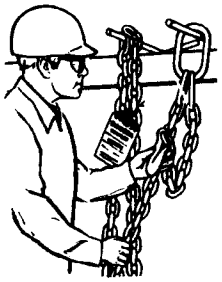
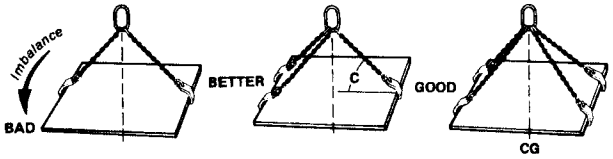
RECOMMENDED CHAIN SLING USE

Follow these Recommendations for Safer Chain Sling Use

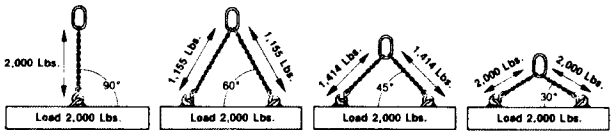
1. Visually examine the sling before each use. Look for stretched, gouged, bent or damaged links and components, including hooks, with opened throats, cracks or distortion. If damaged, remove from service.



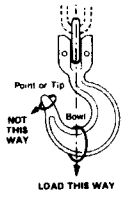
2. Know the load – determine the weight, center of gravity, angle and lift and select the proper size and type of sling.



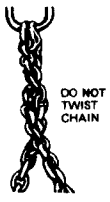
3. Never overload the sling – check the working load limit on the identification tag. Always consider the effect of Angle of Lift – the tension on each leg of the sling is increased as the angle of lift, from horizontal, decreases. Use the charts in this catalog or in the *Acco* Chain Sling User's Manual for this purpose.



4. Do not point load hooks – load should bear on the bowl of hook.

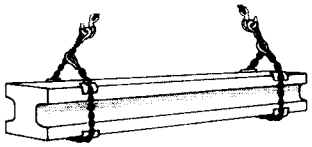


5. Make sure chain is not twisted, knotted or kinked before lifting load.

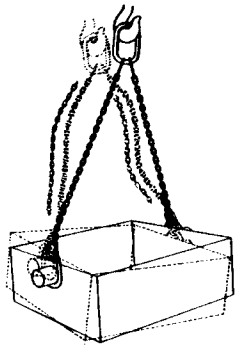


6. Slings should not be shortened with knots, bolts or other makeshift devices.

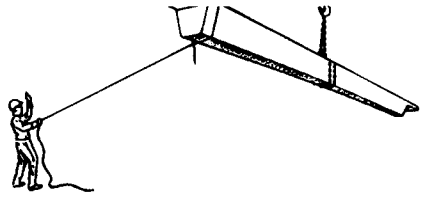
7. Protect chain with padding when lifting sharp edged loads.



8. Lift and lower loads smoothly, do not jerk.

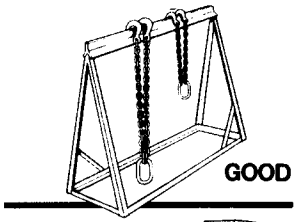


9. Hands and fingers should not be placed between the sling and load while sling is being tightened around the load. When lifted, the load should not be pushed or guided by employee's hands directly on the load.

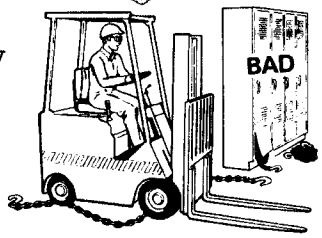


10. Do not expose alloy chain or slings to temperatures of 400°F or higher. (See Table page 65.)

11. Protect chain slings from corrosion during storage.



12. Store slings properly on an A-Frame.



CHAIN SLING INSPECTION

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

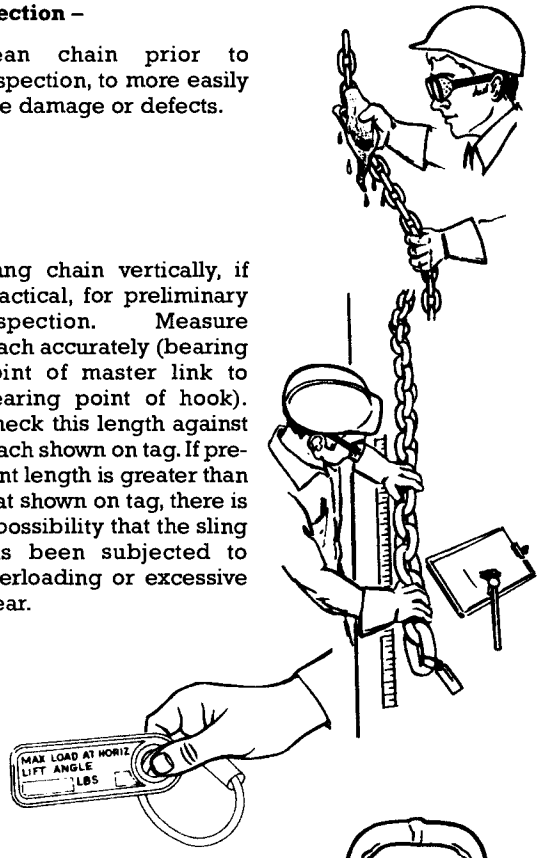
Periodic Inspection – OSHA specifies that all alloy steel chain slings shall have a thorough periodic inspection, by a competent person, at least once every 12 months. These inspections must be recorded and maintained for each individual sling.

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.

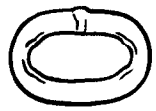
Inspection –

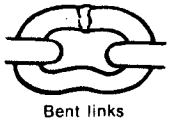
1. Clean chain prior to inspection, to more easily see damage or defects.

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.

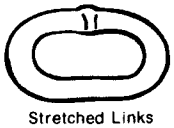


3. Make a link-by-link inspection of the chain slings for:
   a. Excessive wear – If the wear on any portion of any link exceeds the allowable wear shown in the Table of Wear remove from service.
   b. Twisted, bent, gouged, nicked, worn or elongated links.
   c. Cracks in the weld area of any portion of the link. Transverse markings are the most dangerous.
   d. Severe corrosion.


Worn Links

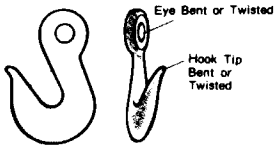

Bent links


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.



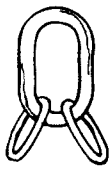


Table of Wear

Minimum Allowable Thickness Measurement at any Location on a Chain, Master Link, and/or Sublink

Material Diameter of Link			Minimum Allowable Thickness on Link	
Nominal Size		Decimal Size		
In.	mm		In.	mm
9/32	7	0.276	0.239	6.07
3/8	10	0.375*	0.325	8.26
	10	0.394	0.342	8.69
15/32	12	0.469*	0.406	10.30
1/2	13	0.511	0.443	11.26
5/8	16	0.625*	0.541	13.74
	16	0.630	0.546	13.87
3/4	19	0.750*	0.650	16.47
	20	0.781	0.682	17.45
7/8	22	0.875*	0.758	19.25
	22	0.906	0.785	19.93
1	26	1.000*	0.866	22.00
	26	1.031	0.886	22.53
1-1/8	29	1.125	0.974	25.11
1-1/4	32	1.280	1.090	27.71
1-3/8	35	1.375	1.191	30.31
1-1/2	38	1.500	1.299	32.91
1-3/4	45	1.750	1.516	38.97
1-7/8	48	1.875	1.624	41.57
2	51	2.000	1.732	44.17
2-1/4	58	2.250	1.949	50.23
2-1/2	64	2.500	2.165	55.42
2-3/4	70	2.750	2.382	60.62

*Material Size of Weldable Coupling Links for Sling Assembly.

***Acco* offers a chain sling inspection service performed by our qualified inspectors.**