

Chain Slings - General Information

CAUTIONS

When preparing the load, protect against:

- Twists and kinks in the sling
- Damage to sling from sharp edges and corners
- Trapping sling between or under loads
- Damage due to load turning in basket hitch
- Shock-loading
- Overloading sling and excessive sling leg angles
- Loading sling out of plain/side loading
- Point loading of hooks
- Exposure to fumes, vapours, sprays or mists of alkalise, ethers or concentrated sulphuric acid
- Exposure to temperatures in excess of 600°F
- Exposure to chemically active environments, which can affect a sling's structural integrity
- General abuse

SAFE OPERATING PRACTICES

- Know the working load limit of the equipment and tackle being used. Never exceed this limit
- Determine the load weight before rigging it
- Determine how the load is to be connected to the lifting hook, as well as how the sling will grip or be attached to the load
- Do not knot or twist sling to shorten. Follow adjustment methods set out by the sling manufacturer
- Inspect the sling before using it and destroy defective components. Discarded equipment may be accidentally used by someone not aware of the hazards and defects
- Never carry out any rigging or hoisting operation when the weather conditions are such that hazards to personnel, property or the public are created
- Stand clear of lift
- Do not jerk the load

CARE, MAINTENANCE & INSPECTION

When placing the sling into storage, the following should be considered:

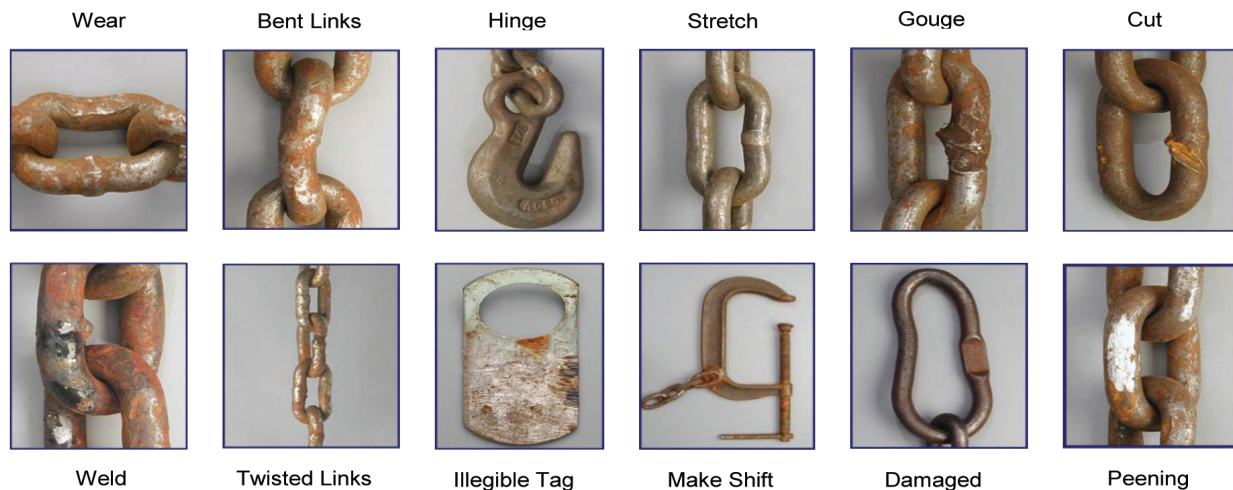
- Examine for damage (i.e. wear, nicks, cracks, gouges or stretch)
- Weld splatter
- Excessive wear and rust
- End attachments, including hooks that are cracked, deformed or obviously worn
- Twisted links
- Knots
- Inspect link by link
- Capacity tag must be legible and in tact
- Hang in clean dry area and avoid entanglement
- Keep records of inspections (including dates and conditions of slings)
- Each day before being used, the sling and all attachments shall be inspected for damage or defects by a competent person designated by the employer. Additional inspections must be performed during sling use where service conditions warrant. Damaged or defective slings must be immediately removed from service.
As per ANSI Std. B30.9 & OSHA

ORDERING SLINGS




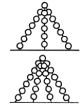

When placing an order for slings, please specify the following:

- Chain size
- Number of legs
- Sling type
- Bottom attachments
- Sling length (measure bearing point to bearing point in feet)

EXAMPLES OF REJECTION



Chain Sling Reference Charts

WORKING LOAD LIMITS (LBS)										
GRADE 100 CHAIN	Single Sling		Double Sling				Triple/Quad Sling			
	90° Angle of Lift		60° Angle		45° Angle		60° Angle		45° Angle	
										
SIZE (IN)	4:1	5:1	4:1	5:1	4:1	5:1	4:1	5:1	4:1	5:1
9/32	4300	3440	7400	5920	6100	4880	11200	8960	9100	7280
5/16	5700	4560	9900	7920	8100	6480	14800	11840	12100	9680
3/8	8800	7040	15200	12160	12400	9920	22900	18320	18700	14960
1/2	15000	12000	26000	20800	21200	16960	39000	31200	31800	25440
5/8	22600	18080	39100	31280	32000	25600	58700	46960	47900	38320
3/4	35300	28240	61100	48880	49900	39920	91700	73360	74900	59920

Working load limits above (in black) are calculated on a 4:1 design factor as per ASME B30.9-2010 specifications

Working load limits above (in red) are calculated on a 5:1 design factor

Chain Sling Features and Benefits

Chain Slings

- Grade 100 chain and fittings offer our customers the finest and strongest chain slings on the market today
- Easily repairable and recertified with a full line of quality matched components
- Superior durability, wear resistance and strength
- Each MacMor chain sling is proof tested and certified showing serial number, manufacturer and date of manufacture
- Each serialized tag provides load ratings, degrees of angle and traceability
- Proof test certificates are provided with each chain sling manufactured
- RFID tag installed if requested

Chain Sling Type Naming Codes

Basic chain sling configurations are often described using a code. Naming conventions have many exceptions and may vary among manufacturers.

1. First letter often designates the number of legs or branches:

- S:** Single leg with one branch
- D:** Double leg with two branches
- T:** Triple leg with three branches
- Q:** Quadruple leg sling with four branches

2. Second letter normally designates the fitting at the top of the sling:

- O:** Oblong shaped master link
- S:** Sling hook
- G:** Grab hook
- B:** Basket with oblong master sling

3. Third letter or group of letters normally designates the fitting at the bottom of each branch. A few of the many possibilities are listed below:

- S:** Sling hook
- G:** Grab hook
- LK:** Sliding choker
- BK:** Safety hook
- F:** Foundry Hook

If **A** precedes the group of letters, then a device to adjust the length has been added.

Example: **ADOS** describes an **A**Adjustable, **D**ouble Leg Sling with **O**blong master link on top and a **S**ling hook at the bottom of each leg or branch.

Chain Sling Examples



SOS



SGG



SOG



SSS



SOBK



SSG

All Sling Hooks Should be Equipped with a Latch Kit

Chain Sling Type Naming Codes (Continued)



ASOS



DOS



DOG



DOF



DOBK



TOS



ADOS



ATOS



QOS

All Sling Hooks Should be Equipped with a Latch Kit