

Technical Data
Manual

Chain





**SOUTHWEST
WIRE ROPE, INC.**

Chain Specifications

Elongation

The elongation at break test for all proof tested chain shall not be less than 15%.

The Working Load Limit is the greatest load which should ever be applied to chain or chain accessory by a user, therefore, any shock loading must be considered when selecting the item for use in a system.

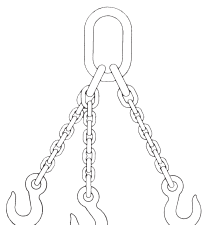
We do not accept any liability for damages which may result from chain used in excess of Working Load Limit.

Therefore, it is recommended that all products be regularly inspected to determine their condition as a basis for deciding if the product may continue to be used at the catalog assigned WLL, a reduced WLL, or removed from service.

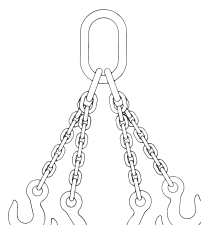
Welding of or to load supporting parts or products can be a source of a problem. It is necessary to have knowledge of materials, heat treatment and welding procedures before welding of any item is to be considered. We suggest the factory be consulted for information.

All fittings are subject to wear and disfigurement in the form of nicks and gouges, and should be inspected periodically for these conditions.

Any detection of a crack or permanent deformation in a fitting is cause to remove the fitting from service and have it destroyed.



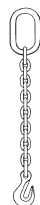
TYPE TOS



TYPE QOS



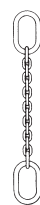
TYPE SOS
SLING
HOOK



TYPE SOG
GRAB
HOOK



TYPE SOF
FOUNDRY
HOOK



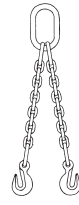
TYPE CO



TYPE CP



TYPE DOS
SLING
HOOKS



TYPE DOG
GRAB HOOKS



TYPE DOF
FOUNDRY HOOKS



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CHAIN SLING INSPECTION

Daily Inspection – as shown in No. 1 – should be conducted by a competent person designated by the employer.

Periodic Inspection – OSHA specifies that all alloy steel chain slings shall have a thorough periodic inspection, by a competent person, at least once every 12 months. These inspections must be recorded and maintained for each individual sling.

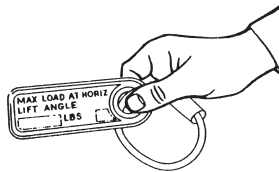
The inspection schedule should be based on frequency of sling use, severity of service conditions, nature of lifts being made and experience gained on service life of slings used in similar circumstances.

Inspection –

1. Clean chain prior to inspection, to more easily see damage or defects.



2. Hang chain vertically, if practical, for preliminary inspection. Measure reach accurately (bearing point of master link to bearing point of hook). Check this length against reach shown on tag. If present length is greater than that shown on tag, there is a possibility that the sling has been subjected to overloading or excessive wear.



3. Make a link-by-link inspection of the chain slings for:

- a. Excessive wear – If the wear on any portion of any link | exceeds the allowable wear shown in Table of Wear remove from service.
- b. Twisted, bent, gouged, nicked, worn or elongated links.
- c. Cracks in the weld area of any portion of the link. Transverse markings are the most dangerous.



Worn Links



Bent links

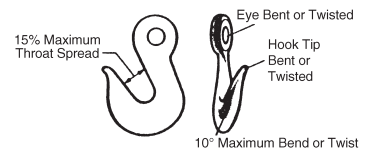


Gouged Links



Stretched Links

4. Check master links and hooks for all of the above faults – hooks especially for excessive throat opening.



Slings showing any of the faults described above should immediately be removed from service and returned to the manufacturer for repair.



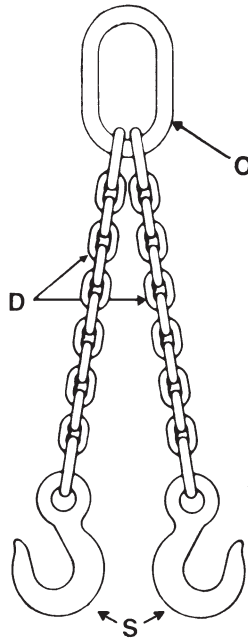
SWWR offers a chain sling inspection service performed by our own qualified inspectors.



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Alloy Chain Slings

HOW TO SELECT THE PROPER CHAIN SLING



EXAMPLE
1/2" chain, 6 ft. reach, type DOS

1. Determine the maximum weight of LOAD
2. Determine the TYPE of sling required.
This will be determined by the configuration of the load.
3. From the working load limit charts of the following pages, determine the size of the body chain for the sling. Be sure to take into consideration the effect of the angles shown.
4. Select the matching ATTACHMENTS required.
5. Determine the REACH required to give the desired angle. The reach is measured from the upper bearing surface of the master link to the bearing surface of the lower attachment ("Pull to Pull").