



Rigging Safety...

Enhancing knowledge saves lives

Presented by:  888.829.9099

Many industries use Rigging

- Regardless of what industry your in, you will encounter some form of rigging.
 - Lifting
 - Pulling
 - Cargo Securement
- What saves lives is knowing your equipment and understanding the proper use.

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Rigging in Construction

- Today we hear of many accidents...
 - Most due human error

Unacceptable... behavior

Example of how
Injuries occur...



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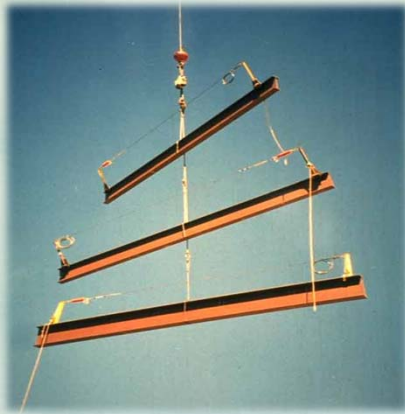
Construction Safety importance

- Many don't realize the importance of rigging safety until its to late...
 - Accidents resulting in death cause everyone to reconsider their position on safety.
 - The purpose of this conference is to ensure those who go to work, return home safely and alive.

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Rigging Procedures in Construction

■ Christmas Treeing

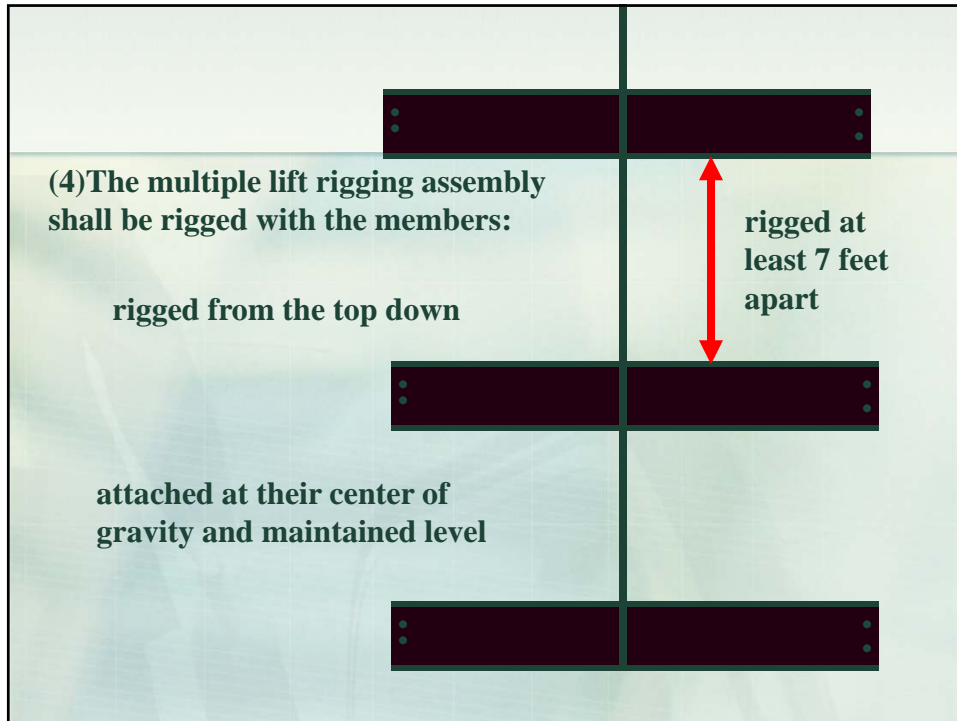


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Steel Connector



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Understand your Equipment

Regardless of your industry, you must:

- Know the types of equipment needed in the field.
- Know the proper names for the equipment.
- Understand how to properly use them.
- Understand how to read the capacity

Commonly mistaken equipment



Shackles versus Clevises can be a deadly mistake.



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Capacities

5 NYLON WEB SLING CHART

NYLON WEB SLINGS (8000 lb/in Material)						
MAXIMUM SAFE WORKING LOADS — POUNDS (SAFETY FACTOR = 5) (Eye & Eye, Twisted Eye, Triangle Fittings, Choker Fittings)						
Web Width (Inches)	Single Vertical Hitch	Single Choker Hitch	Single Basket Hitch (Vertical Legs)	2-Leg Bridle Hitch & Single Basket Hitch With Legs Inclined		
				60°	45°	30°
1	1,600	1,200	3,200	2,770	2,260	1,600
2	3,200	2,400	6,400	5,550	4,520	3,200
3	4,800	3,600	9,600	8,300	6,800	4,800
4	6,400	4,800	12,800	11,100	9,050	6,400
5	8,000	6,000	16,000	13,850	11,300	8,000
6	9,600	7,200	19,200	16,600	13,600	9,600
7	11,200	8,400	22,400	19,400	15,800	11,200
8	12,800	9,600	25,600	22,200	18,100	12,800
9	14,400	10,800	28,800	25,000	20,400	14,400
10	16,000	12,000	32,000	27,700	22,600	16,000
11	17,600	13,200	35,200	30,500	24,900	17,600
12	19,200	14,400	38,400	33,300	27,200	19,200

If used with Choker Hitch multiply above values by $\frac{3}{4}$.

For Double Basket Hitch multiply above values by 2.

Note: For Safe Working Loads of Endless or Grommet Slings, Multiply Above Values by 2.

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Capacities

WIRE ROPE SLING CHART

WIRE ROPE SLINGS
6 x 19 Classification Group, Improved Flow Steel, IWRC

MAXIMUM SAFE WORKING LOADS — POUNDS
(Safety Factor = 5)

Rope Diameter (Inches)	Single Vertical Hitch	Single Choker Hitch	Single Basket Hitch (Vertical Legs)	2-Leg Bridle Hitch & Single Basket Hitch With Legs Inclined		
				60°	45°	30°
5/16	850	480	1,200	1,100	900	850
1/4	1,150	660	2,300	2,000	1,600	1,150
3/8	1,750	1,300	3,500	3,000	2,500	1,750
1/2	2,550	1,900	5,100	4,400	3,600	2,550
5/8	3,450	2,600	6,900	6,000	4,900	3,450
3/4	4,700	3,500	9,400	8,150	6,650	4,700
7/8	5,700	4,200	11,400	9,900	8,050	5,700
1	7,100	5,300	14,200	12,300	10,000	7,100
1 1/8	10,200	7,650	20,400	17,700	14,400	10,200
1 1/4	13,750	10,300	27,500	23,800	19,400	13,750
1 1/2	17,850	13,450	35,900	31,100	25,400	17,850
1 3/4	22,750	17,000	45,500	39,400	32,200	22,750
1 7/8	28,200	21,200	56,400	48,800	39,900	28,200
2	34,800	26,100	69,600	60,300	49,200	34,800
2 1/4	41,200	31,000	82,600	71,300	58,400	41,200
2 1/2	48,800	36,400	97,200	84,200	68,700	48,800
2 3/4	55,900	41,800	111,800	96,600	79,000	55,900
2 7/8	65,400	49,000	130,800	113,300	92,500	65,400
3	72,800	54,500	145,200	125,700	102,700	72,800
3 1/4	90,300	67,500	180,600	158,400	127,700	90,300
3 1/2	111,800	83,700	223,600	193,600	158,100	111,800
3 3/4	131,100	98,200	262,200	227,000	185,400	131,100

If used with Choker Hitch multiply above values by 1/2.

For Double Basket Hitch multiply above values by 2.

Note: Table values are for slings with eyes and thimbles in both ends, Flemish Spliced Eyes and mechanical sleeves.
Hand tucked spliced eyes — reduce loads according to table 1.11, page 47.
Eyes formed by cable clips — reduce loads by 20%.

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Visit our booth

Should you have questions that we have not been able to answer, look for Royal Arc's booth and we can discuss your individual rigging applications.

Thank you!

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