self colored (S) with bolts that are galvanized and painted red.
- Size 3/8 inch is mechanically galvanized.
- 120, 150, 175 metric ton shackle bows are hot-dip galvanized; bolts are Dimetcoated and painted red.
- 200, 250, 300, 400 metric ton shackle bows are Dimetcoated; bolts are Dimetcoated and painted red.
- Approved for use at -40° C (-40° F) to 204° C (400° F).
- Shackles are Quenched & Tempered and can meet DNV impact requirements of 42 Joules (31 ft-lb) at -20° C (-4° F).
- Crosby COLD TUFF® shackles that meet the additional requirements of DNV rules for certification of lifting applications - loose gear are available.
- Shackles 200 metric tons and larger are provided as follows:
  - Serialized bolt and bow
  - Material certification (chemical)
  - Magnetic particle inspected.
  - Certification must be requested at time of order.
- Meets or exceeds all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. 2140 shackles meet other critical performance requirements including impact properties and material traceability, not addressed by ASME B30.26.
- Type Approval certification in accordance with ABS 2016 Steel Vessel Rules and 2016 ABS Guide for Certification of Lifting Appliances. Certificates are available when requested at time of order and may include additional charges.
- G-2140 meets the performance requirements of Federal Specification RR-C-271H, Type IVA, Grade B, Class 3, except for those provisions required of the contractor. For additional information, see Warnings & Applications.
- Look for the Red Pin®... the mark of genuine Crosby quality.

### G-2140 / S-2140 Alloy Bolt Tie Anchor Shackles

Nominal Shackle Size (in)	Working Load Limit (t)	Stock No.			Weight Each (kg)	Dimensions (mm)														Tolerance (+ / - mm)		
		G-2140	S-2140	G-2140OC		A	B	C	D	E	F	G	H	J	K	L	M	N	A	D	E	
3/8	2	1021015	-	-	0.15	16.8	23.1	9.7	11.2	36.6	9.7	45.2	55.1	63.2	26.2	9.7	-	-	1.5	0.3	3.3	
7/16	2.67	1021020	-	-	0.22	19.1	26.9	11.2	12.7	42.9	10.4	51.6	63.8	73.9	29.5	11.2	-	-	1.5	0.3	3.3	
1/2	3.33	1021029	-	-	0.36	20.6	30.2	12.7	16.3	47.8	11.7	58.7	71.1	83.3	33.3	12.7	-	-	1.5	0.5	3.3	
5/8	5	1021038	-	-	0.76	26.9	38.1	17.5	19.6	60.5	14.7	74.7	90.4	106.4	42.9	16.0	-	-	1.5	0.5	3.3	
3/4	7	1021047	-	-	1.23	31.8	46.0	20.6	22.6	71.4	17.5	88.9	105.4	126.2	50.8	19.1	-	-	1.5	0.5	6.4	
7/8	9.5	1021056	-	-	1.79	36.6	53.1	24.6	25.9	84.1	20.6	102.4	122.4	148.1	57.9	22.4	-	-	1.5	0.5	6.4	
1	12.5	1021065	-	-	2.57	42.9	60.5	26.9	29.2	95.3	23.4	119.1	136.9	166.6	68.3	25.4	-	-	1.5	0.5	6.4	
1-1/8	15	1021074	-	-	3.75	46.0	68.3	31.8	31.8	108.0	26.4	131.1	149.9	189.7	73.9	28.7	-	-	1.5	0.5	6.4	
1-1/4	18	1021083	-	-	5.31	51.6	76.2	35.1	35.6	119.1	29.5	146.1	169.9	209.6	82.6	32.8	-	-	1.5	0.8	6.4	
1-3/8	21	1021092	-	-	7.18	57.2	84.1	38.1	38.9	133.4	32.5	162.1	183.1	232.7	92.2	36.1	-	-	3.3	0.8	6.4	
1-1/2	30	1021110	1021129	1262407	8.52	60.5	91.9	41.1	41.4	146	35.3	175	196	254	98.6	38.9	-	-	3.3	0.8	6.4	
1-3/4	40	1021138	1021147	1262416	15.4	73.2	106	57.2	50.8	178	44.5	224	237	313	127	46.7	-	-	3.3	0.8	6.4	
2	55	1021156	1021165	1262425	23.6	82.6	122	61.0	57.2	197	50.8	258	264	347	146	52.8	-	-	3.3	0.8	6.4	
2-1/2	85	1021174	1021183	1262434	43.5	105	148	79.2	69.9	267	66.5	324	345	455	184	68.8	-	-	6.4	0.8	6.4	
3	120	1021192	-	1262443	81	127	165	92.2	82.6	330	76.2	371	384	546	200	79.2	-	-	6.4	1.0	6.4	
3-1/2	† 150	1021218	-	1262452	120	133	203	111	95.3	372	95.3	432	448	632	229	91.9	102	46	6.4	0.3	6.4	
4	† 175	1021236	-	1262461	153	140	229	116	108	368	102	457	517	652	254	102	102	46	6.4	0.3	6.4	
4-3/4	† 200	1021234	-	-	209	184	267	127	121	386	116	529	611	706	279	121	102	46	6.4	0.3	6.4	
5	† 250	1021243	-	-	276	216	305	143	127	470	123	600	632	828	330	127	102	46	4.0	0.3	1.8	
6	† 300	1021252	-	-	362	213	330	154	152	475	124	629	666	871	330	149	102	46	4.0	0.3	1.8	
7*	† 400	1021478	-	-	500	210	356	184	178	572	165	660	728	1022	330	152	102	46	6.4	0.3	6.4	

4.5:1 Design Factor for sizes 2 through 21 metric tons, 5.4:1 Design Factor for sizes 30 through 175 metric tons, 4:1 Design Factor for 200 through 400 metric tons. Maximum Proof Load is 2 times the Working Load Limit. \*Cast alloy steel. †Furnished with round head bolts with a handle. For Working Load Limit reduction due to side loading applications, see Warnings & Applications.



G-2140E



- Quenched & Tempered.
- Alloy bows, alloy bolts.
- Meets performance requirements of Grade 8 shackles.
- Working Load Limit is permanently shown on every shackle.
- 200, 250, and 300 metric ton shackle bows are Dimetcoated®; Pins are Dimetcoated and painted red.
- Approved for use at -40° C (-40° F) to 204° C (400° F).
- Shackles are Quenched & Tempered and can meet DNV impact requirements of 42 Joules (31 ft-lb) at -20° C (-4° F).
- All sizes are individually proof tested to 2.0 times the Working Load Limit.
- Shackles are provided as follows:
  - Serialized bolt and bow
  - Material certification (chemical)
  - Magnetic particle inspected
  - Certification must be requested at time of order
- 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 impact properties and material traceability, not addressed by ASME B30.26.
- Type Approval certification in accordance with ABS 2016 Steel Vessel Rules and 2016 ABS Guide for Certification of Lifting Appliances. Certificates available when requested at time of order and may include additional charges.
- G-2140E meets the performance requirements of Federal Specification RR-C-271H, Type IVA, Grade B, Class 3, except for those provisions required of the contractor.
- Look for the Red Pin®... the mark of genuine Crosby quality.

## G-2140E Alloy Easy-Loc Shackles

Nominal Shackle Size (in)	Working Load Limit (t)	Stock No.	Weight Each (kg)	Dimensions (mm)														Tolerance (+ / - mm)	
				A	B	C	D +/- .02	E	F	G	H	J	K	L	M	N	A	E	
4-3/4	200	1021475	208	184	267	127	121	386	116	529	587	706	279	121	101	45.7	6.4	6.4	
5	250	1021484	271	216	305	143	127	470	114	600	617	829	330	127	101	45.7	6.4	6.4	
6	300	1021493	359	213	330	154	152	475	124	629	646	871	330	149	101	45.7	6.4	6.4	

4:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit. For Working Load Limit reduction due to side loading applications, see Warnings & Applications.





# Shackle Bolt Securement MADE EASY

The patented Easy-Loc V2™ shackle bolt securement system will change the way you make your critical lifts.



Open collar



Push collar onto bolt



Close collar

Wide opening ergonomic grip provides easy access for all hand sizes

316 stainless steel design resists corrosion

The new Easy-Loc V2™ can be retrofitted on all original Crosby Easy-Loc® Shackles

No cotter pin or tools required

- No cotter pins or tools required, reducing install/release time up to 90%.
- Meets all industry standards.
- Up to 60% lighter than conventional nut and cotter pin design.

# Crosby®



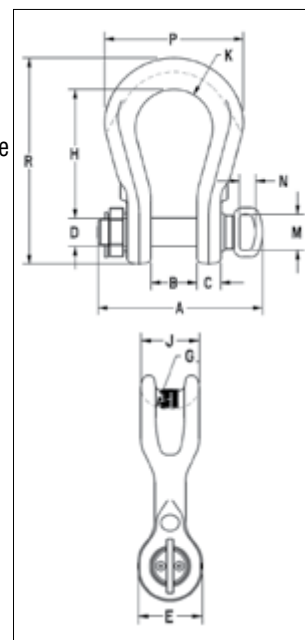
Watch video: [thecrosbygroup.com/easy-loc](https://www.thecrosbygroup.com/easy-loc)



## G-2160 / S-2160



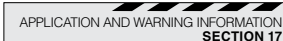
- Increase in shackle bow radius provides minimum 58% gain in sling bearing surface and eliminates need for a thimble.
- Increases usable sling strength a minimum of 15% and greatly improves life of wire rope slings.
- Can be used to connect synthetic web slings, synthetic round slings or wire rope slings.
- All sizes Quenched & Tempered for maximum strength.
- Forged alloy steel from 7 through 300 metric tons.
- Cast alloy steel from 400 through 1550 metric tons.
- Proof tested as follows:
  - 7 through 75 metric tons and 200 through 300 metric tons: 2 x WLL
  - 125 metric tons: 1.6 x WLL
  - 400 metric tons and higher: 1.33 x WLL
- All ratings are in metric tons, embossed on side of bow.
- G-2160, (7 through 55t), are hot-dip galvanized and pins are painted red.
- G-2160 (75t and larger), bows are furnished Dimetcoated; Pins are Dimetcoated, then painted red.
- S-2160 bows and pins are painted red.
- Approved for use at -40° C (-40° F) to 204° C (400° F).
- Bow and bolt are certified to meet Charpy impact testing of 42 Joules (31 ft-lb) min. avg. at -20° C (-4° F).
- All 2160 shackles are individually proof tested and magnetic particle inspected. Crosby certification available at time of order.
- Shackles requiring ABS, Lloyds and other certifications are available upon special request and must be specified at time of order.
- Type approved and certification to DNV Rules for Certification of Lifting Appliances, and are produced in accordance with DNV MSA requirements. Databook is provided that includes required documents.
  - Serialization / Identification
  - Material Testing (physical / chemical / Charpy)
  - Proof Testing
- Look for the Red Pin®... the mark of genuine Crosby quality.



## G-2160 / S-2160 Wide Body Shackles

Working Load Limit (t)*	Stock No.		Weight Each (kg)	Dimensions (mm)													Effective Body Diameter
	G-2160	S-2160		A	B +/- 6.35	C	D +/- .5	E	G	H	J	K	M	N	P	R	
7	1021256	1021548	1.81	105	31.8	17.5	22.4	46.2	31.8	90.4	40.6	31.8	-	-	104	149	53.3
12.5	1021265	1021557	4.54	137	42.9	23.4	28.7	60.5	34.8	118	54.1	41.4	-	-	140	194	61.0
18	1021274	1021566	6.8	170	51.6	29.5	35.1	68.3	38.1	148	63.5	50.8	-	-	172	238	71.1
30	1021283	1021575	11.34	195	60.2	35.1	41.4	88.9	63.5	176	79.5	63.5	-	-	216	289	104
40	1021285	1021584	20.9	236	73.2	42.9	50.8	102	44.4	205	95.3	76.2	-	-	270	346	91.4
55	1021287	1021593	32.21	263	82.6	50.8	57.2	118	66.8	238	114	88.9	-	-	311	397	109
75	1022101	-	51	382	105	60.7	69.9	136	95.3	293	127	92.5	102	45.7	321	474	160
125	1022110	-	87	465	130	78.7	80.0	165	95.3	365	150	110	102	45.7	393	584	173
200	1022118	-	191	491	150	86.1	105	214	133	480	217	138	102	45.7	515	773	241
300	1022127	-	365	574	187	109	133	267	156	600	264	160	102	45.7	608	957	290
400	1021334	-	518	772	220	131	160	320	203	575	320	185	102	45.7	690	985	363
500	1021343	-	653	849	250	146	180	340	205	630	340	225	102	45.7	790	1085	376
600	1021352	-	967	916	275	158	200	394	330	700	370	247	146	57.2	865	1200	516
700	1021361	-	1170	990	300	167	215	433	223	735	400	270	146	57.2	940	1275	422
800	1021254	-	1372	1059	325	185	230	449	248	750	420	277	146	57.2	975	1323	457
900	1021389	-	1712	1112	350	198	250	478	330	757	440	293	146	57.2	1025	1387	569
1000	1021370	-	1850	1169	380	212	270	508	261	760	460	308	146	57.2	1075	1405	490
1250	1021272	-	2588	1278	432	233	300	573	354	930	530	323	-	-	1175	1660	620
1550	1021281	-	3650	1588	465	282	320	616	318	1075	580	338	-	-	1316	1896	693

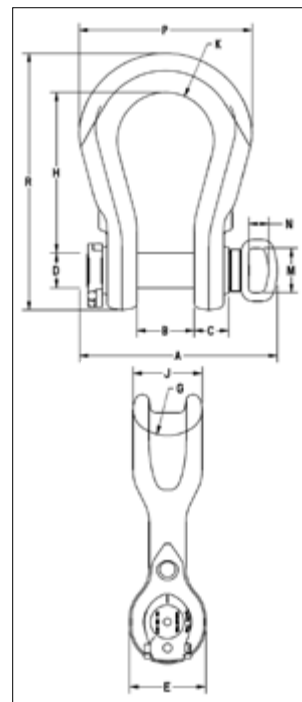
5:1 Design Factor on 75 through 300 metric tons. Maximum Proof Load is 2 times the Working Load Limit on 75 through 300 metric tons (except for 125 metric tons which is proof tested to 1.6 times the Working Load Limit). 4.5:1 Design Factor on 400 through 1550 metric tons. Maximum Proof Load is 1.33 times the Working Load Limit on 400 through 1550 metric tons.



G-2160E



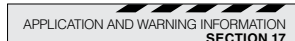
- Increase in shackle bow radius provides minimum 58% gain in sling bearing surface and eliminates need for a thimble.
- Increases usable sling strength a minimum of 15% and greatly improves life of wire rope slings.
- Can be used to connect synthetic web slings, synthetic round slings or wire rope slings.
- All sizes Quenched & Tempered for maximum strength.
- Forged alloy steel from 75 through 300 metric tons.
- Proof tested as follows:
  - 75 metric tons and 200-300 metric tons: 2 x WLL.
  - 125 metric tons: 1.6 x WLL.
- All ratings are in metric tons, embossed on side of bow.
- G-2160E, (75t and larger), bows are furnished Dimetcoated, and pins are Dimetcoated, then painted red.
- Approved for use at -40° C (-40° F) to 204 degrees C (400° F).
- Bow and bolt are certified to meet Charpy impact testing of 42 Joules (31 ft-lb) min. avg. at -20° C (-4 degrees F).
- All 2160E shackles are individually proof tested and magnetic particle inspected. Crosby certification available at time of order.
- Shackles requiring ABS, Lloyds and other certifications are available upon special request and must be specified at time of order.
- Shackles have DNV Type Approval to Rules for Certification of Lifting Appliances, and are produced in accordance with DNV MSA requirements. Databook is provided that includes required documents.
  - Serialization / Identification
  - Material Testing (physical / chemical / Charpy)
  - Proof Testing
- Look for the Red Pin®... the mark of genuine Crosby quality.



### G-2160E Easy-Loc Wide Body Shackles

Working Load Limit (t)	Stock No.	Weight Each (kg)	Dimensions (mm)													
			A	B +/- 6.35	C	D +/- .5	E	G	H	J	K	M	N	P	R	Effective Body Diameter
75	1021500	49.9	382	105	60.7	69.9	136	95.3	293	127	92.5	102	45.7	321	474	160
125	1021509	86.2	450	130	78.7	80.0	165	95.3	365	150	110	102	45.7	393	584	173
200	1021518	185	491	150	86.1	105	214	133	480	219	138	102	45.7	515	773	241
300	1021527	357	574	187	109	133	267	156	600	264	160	102	45.7	608	953	290

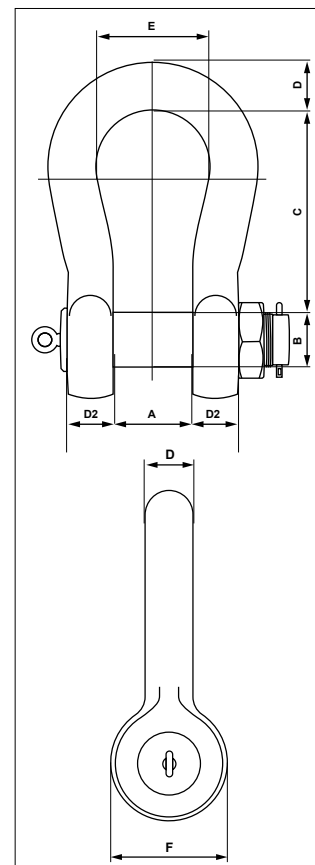
5:1 Design Factor on 75 through 300 metric tons. Maximum Proof Load is 2 times the Working Load Limit on 75 through 300 metric tons (except for 125 metric tons which is proof tested to 1.6 times the Working Load Limit).



## S-2135 / S-2145



- Trusted Crosby quality.
- Embossed Angle Indicators included.
- Meets performance requirements of Grade 8 shackles.
- 5:1 Design Factor.
- Individually proof loaded to 2 times the Working Load Limit.
- S-2135 and S-2145 shackles are available with aluminum paint and are not galvanized.
- Operating temperature range -20° C (-4° F) to 200° C (392° F) for S-2135 and S-2145.
- Material inspection certificate Type 3.1 according to EN 10204.
- DNV type approved: DNVGL-ST-0377 and DNVGL-ST-0378.
- Meets performance requirements of federal specification RR-C-271H, except for those provisions required of the contractor.
- Meets or exceeds all requirements of ASME B30.26.
- S-2135CT COLD TUFF® available from 85t to 400t with an operating temperature range of -60°C (-76°F) up to +200°C (392°F).
- DNV witness proof testing available on request for all sizes and models.
- Magnetic Particle Inspection available on request for all sizes and models.
- Look for the Red Pin®... the mark of genuine Crosby quality.



## S-2135 / S-2145 Bolt Type Anchor Shackles

Frame Size (in)	Working Load Limit (t)	Stock No	Weight (kg)	Dimensions (mm)							
				A	+/- 0	B	C	D	D2	E	F
S-2135											
3	85	1205009	78	127	+6 / -0	83	330	85	80	190	162
3 1/2	120	1205018	115	144	+6 / -0	95	380	95	89	238	200
4	150	1205027	162	165	+8 / -0	108	385	105	100	275	230
4 3/4	200	1205036	240	180	+8 / -0	125	450	120	110	280	270
5	250	1205045	306	205	+10 / -0	140	520	130	115	305	290
6	300	1205054	368	205	+10 / -0	150	530	140	120	305	315
7	400	1205063	602	230	+10 / -0	175	575	160	160	325	365
7 1/4	500	1205234	735	250	+12 / -0	185	650	180	160	350	385
8	600	1205243	969	275	+13 / -0	205	650	200	185	375	430
8 1/4	700	1205252	1091	300	+15 / -0	215	650	210	200	400	440
8 1/2	800	1205261	1106	300	+15 / -0	220	650	210	200	400	450
9 1/2	1000	1205270	1476	340	+17 / -0	240	700	240	240	420	500
10	1250	1205279	1955	360	+18 / -0	270	750	260	225	450	570
11	1500	1205288	2327	360	+18 / -0	290	800	280	225	450	610
S-2145											
3	120	1205072	78	127	+6 / -0	83	330	85	80	190	162
3 1/2	150	1205081	115	144	+6 / -0	95	380	95	89	238	200
4	175	1205090	162	165	+8 / -0	108	385	105	100	275	230

Maximum Proof Load is 2.0 times the Working Load Limit.

Load Rated

Fatigue Rated

TA  
TYPE APPROVED

QUIC-CHECK®  
✓

QT  
QUALITY & TRUST

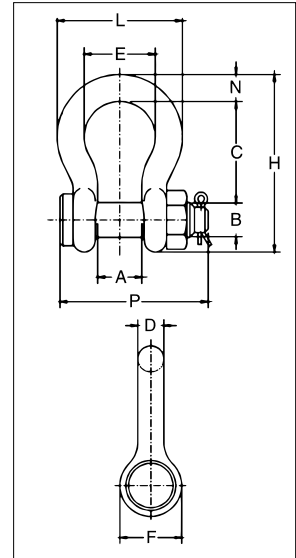
MAXTOUGH®

APPLICATION AND WARNING INFORMATION  
SECTION 17

### G-2130CT / G-2140CT



- Forged, Quenched & Tempered, with alloy bolt.
  - G-2130CT - carbon steel
  - G-2140CT - alloy steel
- Working Load Limit permanently shown on every shackle.
- Individually serialized with certification.
- Fatigue Rated (G-2130CT only).
- All sizes are individually proof tested to 2.0 times the Working Load Limit.
- Finish is inorganic zinc primer.
- Bow and bolt are certified to meet Charpy impact testing of 42 Joules (31 ft-lb) min. avg. at -20° C (-4° F).
- Individually magnetic particle inspected with certification.
- Type Approval and certification in accordance with DNV 2.7-1 Offshore Containers, and Rules for Certification of Lifting Appliances, DNV-OS-E101 and are produced in accordance with DNV MSA requirements, including required documents.
- DNV certified minimum design temperature -4° F. May be used at -50° F (-45° C) in non DNV applications.
- Meets the performance requirements of Federal Specification RR-C-271H Type IVA:
  - G-2130CT - Grade A, Class 3, except for those provisions required of the contractor.
  - G-2140CT - Grade B, Class 3, except for those provisions required of the contractor.



### G-2130CT COLD TUFF® Bolt Type Anchor Shackles

Nominal Shackle Size (in)	Working Load Limit (t)	Stock No.	Weight Each (kg)	Dimensions (mm)										Tolerance (+ / - mm)	
				A	B	C	D	E	F	H	L	N	P	A	C
3/4	4.75	1260568	1.23	31.8	22.4	71.5	19.1	51.0	46.0	126	89.0	20.6	108	1.50	6.35
7/8	6.5	1260577	1.76	36.6	25.4	84.0	22.4	58.0	53.0	148	102	24.6	120	1.50	6.35
1	8.5	1260586	2.57	42.9	28.7	95.5	26.2	68.5	60.5	167	119	26.9	137	1.50	6.35
1-1/8	9.5	1260595	3.75	46.0	31.8	108	28.7	74.0	68.5	190	131	31.8	150	1.50	6.35
1-1/4	12	1260604	5.31	51.5	35.1	119	32.8	82.5	76.0	210	146	35.1	168	1.50	6.35
1-3/8	13.5	1260613	6.85	57.0	38.1	133	35.1	92.0	84.0	233	162	38.1	183	3.30	6.35
1-1/2	17	1260622	9.43	60.5	41.4	146	39.1	98.5	92.0	254	175	41.1	195	3.30	6.35
1-3/4	25	1260633	15.4	73.0	51.0	178	46.7	127	106	313	225	57.0	233	3.30	6.35

5.4:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit. For Working Load Limit reduction due to side loading applications, see Warnings & Applications.

### G-2140CT COLD TUFF® Alloy Bolt Type Anchor Shackles

Nominal Shackle Size (in)	Working Load Limit (t)	Stock No.	Weight Each (kg)	Dimensions (mm)										Tolerance (+ / - mm)	
				A	B	C	D	E	F	H	L	N	P	A	C
1-1/2	30	1260801	9.43	60.5	41.4	146	38.9	98.6	91.9	254	175	41.1	196	3.3	6.4
1-3/4	40	1260812	15.4	73.2	50.8	178	46.7	127	106	313	224	57.2	237	3.3	6.4
2	55	1260823	23.6	82.6	57.2	197	52.8	146	122	347	258	61.0	264	3.3	6.4
2-1/2	85	1260834	43.5	105	69.9	267	68.8	184	148	455	324	79.2	345	6.4	6.4
3	120	1260843	81	127	82.6	330	79.2	200	165	546	371	92.2	384	6.4	6.4
3-1/2	† 150	1260852	120	133	95.3	372	91.9	229	203	632	432	111	448	6.4	6.4
4	† 175	1260861	153	140	108	368	102	254	229	652	457	116	517	6.4	6.4
4-3/4	† 200	1260870	204	184	121	397	114	279	267	743	533	152	539	6.4	6.4
5	† 250	1260889	272	216	127	508	114	330	305	889	622	165	576	6.4	6.4

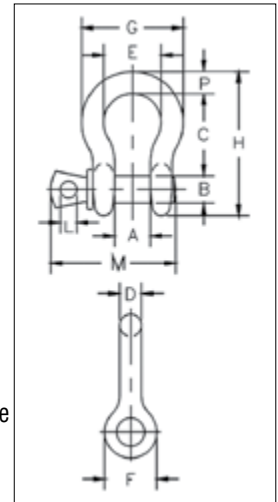
5.4:1 Design Factor on 30t through 175 metric tons. 4:1 Design Factor on 200 metric tons and larger. Maximum Proof Load is 2 times the Working Load Limit for all sizes.



## S-209T



- Flat black baked on powder coat finish.
- Forged, Quenched & Tempered, with alloy pins.
- Working Load Limit and Grade 6 permanently shown on every shackle.
- Fatigue rated to 20,000 cycles at 1-1/2 times the Working Load Limit.
- Industry leading 6 to 1 Design Factor.
- Screw pin anchor shackles meet the performance requirement of Federal Specification RR-C-271H, Type IVA, Grade A, Class 2, except for those provisions required of the contractor.
- Meets the performance requirements of EN 13889.
- 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.



## S-209T Theatrical Shackles

Nominal Size (in)	Working Load Limit (t)	Stock No.	Weight Each (kg)	Dimensions (mm)												Tolerance (+ / - mm)	
				A	B	C	D	E	F	G	H	L	M	P	C	A	
3/8	1	1018706	.14	16.8	11.2	36.6	9.65	26.2	23.1	45.2	63.0	6.35	51.5	9.65	3.30	1.50	
7/16	1.5	1018724	.17	19.1	12.7	42.9	11.2	29.9	26.9	51.5	74.0	7.85	60.5	11.2	3.30	1.50	
1/2	2	1018742	.33	20.6	16.0	47.8	12.7	33.3	30.2	58.5	83.5	9.65	68.5	12.7	3.30	1.50	
5/8	3.25	1018760	.62	26.9	19.1	60.5	16.0	42.9	38.1	74.5	106	11.2	85.0	17.5	6.35	1.50	
3/4	4.75	1018778	1.07	31.8	22.4	71.5	19.1	51.0	46.0	89.0	126	12.7	101	20.6	6.35	1.50	

Maximum Proof Load is 2.0 times the Working Load Limit.

Load Rated

Fatigue Rated

QUIC-CHECK

QT & ENHANCED A TENSILE

MAX TOUGH

APPLICATION AND WARNING INFORMATION SECTION 17



Ep. 46 Shackles designed for theatrical applications

## VIDEO PODCAST SERIES

Our experts answer some of your most common safe rigging, lifting, and securement questions in our video podcast series, *Ask the Expert*.

Watch all episodes and submit your questions at [thecrosbygroup.com/podcast](https://thecrosbygroup.com/podcast), and subscribe to our YouTube channel to catch every new video as soon as it's released.



Ep. 36 Lifting & Mooring Fatigue: What is it and how to avoid it?



Ep. 5 Hooks: Why the tips must point outward on multiple bridles

**Ask the Expert**  
VIDEO PODCAST





QUIC-TAG™

Crosby®

# THE NEWEST ADDITION TO CROSBY'S RFID TAG FAMILY

Industry standards require periodic performance inspections to make sure lifting equipment is performing to specified levels.

The Crosby QUIC-TAG™ makes the inspection process more efficient, and its unique design can be retrofitted on numerous products.

- Easy, fast, and secure attachment
- Engineered for extreme durability and strength with a low profile design
- Resistant to harsh environmental conditions including exposure to UV rays, water chemical exposure and temperatures up to 85°C (185°F)
- Compatible with the Crosby QUIC-CHECK® Inspection and Identification System
- 13.5 MHz operating frequency
- The most cost effective RFID tag offered by Crosby

QUIC-CHECK®



Shown actual size:





# Feel confident in every situation

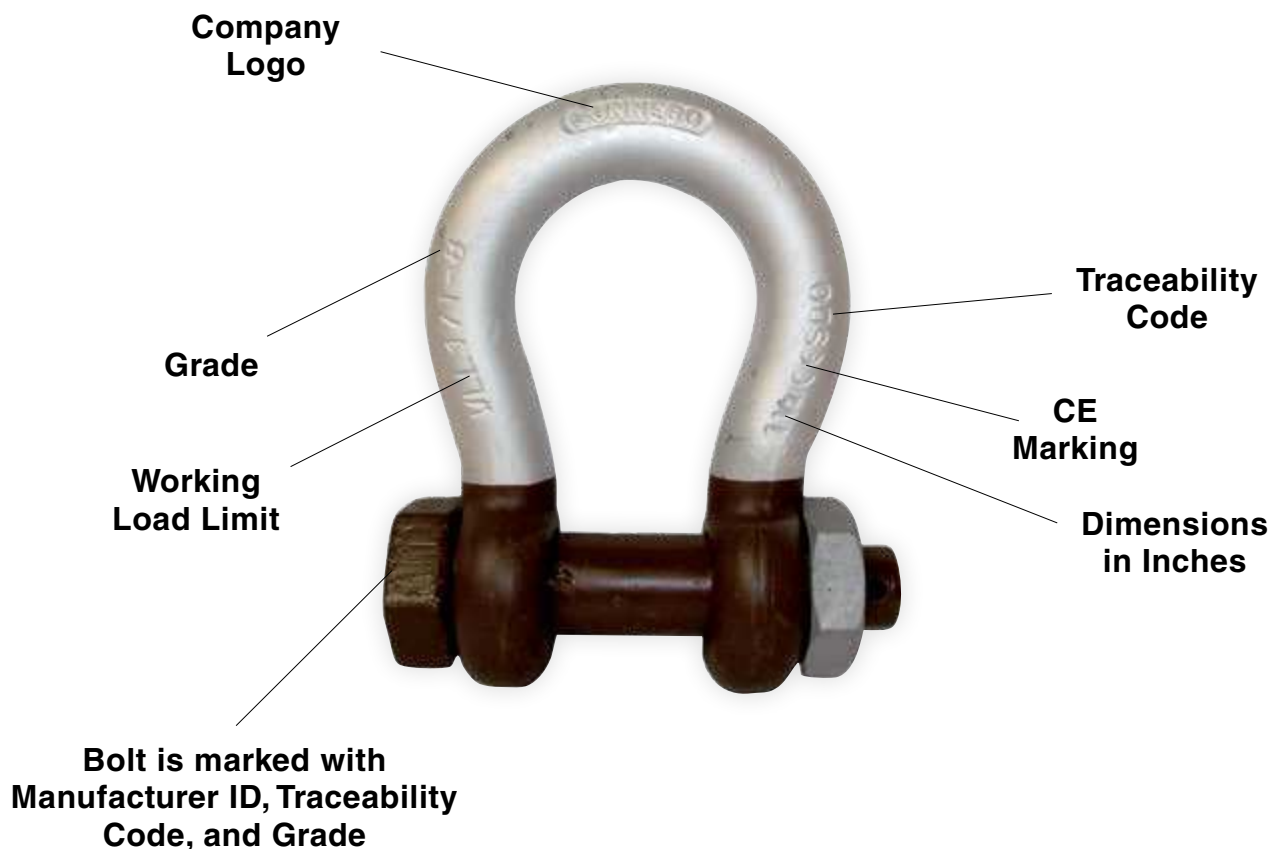
Gunnebo Industries shackles are made from a range of steel qualities, including acid proof stainless steel and high-grade alloy steel to comply with the most stringent specifications. Our factories comprise all facilities and systems for the manufacturing and control of a top-quality product. This includes tool design, an advanced tool shop, forging, heat treatment, machining, hot-dip galvanizing and quality control.

We offer a range of DNV 2.7-1 Type Approved lifting shackles for offshore containers, developed for the tough conditions of the offshore industry, where safety must be of the highest priority at all times. The heat treatment of these products ensures the proper ductility and strength to sustain shock loads which may be imposed when the container is lifted from the deck of a vessel.

## Make sure you have the original

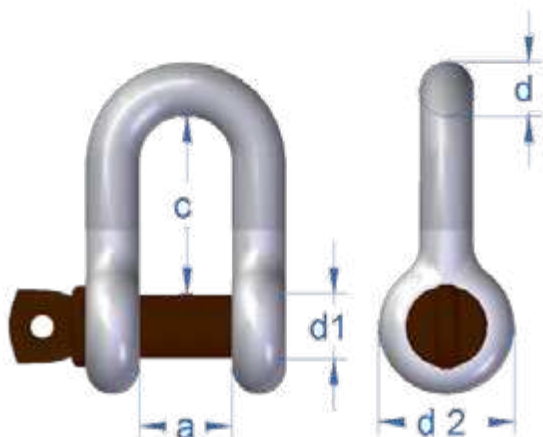
- High quality shackles acc. EN 13889 and US Fed. Spec RR-C. 271 (Grade A and Grade B)
- Consistent product quality
- Long experience of shackle production using modern manufacturing methods
- Local availability of expertise

To ensure you have a genuine Gunnebo Industries shackle, it should be marked as below:

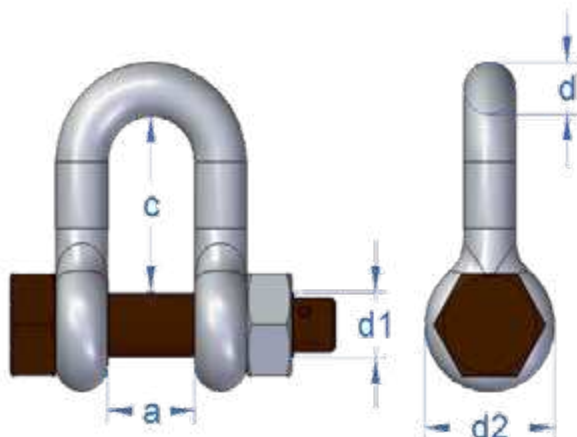


## Dee Shackle No 834 and No 835

<b>Standard:</b>	DNV 2.7-1 Type Approved, EN 13889 and US Federal Spec. RR-C-271
<b>Material:</b>	High tensile carbon steel, Quenched & Tempered, Grade 6
<b>Finish:</b>	All parts hot-dip galvanized, pin brown painted on top of galvanized.
<b>Design Factor:</b>	6:1
<b>Documentation:</b>	Test certificate and traceable raw material / inspection certificate acc. EN 10204 - 3.1. DNVGL-ST-E271-2.7-1 and E273-2.7-3 Type Approval Certification.
<b>Temperature:</b>	- 40°C to 200°C



Shackle No 834 with screw pin



Shackle No 835 with safety bolt



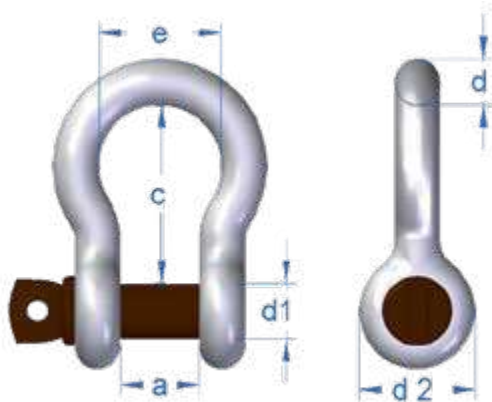
834 Screw Pin Stock No.	835 Safety Bolt Stock No.	WLL (t) 6:1	Pin d1 (mm)	Nominal Size d		Inner Width a* (mm)	Inner Length c* (mm)	Eye Outer d2 (mm)	834 Screw Pin Weight (kg)	835 Safety Bolt Weight (kg)
				(mm)	(in)					
A083416	A083516	3.25	19	16	5/8"	27	51	40	0.55	0.60
A083419	A083519	4.75	22	19	3/4"	31	60	48	1.00	1.10
A083422	A083522	6.5	25	22	7/8"	37	71	52	1.30	1.50
A083425	A083525	8.5	28	25	1"	43	81	60	1.90	2.20
A083428	A083528	9.5	32	28	1 1/8"	46	90	64	2.80	3.10
A083432	A083532	12.0	35	32	1 1/4"	52	100	72	3.60	4.20
A083435	A083535	13.5	38	35	1 3/8"	57	111	76	4.60	5.60
A083438	A083538	17.0	42	38	1 1/2"	60	122	84	6.50	7.50
A083445	A083545	25.0	50	45	1 3/4"	74	149	105	11.50	13.00

\* Forging tolerance: +/- 5% on inside width/length.

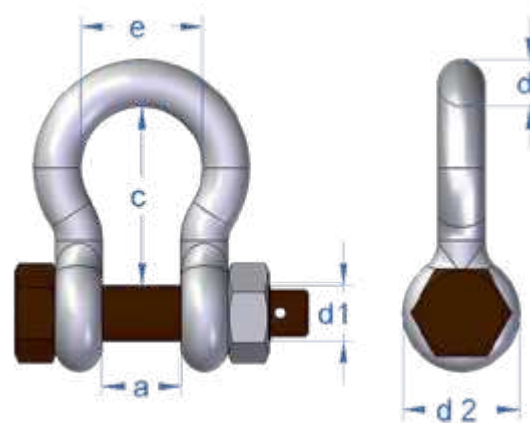
Split pin included

## Bow Shackle No 854 and No 855

- Standard:** DNV 2.7-1 Type Approved, EN 13889 and US Federal Spec. RR-C-271
- Material:** High tensile carbon steel, Quenched & Tempered, Grade 6
- Finish:** All parts hot-dip galvanized, brown painted bolts on top of galvanized.
- Design Factor:** 6:1
- Documentation:** Test certificate and traceable raw material / inspection certificate acc. EN 10204 - 3.1.  
DNVGL-ST-E271-2.7-1 and E273-2.7-3 Type Approval Certification.
- Temperature:** - 40°C to 200°C



Shackle No 854 with screw pin



Shackle No 855 with safety bolt



854 Screw Pin Stock No.	855 Safety Bolt Stock No.	WLL (t) 6:1	Pin d1 (mm)	Nominal Size d		Inner Width a* (mm)	Inner Length c* (mm)	Bow Width e (mm)	Eye Outer d2 (mm)	854 Screw Pin Weight (kg)	855 Safety Bolt Weight (kg)
				(mm)	(in)						
A085413	A085513	2.0	16	13	1/2"	21	47	33	33	0.37	0.42
A085416	A085516	3.25	19	16	5/8"	27	60	42	40	0.65	0.70
A085419	A085519	4.75	22	19	3/4"	31	71	49	48	1.10	1.20
A085422	A085522	6.5	25	22	7/8"	37	84	60	52	1.50	1.70
A085425	A085525	8.5	28	25	1"	43	95	68	60	2.21	2.58
A085428	A085528	9.5	32	28	1 1/8"	46	108	74	64	3.10	3.40
A085432	A085532	12.0	35	32	1 1/4"	52	119	83	72	4.20	4.80
A085435	A085535	13.5	38	35	1 3/8"	57	132	89	76	6.00	7.00
A085438	A085538	17.0	42	38	1 1/2"	60	146	98	84	8.00	9.00
A085445	A085545	25.0	50	45	1 3/4"	74	178	127	105	13.50	15.00
A085452	A085552	35.0	57	50	2"	83	197	138	112	19.00	21.00
A085464	A085564	55.0	70	65	2 1/2"	105	260	180	145	38.00	39.00

Split pin included

## Arctic Shackle No 856

Bow shackle with safety bolt

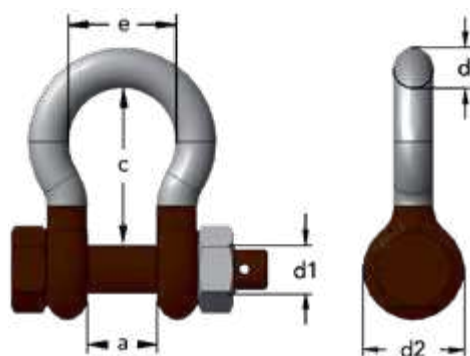


### Unique benefits with the Arctic Shackle

Adverse weather and rough sea conditions in combination with extremely low temperatures, as often encountered for instance in the North Sea, places tough requirements on the products used. 856 Arctic shackles are specially designed for these conditions. The Arctic Shackle is type approved to DNV 2.7-1 Offshore containers and meets the impact requirements of 42 J at – 40 degrees °C.

The Arctic Shackle is a grade 8 shackle with all parts hot-dip galvanized, including the safety bolt, and has the characteristic brown color marking.

- Standard:** DNV 2.7-1, US Federal Spec. RR.C-271 and EN-13889
- Material:** Special alloy steel, Quenched & Tempered, Grade 8
- Finish:** All parts hot-dip galvanized + brown color marking
- Design Factor:** As specified in the table below
- Documentation:** Test certificate and traceable raw material / inspection certificate acc. EN 10204 - 3.1. DNVGL-ST-E271-2.7-1 and E273-2.7-3 Type Approval Certification.
- Temperature:** - 40°C to 200°C



Stock No.	WLL (t)	Design Factor	Pin d1 (mm)	Nominal Size d		Inner Width a (mm)	Inner Length c (mm)	Eye Outer e (mm)	Bow Width d2 (mm)	Weight (kg)
				(mm)	(in)					
A085613	2.0	8.00	16	13	1/2"	21	47	33	33	0.42
A085616	3.25	8.00	19	16	5/8"	27	60	42	40	0.7
A085619	4.75	8.00	22	19	3/4"	31	71	49	48	1.2
A085622	6.5	7.85	25	22	7/8"	37	84	60	52	1.7
A085625	8.5	7.25	28	25	1"	43	95	68	60	2.5
A085628	9.5	6.94	32	28	1 1/8"	46	108	74	64	3.4
A085632	12.0	6.40	35	32	1 1/4"	52	119	83	72	4.8
A085635	13.5	6.10	38	35	1 3/8"	57	132	89	76	7
A085638	17.0	6.00	42	38	1 1/2"	60	146	98	84	9
A085645	25.0	6.00	50	45	1 3/4"	74	178	127	105	15
A085652	35.0	6.00	57	50	2"	83	197	138	116	21
A085664	55.0	6.00	70	65	2 1/2"	105	260	180	145	39

Split pin included

## Super Shackle No 858 Bow shackle with safety bolt

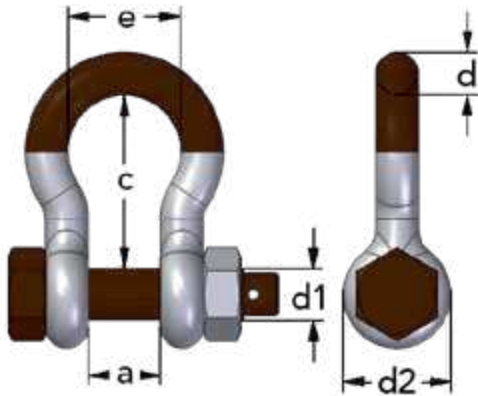


### Unique Benefits with The Super Shackle

In certain situations a demand for extra Working Load Limit occurs in others the lifting environment has limited space for the lifting application. The 858 Super Shackle enables a higher working load limit for the same nominal size.

The Super shackle meets the US Federal Specification RR.C-271. It is a grade 8 shackle and has all parts hot dipped galvanized, including the safety bolt.

<b>Standard:</b>	US Federal Spec. RR.C-271 Type IVA Class 3, Grade B
<b>Material:</b>	High tensile steel. Quenched & Tempered, Grade 8
<b>Finish:</b>	All parts hot-dip galvanized + brown color marking
<b>Design Factor:</b>	5:1
<b>Documentation:</b>	Test certificate and traceable 3.1 certificate
<b>Temperature:</b>	-40°C to 200°C

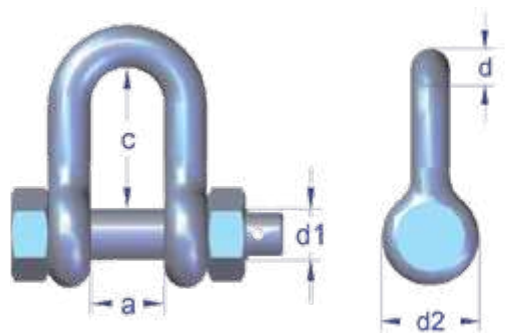


Stock No.	WLL (t) 5:1	Pin d1 (mm)	Nominal Size d		Inner Width a (mm)	Inner Length c (mm)	Bow Width e (mm)	Eye Outer d2 (mm)	Weight (kg)
			(mm)	(in)					
A085813	3.3	16	13	1/2"	21	51	33	33	0.4
A085816	5.0	19	16	5/8"	27	60	42	40	0.7
A085819	7.0	22	19	3/4"	31	71	49	48	1.2
A085822	9.5	25	22	7/8"	37	84	60	52	1.7
A085825	12.5	28	25	1"	43	95	68	60	2.5
A085828	15.0	32	28	1 1/8"	46	108	74	64	3.4
A085832	18.0	35	32	1 1/4"	52	119	83	72	4.8
A085835	21.0	38	35	1 3/8"	57	132	89	76	7
A085838	30.0	42	38	1 1/2"	60	146	98	84	8.8
A085845	40.0	50	45	1 3/4"	74	178	127	105	15

Split pin included

## Stainless Steel Shackle No 735 Dee shackle with safety bolt

**Material:** AISI 316  
**Finish:** Highly polished  
**Design Factor:** 6:1  
**Documentation:** Test certificate and traceable 3.1 certificate supplied upon request.

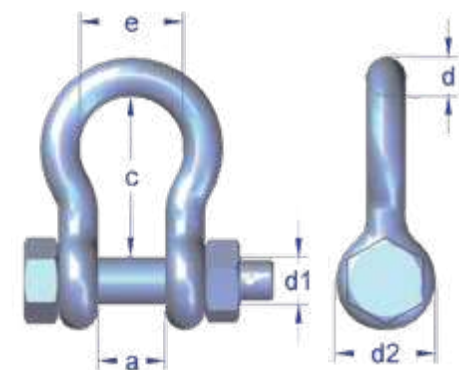


Stock No.	WLL (t) 6:1	Pin d1 (mm)	Nominal Size d (mm)	Inner Width a (mm)	Inner Length c (mm)	Eye Outer d2 (mm)	Weight (kg)
A073510	0.6	10	10	20	40	20	0.2
A073512	0.9	12	12	26	50	24	0.3
A073516	1.5	16	13	24	52	33	0.4
A073520	2.5	19	16	28	65	40	0.7
A073522	3.0	22	19	31	60	48	1.5
A073524	4.5	25	22	37	71	52	1.3
A073533	7.5	32	28	46	90	64	3.0
A073536	10.0	35	32	52	100	72	4.1

Split pin included

## Stainless Steel Shackle No 755 Bow shackle with safety bolt

**Material:** AISI 316  
**Finish:** Highly polished  
**Design Factor:** 6:1  
**Documentation:** Test certificate and traceable 3.1 certificate supplied upon request.

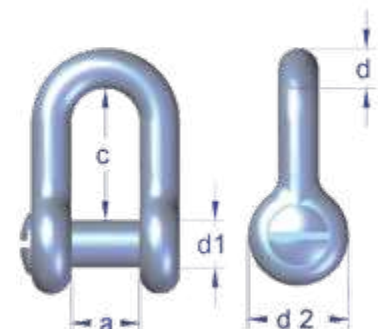


Stock No.	WLL (t) 6:1	Pin d1 (mm)	Nominal Size d (mm)	Inner Width a (mm)	Inner Length c (mm)	Bow Width e (mm)	Eye Outer d2 (mm)	Weight (kg)
7200685	0.6	10	10	20	40	27	20	0.2
A075512	0.9	12	12	25	47	37	26	0.3
A075516	1.5	16	13	25	47	33	34	0.4
A075520	2.5	20	16	28	60	42	40	0.8
A075522	3.0	22	19	31	71	51	48	1.3
A075524	4.5	25	22	37	84	58	52	1.7
A075533	7.5	32	28	46	108	74	64	3.4
A075536	10.0	35	32	52	119	83	72	5.2

Split pin included

## Stainless Steel Shackle No 732 Dee shackle with countersunk pin

**Material:** AISI 316  
**Finish:** Highly polished  
**Design Factor:** 6:1  
**Documentation:** Test certificate supplied upon request.

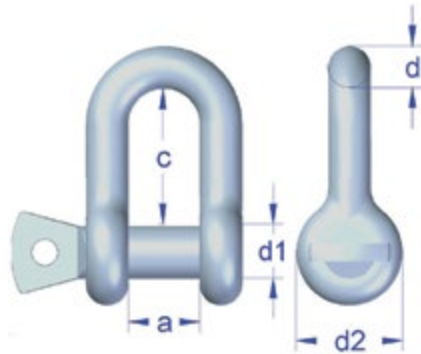


Stock No.	WLL (t) 6:1	Pin d1 (mm)	Nominal Size d (mm)	Inner Width a (mm)	Inner Length c (mm)	Eye Outer d2 (mm)	Weight (kg)
A073216	2.0	M16	13	24	52	34	0.3
A073220	3.0	M20	16	28	65	40	0.6
A073222	3.0	M22	19	31	60	48	1.4



## Stainless Steel Shackle No 730 Dee shackle with screw pin

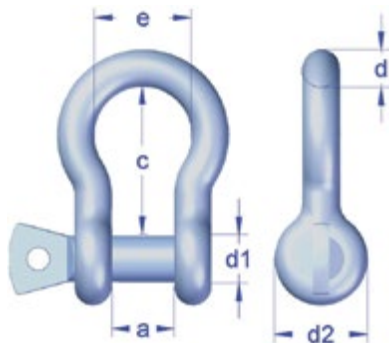
**Material:** AISI 316  
**Finish:** Highly polished  
**Design Factor:** 6:1  
**Documentation:** Test certificate supplied upon request.



Stock No.	WLL (t) 6:1	Pin d1 (mm)	Nominal Size d (mm)	Inner Width a (mm)	Inner Length c (mm)	Eye Outer d2 (mm)	Weight (kg)
A073008S	0.4	M8	8	16	30	16	0.06
A073010S	0.6	M10	10	20	40	20	0.1
A073012S	0.9	M12	12	26	50	24	0.2
A073016S	1.5	M16	13	24	52	34	0.3
A073020S	2.5	M20	16	28	65	40	0.6
A073022S	3.0	M22	19	30	72	48	0.9

## Stainless Steel Shackle No 750 Bow shackle with screw pin

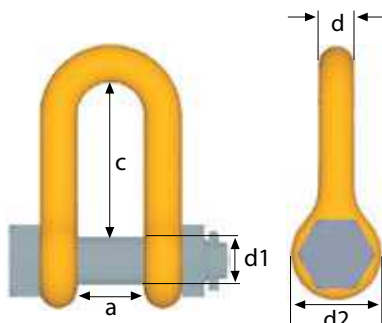
**Material:** AISI 316  
**Finish:** Highly polished  
**Design Factor:** 6:1  
**Documentation:** Test certificate supplied upon request.



Stock No.	WLL (t) 6:1	Pin d1 (mm)	Nominal Size d (mm)	Inner Width a (mm)	Inner Length c (mm)	Bow Width e (mm)	Eye Outer d2 (mm)	Weight (kg)
A075008S	0.4	M8	8	16	30	23	16	0.07
A075010S	0.6	M10	10	20	40	27	20	0.11
A075012S	0.9	M12	12	25	47	37	26	0.25
A075016S	1.5	M16	13	25	47	34	33	0.33
A075020S	2.5	M20	16	28	60	42	40	0.96
A075022S	3.0	M22	19	31	71	51	48	1.0

## Shackle SA Grade 8

**Material:** Alloy steel  
**Finish:** Painted yellow  
**Design Factor:** 4:1



Stock No.	Code	WLL (t) 4:1	For Chain Size (mm)	Pin d1 (mm)	Nominal Size d (mm)	Inner Width a (mm)	Inner Length c (mm)	Eye Outer d2 (mm)	Weight (kg)
Z100706	SA-7/8-8	2.0	7, 8	M10	8	15	30	20	0.1
Z298728	SA-10-8	3.2	10	M16	13	24	52	34	0.4
Z292528	SA-13-8	5.4	13	M20	16	28	65	40	0.7
Z293024	SA-16-8	8.2	16	M22	18	30	72	46	1
Z299622	SA-19-8	11.5	19	M27	22	36	86	52	1.7
Z294122	SA-22-8	15.5	22	M30	25	40	94	60	2.5
Z304328	SA-26-8	21.7	26	M38	32	48	116	76	5.2

Split pin included



# ENSURE YOUR TEAM IS KNOWLEDGEABLE & SAFE

The Crosby Group offers the most comprehensive on-site and online training on the installation, use, inspection and maintenance of rigging hardware.

## ON-SITE COURSES (INSTRUCTOR-LED)

- ASME/OSHA for general industry and construction
- Land Based Energy (Oil & Gas)
- Offshore Energy (Oil & Gas)
- Certificate upon successful completion

## ON-SITE SAFE RIGGING CLINICS (TRUCK/TRAILER)

- Insights into key safe, effective and efficient rigging best practices
- 30–45 minute toolbox talk
- Product proof testing
- Product application and live load demonstrations

## ONLINE SAFE RIGGING COURSE (SELF-PACED)

- Rigging fundamentals based on topics covered in the *User's Guide for Lifting* rigging card
- Video explanations and quizzes
- Certificate upon successful completion