MOUNTING INSTRUCTIONS PIPE TRANSPORT HOOKS TWN 0868



1 DESCRIPTION AND INTENDED USE

THIELE-Pipe transport hooks are intended for the use in 2-leg chain slings of grade 8 and are used for the safe transport of pipes.

These mounting instructions describe in particular the safe use of THIELE-Pipe transport hooks according to TWN 0868 (TWN = THIELE factory standard).

The chain slings with pipe transport hooks may only be used:

- if mass and center of gravity of the load are known,
- within the limits of their permissible Working Load Limit,
- within the limits of the permissible inclination angles,
- within the temperature limits prescribed,
- for the transport of pipes with symmetrical load,
- with suitable connecting links, chain slings and suspension links,
- by trained and authorized persons.

THIELE-Pipe transport hooks meet EG Machinery Directive 2006/42/EG requirements and feature a safety factor of at least 4 based on the Working Load Limit. They are certified by the German Employer's Liability Insurance Association Wood and Metal and signed with the corresponding chain size, grade, manufacturers mark (H4) and traceability code.

They are designed to withstand 20,000 dynamic load changes under maximum load conditions. In the event of higher loads (e.g. multi-shift) the Working Load Limit must be reduced.

As a rule, pipe transport hooks are not permitted for the transportation of persons.

2 SAFETY NOTES



- Operators, fitters, and maintenance personnel must in particular observe the Operating Instructions of the used chain sling, documentations DGUV V 1, DGUV R 100-500 Chapter 2.8, DGUV I 209-013 and DGUV I 209-021 issued by the German Employers' Liability Insurance Association, as well as standard specifications DIN 685-5, EN 818-4 and EN 818-6.
- Outside the Federal Republic of Germany the specific provisions issued locally in the country where the items are used must also be observed.
- The directions given in these Mounting Instructions and specified documentations relating to safety, assembly, operation, inspection, and maintenance must be made available to the respective persons.
- Make sure these Mounting Instructions are available in a place near the product during the time the equipment is used.
- When performing work make sure to wear your personal protective equipment!
- Improper assembly and use may cause personal injury and/or damage to property.
- Assembly and removal as well as inspection and maintenance must exclusively be carried out by skilled and authorized persons.
- Structural changes are impermissible (e.g. welding, bending).
- Operators must carry out a visual inspection and, if necessary, a functional test
 of the safety equipment before each use.
- Pipe transport hooks may only be used in pairs.
- Never put to use worn-out, bent or damaged pipe transport hooks.
- Only lift loads the mass of which is less than or equal to the Working Load Limit of the chain sling.



- Never expose pipe transport hooks or corresponding chain slings to loads exceeding the specified Working Load Limits.
- Do not use pipe transport hooks under high dynamic and cyclical loads (e.g. multishift operation).
- For chain slings with pipe transport hooks, inclination angles between 15° and 45° are only permissible.
- Suspension links must be allowed to move freely in the crane hook.
- Connecting links must be able to move freely in the eye of the pipe transport hook.
- Do not tip-load a pipe transport hook.
- Do not use force when mounting/positioning pipe transport hooks.
- Check that the pipe can absorb the forces to be applied without deformation.
- Asymmetrical loads are not permitted, therefore shortening of chain legs must be avoided.
- When using pipe transport hooks special care must be taken and a special risk assessment should be done.
- Do not start lifting before you have made sure the load has been correctly attached.
- Make sure that adjacent pipes of the pipe to be lifted are secured against unintentional moving.
- When lifting a pipe, the adjacent pipes must not be touched. Use guide ropes if necessary.
- Make sure no one including you (operator) is in the way of the moving load (hazard area).
- During lifting/hoisting make sure your hands or other body parts do not come into touch with hoisting means. Only remove hoisting means manually (by hands).
- Avoid impacts, e.g. due to abruptly lifting loads with chain in slack condition.
- Never move a suspended load over persons.
- Never cause suspended loads to swing.
- Make sure that the chains are not twisted.
- Always monitor a suspended load.
- Put the load only down in flat places/sites where it can be safely deposited.
- Avoid parts of the chain sling to get caught under the load.
- Take care for sufficient place for the personnel to move when choosing the route
 of transportation and storage location. Danger to life and risk of injury by crushing
 hazards!
- Pipes to be lowered must be secured against unintentional moving.
- In the event of doubts about the use, inspection, maintenance or similar things contact your safety officer or the manufacturer.

THIELE will not be responsible for damage caused through non-observance of the instructions, rules, standards and notes indicated!

Working under the influence of drugs and alcohol consumption (including residual alcohol) as well as drugs affecting the senses is strictly prohibited.

3 COMMISSIONING

Prior to using the components for the first time make sure that

- the components comply with the order and have not been damaged,
- test certificate and Mounting Instructions are at hand,
- markings correspond with what is specified in the documentation,
- inspection deadlines and the qualified persons for examinations are determined,
- visibility and functional testing are carried out and documented,
- the documentation is safely kept in an orderly manner.

Dispose of the packing in an environmentally compatible way according to local rules.

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4 OPERATION

Position the crane hook with the unloaded chain sling above the center of gravity of the load. Use the handles of the pipe transport hooks to position them at the pipe ends in such a way that the edge of the pipe engages into the hook opening (dimension G) until it stops. If the edge of the pipe cannot fully engage, stop the transport process. It is not permissible to pick up the pipes at the hook tips.

Tighten the chain sling and make sure that the pipe transport hooks are in alignment at the top of the pipe ends. Lift the load a little and check again that the hooks are correctly positioned before continuing the transport process.

At the end of the transport process, make sure that the load is placed in a proper way and secured against unintentional movement. Unload the chain sling and remove the pipe transport hooks by hand. Use the handles again. Guide the pipe transport hooks by hand into their rest position under the crane hook and do not let them fall unintentionally.

5 TECHNICAL DATA



Nominal size	Article- no.	Load Limit [t]										Mass
			В	А	D_1	D ₂	G	н	С	R	М	[kg]
13-8	F32608	5,3	174	226	28	20	49	57	60	110	68	3,3
22-8	F32641	15,0	274	345	44	30	80	90	95	160	112	15,1

6 MOUNTING

The eye of the pipe transport hook is designed to carry a mounted connecting link. Observe its installation instructions and safety instructions.

When assembling a chain sling with pipe transport hooks, ensure that the chain legs are of the same length and that the hooks are symmetrically positioned. Make sure that all components to be installed are in perfect condition. Check that the components are designed for the expected loads.

7 CONDITIONS OF USE

7.1 Influence of temperature

The temperature range for use is -40 to +200 °C.

7.2 Environmental influence

<u>Hooks must not be used in environments where acids, aggressive or corrosive chemicals or their fumes are present.</u> Hot-dip galvanizing or a galvanic treatment is prohibited as well.

8 INSPECTIONS AND MAINTENANCE

8.1 General

Inspections and maintenance must be arranged for by the Owner! Inspection intervals shall be determined by the Owner!

Carry out regular visual inspections. Inspections must be carried out and documented by competent persons regularly but at least once a year, or more frequently if hooks are in heavy-duty service. After three years at the latest they must additionally be examined for cracks. A load test shall never be considered a substitute for this examination.



The results of the inspection shall be entered into a register (DGUV I 209-062 or DGUV I 209-063) to be prepared at first use. The register will show characteristic data of the pipe transport hooks and other components as well as identity details. Immediately stop using hooks that show the following defects:

- deformation, elongation,
- local material reduction (max. 10 %),
- cuts, notches, cracks, incipient cracks, pinching,
- severe corrosion,
- expansion of dimension M by more than 10 %,
- jamming components,
- illegible marking.

8.2 Maintenance

Due to their design, pipe transport hooks are not suitable for repairs and can only be replaced. In such cases, replace the hooks in pairs.

8.3 Inspection service

THIELE offers inspection, maintenance and repair services by trained and competent personnel.

9 STORAGE AND DISPOSAL

Store pipe transport hooks and chain slings clean and dry at temperatures between 0 °C and +40 °C.

Dispose of packaging in an environmentally friendly manner in accordance with local regulations.

All components and accessories of steel taken out of service are to be scrapped in line with local regulations and provisions.

10 THIELE OPERATING AND MOUNTING INSTRUCTIONS

Current operating and mounting instructions are available as a PDF download on the homepage.



11 PUBLISHING INFORMATION

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