

Hendrik Veder Group

User manual steel wire rope slings

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General introduction

A single leg sling for general lifting applications is a lifting appliance, which has two end terminations and can be used for lifting.

A cable laid grommet is an endless wire rope sling made from one or two continuous lengths of rope, formed to make a body composed of six ropes around a rope core.

For lifting purposes, the cable laid grommet is widely used for heavy lifts as the cable laid grommet is more flexible than its single leg counterpart and has a length-load bearing capacity advantage over the cable laid sling.

Inspection, thorough examination and maintenance

General

During service, wire rope slings are subjected to conditions that affect their safety. Therefore it is necessary to ensure, as far as is reasonable practical, that the sling is safe for continued use.

- Inspect the (grommet) sling visually before every use
- Use gloves to protect your hands
- Never bend the grommet at the position marked red (tug and core butt position)
- Only use the (grommet) sling on bearings of twice the diameter of the grommet. If the diameter is smaller, reduce the load bearing accordingly.

If at any time, there is reason to doubt the safe condition of the sling, withdraw it from service and subject it to a thorough examination.

If the tag or label identifying the sling and its working load limit becomes detached and the necessary information is not marked on the master link, or by some other means, withdraw the sling from service.

Inspection

An inspection is a visual check on the condition of the sling to identify any obvious damage or deterioration that might affect its fitness for use.

Withdraw the sling from service and refer it to a competent person for thorough examination if any of the following is observed:

- Illegible sling markings, i.e. sling identification and/or working load limit;
- Wear, distortion and/or cracking of the upper or lower terminals and/or ferrules;
- Concentration(s) of broken wires;
- Severe rope distortion, such as kinks or protrusion of the core;
- Significant rope wear;
- Corrosion;
- Heat damage.

Thorough examination

Lifting products are required by law to have inspections at least once a year by a competent person.

Maintenance and storage

Any replacement component or part of the wire rope sling should be in accordance with the appropriate European standard for that component or part.

Components that are cracked, visibly distorted or twisted, severely corroded or have deposits that cannot be removed, should be discarded and replaced.

Minor damage such as nicks and gouges to terminal fittings may be removed by careful grinding or filing. The surface should blend smoothly into adjacent material without abrupt change of section. The complete removal of the damage should reduce the thickness of the section at that point to less than the manufacturer's specified minimum dimensions or by more than 10% of the nominal thickness of the section.

When not in use, wire rope slings should normally be kept on a properly designed rack. Do not leave them lying on the ground where they may be damaged.

If the wire rope slings are to be left suspended from a crane hook, engage the sling hooks in an upper link to reduce the risk of sling legs swinging freely of snagging.

If it is likely that the wire rope slings will be out of use for some time, clean dry and protect them from corrosion. For example lightly oiled.