

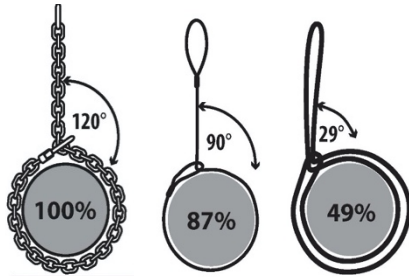


The objective of this Tool Box Talk is that it can be used as part of a safety meeting that focuses on the use of Alloy Steel Chain Slings in the workplace. The ASME B30.9 standard has been referenced when compiling this document as this is the most recognized standard used in North America for selection, inspection, cautions to personnel, effects of environment, and rigging practices of slings.

Ask members of the meeting to give answers to the following, encouraging participation whether their answers are right or wrong.

LEGISLATION	ANSWER
1) WHAT STANDARDS SHOULD THE SLING COMPLY WITH?	<b>ASME B30.9 standard.</b>
2) WHAT OTHER INFORMATION MUST BE REFERENCED?	<b>Manufacturers Specifications</b>
3) HOW OFTEN DO PERIODIC INSPECTIONS NEED TO BE CARRIED OUT?	<b>At least annually (ASME), but state what your company rules are.</b>
MARKINGS	ANSWER
4) WHAT 7 ITEMS ARE REQUIRED TO BE MARKED ON THE SLING?	<b>1. Manufacturer, 2. Grade, 3. Size, 4. Number of Legs, 5. Rated Load, 6. Length, 7. Sling Identification Number.</b>
APPLICATION	ANSWER
5) WHAT ARE THE TEMPERATURE RANGES FOR THE SLING?	<b>Minus 40 to plus 204 Celsius.</b>
6) NAME SOME REASONS WHY THE SLING MAY HAVE TO BE REMOVED FROM SERVICE?	<b>1. Missing or illegible identification, 2. Cracks or breaks, 3. Excessive wear, nicks or gouges, 4. Stretched links or fittings, 5. Bent, twisted or deformed links or fittings, 6. Evidence of heat damage, 7. Excessive pitting or corrosion, 8. Lack of ability of chain or fittings to hinge freely, 9. Weld spatter.</b>
7) ON A BRIDAL (MULTI-LEGGED) SLING WHAT HORIZONTAL ANGLE IS THE RATED LOAD NORMALLY BASED ON?	<b>It is generally based on the horizontal sling angle of 60 degrees</b>
8) IF THE SLING IS USED AROUND AN EDGE OR CORNER WHAT MUST BE USED TO PROTECT THE SLING?	<p><b>Softeners, ask what is good to use as softeners and what is not good</b></p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>

9) WHAT HAPPENS TO THE RATED LOAD IF THE SLINGS CHOKER HITCH IS TIGHTENED AGAINST THE LOAD?



When the hitch angle is less than 120 degrees the rated load reduces.

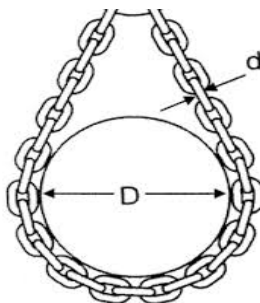
Choker hitch rated capacity adjustment	
Angle of choke in degrees	Rated capacity
Over 120	100%
90 - 120	87%
60 - 89	74%
30 - 59	62%
0 - 29	49%

10) WHAT HAPPENS TO THE RATED LOAD IF THE SLINGS BASKET HITCH IS NOT USED AT 90°?

When the hitch angle is less than 90 degrees the rated load reduces. (15% @ 60°, 30% @ 45° and 50% @ 30°)

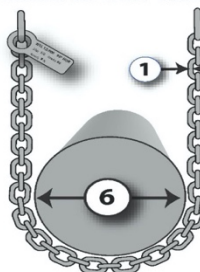


11) WHAT IS THE RECOMMENDED D:d RATIO FOR AN ALLOY STEEL CHAIN SLING ?



6:1 and above, if less the sling will have a reduced rated load.

Alloy Chain Slings are rated for a 6:1 D/d ratio



D/d	Rated Capacity
6	100 %
5	90 %
4	80 %
3	70 %
2*	60 %

12) WHAT IS THE LOWEST RECOMMENDED HORIZONTAL SLING ANGLE TO USE THE SLING?

30 Degrees

13) HOW ARE SLINGS AFFECTED BY DIFFERENT ANGLES AND HITCHES?

Check with the manufacturers' charts for different configurations.

Grade 80 Alloy Steel Chain Slings	Vertical	Choker	2-Leg or Basket		
			60°	45°	30°
7/32" (5.5 mm)	2,100	1,700	3,600	3,000	2,100
9/32" (7 mm)	3,500	2,800	6,100	4,900	3,500
5/16" (8 mm)	4,500	3,600	7,800	6,400	4,500
3/8" (10 mm)	7,100	5,700	12,300	10,000	7,100
1/2" (13 mm)	12,000	9,600	20,800	17,000	12,000
5/8" (16 mm)	18,100	14,500	31,300	25,600	18,100
3/4" (20 mm)	28,300	22,600	49,000	40,000	28,300
7/8" (22 mm)	34,200	27,400	59,200	48,400	34,200
1" (26 mm)	47,700	38,200	82,600	67,400	47,700
1-1/4" (32 mm)	72,300	57,800	125,200	102,200	72,300

14) WHERE IS THE BEST PLACE TO STORE SLING?

Where they will not be affected by mechanical damage, corrosion, moisture, or adverse temperatures.