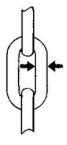
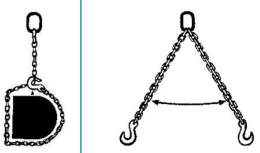
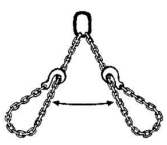
ALLOY GRADE 80
CHAIN SLING WORKING LOAD LIMITS (WLL)

CHAIN SIZE (mm)	WORKING LOAD LIMIT UNDER GENERAL CONDITION OF USE (t)												
	SINGLE LEG SLINGS			SLINGS OF 2, 3 OR 4 LEGS						ENDLESS SLINGS			
													
	Straight or adjustable slings with no deration	Adjustable sling with deration	Reeved sling	Straight sling			Reeved sling			Basket sling			Reeved sling
Loading Factors	x1	x0.75	x0.75	x1.73	x1.41	x1	x1.3	x1.06	x0.75	x1.3	x1.06	x0.75	x1.5
6	1.1	0.8	0.8	1.9	1.6	1.1	1.5	1.2	0.8	1.5	1.2	0.8	1.7
8	2.0	1.5	1.5	3.5	2.8	2.0	2.6	2.1	1.5	2.6	2.1	1.5	3.0
10	3.2	2.4	2.4	5.5	4.5	3.2	4.1	3.4	2.4	4.1	3.4	2.4	4.8
13	5.3	4.0	4.0	9.2	7.5	5.3	6.9	5.6	4.0	6.9	5.6	4.0	8.0
16	8.0	6.0	6.0	13.8	11.3	8.0	10.4	8.5	6.0	10.4	8.5	6.0	12.0
19	11.2	8.4	8.4	19.4	15.8	11.2	14.6	11.9	8.4	14.6	11.9	8.4	16.8
20	12.5	9.4	9.4	21.6	17.6	12.5	16.3	13.3	9.4	16.3	13.3	9.4	18.8
22	15.0	11.3	11.3	26.0	21.2	15.0	19.5	15.9	11.3	19.5	15.9	11.3	22.5
26	21.2	15.9	15.9	36.7	29.9	21.2	27.6	22.5	15.9	27.6	22.5	15.9	31.8
32	31.5	23.6	23.6	54.5	44.4	31.5	41.0	33.5	23.6	41.0	33.4	23.6	47.3

To AS/NZS 3775 (SAFETY FACTOR OF 4)


Single leg Chain Sling c/w Oblong Links


Single leg Chain Sling c/w Self Locking Hook & Shortener


Four Leg Chain Sling with Sling hooks


Safety Tag


Two Leg Chain Sling c/w Self Locking Hooks & Shorteners


Endless Chain Sling


Two Leg Endless Chain Sling

- We can manufacture chain slings to your requirements in any configuration and length.
- All slings are manufactured, tested and certified to Australian Standard requirements.
- WLL tags are fitted to all of our chain slings.

CONDITIONS OF USE

Heat treatment: Grade T chain slings shall not be heat treated subsequent to the completion of thier manufacture, except by the manufacturer of the component.

Galvanizing: Grade T chainslings shall not be hot-dip galvanised or electroplated, except by the manufacturer of the component, as these processes may be detrimental to the sling.

Corrosive environments: Grade T chain slings and fittings should not be used in acid of other corrosive environments, due to the possibility of hydrogen embrittlement and corrosion.

Temperature effects: Temperatures at which the sling is used could affect it's stength. Slings should not be used at temperatures colder than minus 10°C, prior to checking with the manufacturer to ensure it's stability at such a temperature. Under no circumstances should Grade T chain slings be used if it's temperature has exceeded 400°C. Any sling that has been exposed to a temperature exceeding 400°C should be immediatly withdrawn from service and destroyed.

The strength of Grade T chain is adversely affected by excessively elevated temperatures. It may be difficult to determine in practice the actual temperature involved, but underestimation must be avoided. Where subjected to elevated temperatures up to 400°C, the following reductions to the WLL will apply:

Temperature (°C)	Reduction of WLL (%)
> -10 < 200	Nill
> 200 < 300	10
>300 < 400	25

RECOMMENDATIONS

- Ensure the sling has a metal tag showing the WLL for it's varous configuations.
- Packing (such as wooden blocks) may be required where a chain comes into contact with a load, to protect the chain and the load from damage. Sharp corners of metal or other hard materials can bend of damage chain links.
- Where one of more legs of a multi-leg sling are not being used, ensure they are hooked back to the master link or intermediate link during operations.
- Chain slings shall not be subject to shock loading. When loads are accelerated and decelerated suddenly, high dynamic forces occur, which increase stresses in the chain. Such situations arise from snatch of shock loading (eg. from not taking up the slack chain before starting to lift or by the impact of arresting falling loads).
- When landing, avoid the possibility of crushing or trapping the sling by ensuring the load does not land on the sling. Suitable damage should not be used to enable the sling to be readily removed by hand.

INSPECTION

In-service: Prior to each use, chain slings shall be visually inspected. Ensure that slings are free of any significant damage or wear and a WLL tag is fitted. If any defects are detected, the sling shall immediatly be withdrawn from service.

Periodic: It is important for slings to be periodically inspected by a competant person, and the following apply:

- Sling inspections shall be undertaken in an adequately lit location.
- Where necessary, the sling should be cleaned before it is inspected.
- Every individual chain link should be inspected for any signs of wear, nicks, cracks, gouging, twisting, stretching of lack of articulation between the links. Particular attention should be given to links that have been reeved, due to the possibility of bending or twisting of the engaged link.
- Any worn components should be measured to determine the degree of wear, which shall not exceed that allowed. Wear may be tolerated until the thickness of any worn section has been reduced by 10% of the nominal section in any plane. Wear by contact with other objects usually occurs on the outside of the straight portions of the links where it is easily seen and measured. Wear between adjoining links is hidden. The chain should be slack and adjoining links rotated to expose the inner end of each link.
- Upper and lower terminal fittings should be inspected for any signs of wear at their load-bearing points, nicks, cracks, gouging, stretching or distortion.
- Connecting devices shall be inspected for any signs of wear at their load-bearing points, any excessive play of the load pin within the body halves, nicks, cracks, gouging, distortion of any impaired rotation of the body halves around the load pin.

A sling inspected record should be provided for each sling. Regulatory requirements may require results to be entered on a sling inspection record.