

# **Operating instructions**

# **Lashing chains**



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#### **Dolezych**-Originalbetriebsanleitung

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# Operating instructions for Dolezych lashing chains

**Dolezych lashing chains** may only be used for the lashing of loads, not for the lifting of loads. These operating instructions are to be read before putting into operation for the first time and must be followed when using **Dolezych lashing chains**.

You are referred in particular to the following jointly applicable regulations and technical rules:

**BGV A1** Principles of prevention

**BGV D29** Accident prevention regulation - vehicles

BGI 649 Securing and distribution of loads on vehicles

VDI 2700 ff. Securing of loads on road vehicles and

DIN EN 12195 Load restraint assemblies on road vehicles - Safety

Part 1 Calculation of lashing forces

Part 2 Lashing straps made of chemical fibres

Part 3 Lashing chains

Part 4 Lashing steel wire ropes

Beyond that, the military requirements and, if applicable, other special regulations must be observed, e.g. in the case of transport of hazardous materials, or transport by rail or ship.

### Selection

- The specifications for the lashing force, STF, etc. can be taken from the respective tags of the **Dolezych lashing chains**.
- The **Dolezych lashing chains** selected must exhibit the required lashing force for the purpose of use and be of the correct length for the type of lashing.
- The number of **Dolezych lashing chains** must be calculated in accordance with EN 12195-1 and VDI 2700 or according to the Dolezych simple method (see Dolezych Bestseller).
- Long-link round steel chains with a pitch of between 3 d and 6 d, which
  are intended only for the transport of long tree trunks, may not be used
  for lashing in general operation.
- Because of different behaviour and the change of length under load, different lashing devices (e.g. **Dolezych lashing chains** and lashing straps made of chemical fibres) may not be used for the lashing of the

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same load. When using additional connecting parts and lashing equipment for lashing, care must be taken to ensure that these items are suitable for use with **Dolezych lashing chains**.

#### It is forbidden:

- to overload Dolezych lashing chains or to use them as lifting chains.
- to suspend lashing hooks with the tip in a chain link.
- to load lashing hooks at their tip if these hooks are not intended for this special purpose.
- to continue to use **Dolezych lashing chains** that have been pulled rigid by overloading.
- to overwhelm lying Dolezych lashing chains with loads.

#### Instructions for use

- Dolezych lashing chains that are knotted or connected by bolts and screws may not be used. Twisted chains are to be put in order.
- Damage to tags is to be prevented b keeping them away from the edges of the load and if possible from the load itself.
- When lashing sharp-edged items, the **Dolezych lashing chains** are to be protected at the edges of the load by intermediate layers or edge protection.
- Dolezych lashing chains that are only occasionally used must be stored in a weatherproof place (suitably suspended on racks).
- Dolezych lashing chains may not be overloaded. The maximum manual force of 500 N may be applied only with one hand. No mechanical aids such as rods or levers, etc. may be used unless they are part of the tensioning element.
- Use only **Dolezych lashing chains** that are legibly marked and fitted with a tag.
- Use only suitable and sufficiently dimensioned lashing points.
- Dolezych lashing chains are to be regularly re-tensioned during the journey. During a longer journey, partial unloading is to be considered.
- Pay attention to the safety device against turning and do not overturn.
- Work gloves are to be worn when working with Dolezych lashing chains.

- Please note: when shortening chains with grab hooks, a reduction in the breaking load must be taken into account (see circular from BG-Metall of January 2008).
- Safety chains must be wrapped around tensioning devices (figs. 1 to 4).

## Use of the safety latch

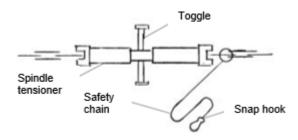
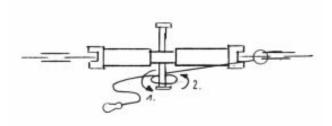
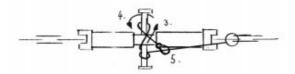


Fig. 1: PowerLash SP



**Fig. 2:** PowerLash SP - guide the free end of the safety chain with the snap hook around the toggle (1. and 2.).

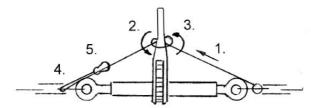


**Fig. 3:** PowerLash SP - guide the safety chain crosswise over the spindle tensioner (3) and loop it around the toggle (4.). Fasten the snap hook to a free link of the safety chain so that the chain is as taut as possible (5.).

**Fig. 4:** PowerLash L-140 - guide the free end of the safety chain around the handle (1. - 3.) and through the link of the lashing chain (4.). Fasten the snap hook to a free link of the safety chain so that the chain is as taut as possible (5.).

## Opening the lashing

Before opening, it must be ensured that the load remains securely standing



those carrying out the rovided for further order to prevent it falling

# Replacement state of wear / maintenance / repair

**Dolezych lashing chains** must be taken out of service if they show signs of damage. The following points should be regarded as signs of damage.

- for round steel chains: surface cracks, elongation of more than 3 %, wear of more than 10 % of the nominal thickness, visible deformations.
- for connecting parts and tensioning elements: deformations, cracks, strong signs of wear, signs of corrosion.

If your **Dolezych lashing chains** exhibit defects, they can be repaired by an expert **Dolezych specialist**. This helps you to save costs. Never attempt to repair **Dolezych lashing chains** yourself!

## **Monitoring**

At the instigation of the user, **Dolezych lashing chains** in use are to be inspected and tested at regular intervals by an expert as follows:

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- **Dolezych lashing chains** are to be inspected irregularly according to the operating conditions, but at least once per year.
- The inspection intervals must be shortened in case of an increase in the frequency of use, wear or corrosion and increased susceptibility to trouble.
- The visual inspection extends to the identification of external defects, deformations, incipient cracks, wear and corrosion pits.
- The **Dolezych lashing chains** must be cleaned before the visual inspection; flame cleaning is not permissible.
- Cleaning methods that do not negatively affect the chain material must be used.

#### **General hazard notes**

When transporting loads by vehicle there is a danger to the loading personnel (e.g. falling due to insufficient stability or the danger of being struck by an unstable load) and for people and goods in the danger area of the vehicle. Insufficient securing of loads can lead to injuries to and the death of persons.

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