



# Operating Practices

## Alloy Chain Slings 1 of 2

### ⚠ WARNING ⚠

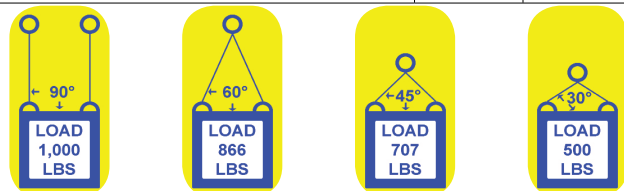


- CAN FAIL IF DAMAGED, MISUSED OR OVERLOADED.
- INSPECT BEFORE USE.
- USE ONLY IF TRAINED.
- OBSERVE RATED LOAD.
- PAD EDGES OF LOAD TO AVOID DAMAGE TO SLING.
- DEATH OR INJURY CAN OCCUR FROM IMPROPER USE OR CARE.

**RATED LOAD = RATED CAPACITY = WORKING LOAD LIMIT**

### ALLOY CHAIN SLINGS

LOAD ANGLE CHART	ANGLE	FACTOR
Angle factor must be applied to calculate the reduced sling capacity when lifting force is not at 90° to the plane of the load.  Multiply angle factor x sling's vertical rated load to calculate the reduced capacity at that angle.	90°	1.0000
	80°	0.9848
	75°	0.9659
	70°	0.9397
	65°	0.9063
	60°	0.8660
	55°	0.8192
	50°	0.7660
	45°	0.7071
	40°	0.6248
	35°	0.5736
	30°	0.5000



Because of the greatly reduced lifting capacity, use extra care when the sling to load angle, also known as the horizontal angle, is less than 45° and do not make lifts of less than 30° load angle. Example: a sling with adequate capacity could be broken because of increased tension resulting from angles of less than 30°. When possible, use longer slings to minimize angular tension by increasing the angle.

#### INSTRUCTIONS FOR CARE, USE, INSPECTION AND REPAIR

##### CARE:

- Store On A Rack Away From Possible Mechanical Damage, Corrosion, Dust, Grit, Extreme Temperatures, Sun And Any Ultraviolet Light Source.
- Do Not Anneal (Temper) Alloy Chain, Connecting Links Or Hooks. Hot Galvanizing Requires Chain Manufacturer's Advice.

##### USE:

- Check Weight Of Load.
- Check Tag To Confirm That Sling Is Rated Adequately For The Load (See Load Angle Chart).
- Sling Shall Not Be Twisted, Tied Into Knots Or Joined By Knotting.
- Be Sure The Load Can't Cut The Sling During The Lift By Padding Corners, Edges, Protrusions Or Abrasive Surfaces; Use Materials Of Sufficient Strength And Thickness.
- Center Load On Base (Bowl) Of Hook Unless Sling Hook Is Designed For Point Loading.
- Balance The Load.
- Maintain Load Control.
- Avoid Jerking The Load.
- Be Alert For Snagging Of Load.
- Avoid Dragging Sling Over Rough Surfaces And From Under The Load.
- Choker Hitch Must Choke On Sling Body, Never On End Fitting.
- Stand Clear Of Load At All Times.
- Persons Are Not To Ride On Sling Or Load.
- If Sling Is To Be Used In A Chemical Environment Or In Temperatures Below -40° F Or Above 400° F, Contact Manufacturer For Specific Recommendations.
- When Shortening Chain, Use Only The Manufacturer's Recommended Alloy Components.

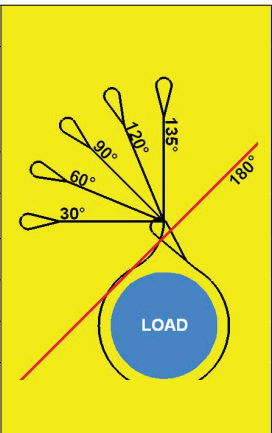
##### INSPECTION:

- Before Each Use: Check For Nicks, Gouges Or Excessive Wear. Inspect For Bent, Twisted, Deformed Chain Or Components. Inspect For Heat Damage, Weld Spatter, Pitting Or Corrosion, Increase In Hook Throat Opening, Missing Latch (If So Equipped). If This Wear Or Damage Is Present, If Rated Load Tag Is Missing Or Illegible, Remove From Service And Repair Or Replace Sling. Periodic Inspections Are Required At Least Annually For Normal Service, Quarterly Or More Frequently If In Severe Service Or Nearly Constant Use Periodic Inspections Are Performed Only By Chain Manufacturer Or Other Designated Person Who Records The Observed Condition And Determines When Further Use Would Be Hazardous.

##### REPAIR:

- Any Hazardous Condition Disclosed By An Inspection Shall Require Repair By Chain Manufacturer Or Other Qualified Person.

CHOKE ANGLE EFFECT	
ANGLE OF CHOKE	RATED CAPACITY **
OVER 120°	100%
90°-120°	87%
60°-89°	74%
30°-59°	62%
0°-29°	49%
** PERCENT OF SLING RATED CAPACITY IN A CHOKER HITCH.	



RATED CAPACITY OF SLING SHALL BE DECREASED WHEN D:d RATIO WILL BE SMALLER THAN THAT CITED IN THE LATEST REVISION OF ASME B30.9 CH2. CONSULT THE SLING MANUFACTURER FOR SPECIFIC DATA OR REFER TO THE WRTB WIRE ROPE SLING USER'S MANUAL.  
GENERAL NOTE: WHEN D IS 25 TIMES THE COMPONENT ROPE DIAMETER (d) THE D:d IS EXPRESSED AS 25:1.

