

General Information

Chain Slings

Chain Inspection:
Inspection and Removal from service
Per Occupational Health and Safety Act (OHSA)

Frequent Inspection:

Normal Service: Monthly

Severe Service: Daily to Monthly

Check chain and attachments for wear, nicks, cracks, breaks, gouges, stretch, bend, weld splatter, discolouration from excessive temperature, and throat openings of hooks.

1. Chain links and attachments should hinge freely to adjacent links.
2. Latches on hooks, if present, should hinge freely and seat properly without evidence of permanent distortion.

Periodic Inspection
(Inspection Records Required):

Normal Service: Yearly

Severe Service: Monthly

This inspection shall include everything in a frequent inspection plus each link and end attachment shall be examined individually, taking care to expose inner link surfaces of the chain and chain attachments.

1. Worn links should not exceed values given by the manufacturer.
2. Sharp transverse nicks and gouges should be rounded out by grinding.
3. Hooks should be inspected in accordance with international standards.
4. If present latches on hooks should seat properly, rotate freely, and show no permanent distortion.

Caution

Only Alloy chain is recommended for lifting applications. It must be recognised that certain factors in the usage of chain and attachments can be abusive and lessen the load that the chain or attachments can withstand. Some examples are twisting of the chain, disfigurement, deterioration by straining, usage, weathering and corrosion, rapid application of load or jerking applying excessive loads, and sharp corners cutting action.

Due to the crushing effect Grab Hooks without saddles have upon chain, the design factor for all assemblies must be reduced by 20%.

All ratings given in tons [t] refer to 1000 kgs.

Severe Environment

- Chain and components must not be used in alkaline or acid.
- Comprehensive and regular examination must be carried out when used in severe or corrosive inducing environments.
- In certain situations consult your dealer.

Extreme Temperature Conditions

The in service temperature of the whole or part of the chain sling effects the Work Load Limit as follows:

Temperature of Sling	Reduction of Work Load Limit
[°C]	[%]
-40 – 200	0%
+200 – 300	10%
+300 – 400	25%

Upon return to the normal temperature, the sling reverts to its full capacity within the above temperature range. Chain slings shall not be used above or below these temperatures.

Surface treatment

Note! Hot dip galvanising or plating is not allowed outside the control of the manufacturer.

Asymmetric loading conditions

For unequally loaded chain legs we recommend that the Work Load Limit is determined as follows:

- 2 leg slings are calculated as the corresponding 1 leg sling
- 3 / 4 leg slings are also calculated as the corresponding 1 leg sling, (Unless it is that 2 legs are equally carrying the major part of the load, then it can be calculated as the corresponding 2 leg sling.)

Protect yourself and others

- Before each use, the chain sling shall be checked for obvious damage or deterioration. Never use a worn out or damaged sling.
- Know the weight of the load, the centre of gravity and ensure it is ready to move and no obstacles will obstruct the lift.
- Never use an improper sling configuration Check that the load does not exceed the Work Load Limit on the ID Tag for the specific working configuration.
- Never use a sling without a legible ID Tag.
- Prepare the landing site,
- Take into consideration that the load may swing or rotate.
- Watch your feet and fingers while loading/unloading.
- Never overload a sling and avoid shock loading.
- Never ride on the load.
- Never go under a suspended load.
- Note that as the angle between the legs of a sling increase, the work load limit decreases.

General Advice

- Ensure that the sling is precisely as ordered.
- Ensure that the manufacturer's certificate is correct.
- Ensure that the identification and the Work Load Limit on the ID Tag correspond to the information is compulsory: Work Load Limit, Number of chain legs, normal size [mm], Individual ID mark, manufacturer, angle of operation.
- Ensure that the full details of the chain sling are recorded.
- Ensure that the staff using the chain sling have received the appropriate information and training.