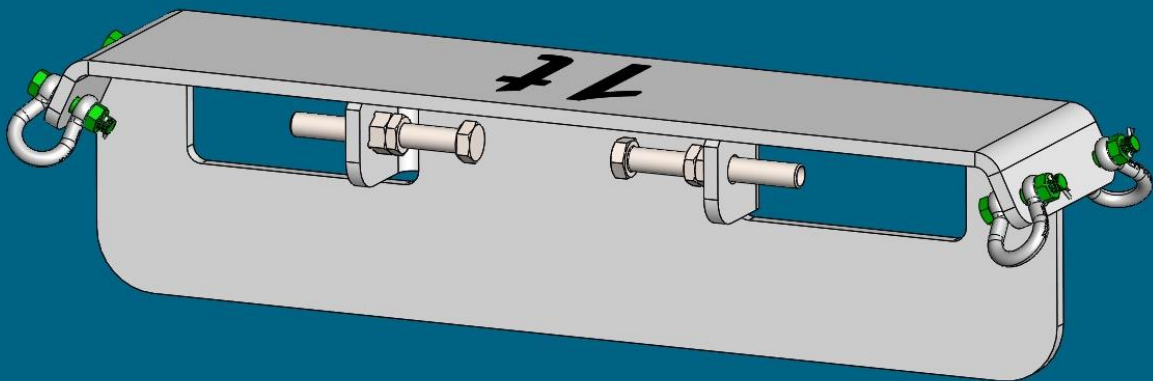


VOLKSWAGEN

AKTIENGESELLSCHAFT

USA

Translation of the Original
Operating Manual



Operating Manual Traverse for HV accumulator including chain suspension GKL 8 VW AG | VAS 501009



Version 1: 06.02.2019

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1. Introduction

The traverse for forklift trucks is used for vertical lifting and lowering of unguided loads.

Before using the traverse for forklift trucks for the first time, read through the operating manual completely. The operating manual explains how to safely use, maintain, inspect and dispose of the traverse for forklift trucks. This operating manual is an integral part of the product and must be available to all users. Always keep the operating manual in a safe place for later use. In the following, the traverse for forklift trucks is referred to as the load handling attachment.

1.1 Manufacturer/service

Carl Stahl Süd GmbH

Munich location

Christa-McAuliffe-Str. 3

85521 Ottobrunn, Germany

Telephone hotline

+49 89/939445-0

Fax hotline

+49 89/939445-45

E-Mail

muenchen@carlstahl.com

Internet

www.carlstahl-lifting.com

**INFO**

We are happy to answer any questions you may have about your product.

1.2 Terms and conditions

The general terms and conditions can be obtained directly from the manufacturer or at:
www.carlstahl-lifting.com/news/downloads

1.3 EC Declaration of Conformity

Representation of content

For the product described below

Name:	Traverse for HV accumulator including chain suspension GKL 8
Type:	TF 1000 kg / VAS 501 009 - 25302400039240

it is hereby declared that it complies with the essential requirements established, by the harmonization legislation referred to below:

DIRECTIVE 2006/42/EC

Indication of the relevant harmonized standards used or of the specifications for which conformity is declared:

Reference	Date issued	Title
Harmonized standards for the Machinery Directive:		
EN ISO 12100:2010	2011-03	Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)
EN 13155:2003+A2:2009	2009-08	Cranes - Safety - Loose load handling attachment
Other technical specifications applied (not published in the EU Official Journal):		
EN 1993-1-1:2005 + AC:2009	2010-12	Dimensioning and design of steel structures - Part 1-1: General dimensioning rules and rules for building construction
EN 1090-2:2018	2018-09	Construction of steel and aluminum structures - Part 2: Technical rules for the construction of steel structures

Authorized representative within the meaning of Annex II, No. 1. A. No. 2, 2006/42/EC for the compilation of technical documentation:

Name	Aleksandar Rabadzija Carl Stahl Süd GmbH (Munich location)
Address	Christa-McAuliffe-Str. 3 85521 Ottobrunn, Germany

The sole responsibility of issuing this Declaration of Conformity regarding the fulfillment of the essential requirements and the preparation of the technical documentation shall be borne by the manufacturer (or installer):

Company	Carl Stahl Süd GmbH (Munich location)
Address	Christa-McAuliffe-Str. 3 85521 Ottobrunn, Germany

This declaration certifies compliance with the aforementioned harmonization legislation, but does not include any guarantee of product characteristics.

Additional information:

This declaration applies to all models manufactured in accordance with the corresponding manufacturing drawings which form part of the technical documentation.

Further information on compliance with the above references can be found in the accompanying documentation supporting the statement of conformity.

The full Declaration of Conformity has been attached as a separate document.

1.4 Certificate of compliance

For the product described below

Name:	Traverse for HV accumulator including chain suspension GKL 8
Type:	TF 1000 kg / VAS 501 009- 25302400039240

The load handling attachment/s delivered/supplied by us is/are constructed in accordance with the current DGUV regulation 100- 500 2.8 "Operation of work equipment" ("Betreiben von Arbeitsmitteln").

The following materials were used:

<input type="checkbox"/>	S235JR (1.0037)	<input type="checkbox"/>	Chain quality grade 80
<input checked="" type="checkbox"/>	S355J2 (1.0570)	<input type="checkbox"/>	Chain quality grade 100
<input type="checkbox"/>	S355J2H (1.0576)	<input type="checkbox"/>	Chain quality grade 120
<input type="checkbox"/>	42CrMo4 (1.7225)	<input type="checkbox"/>	Screw quality 5.6
<input type="checkbox"/>	X5CrNi18-10 (1.4301)	<input checked="" type="checkbox"/>	Screw quality 8.8
<input type="checkbox"/>	X6CrNiMoTi17-12-2 (1.4571)	<input type="checkbox"/>	Screw quality 10.9

Attachment parts GKL 6 GKL 8 GKL10 (corresponding is checked)

The welding work was carried out by qualified welders according to EN ISO 9606-1:2013-12. The company is a qualified manufacturer according to EN 1090-2: 2008+A1:2011 up to and including EXC 3 for welding of steel structures.

The company is certified according to ISO 9001 and EN 3834-2.

Ottobrunn, 18.02.2019

City, Date

by order Gunnar Lapko

2. Information Processing

This operating manual contains symbols, designations, work instructions and bullet points as described in Chapter 2.1 to Chapter 2.2.

2.1 Symbols and designations

Warning notices

The warnings are classified and displayed as follows:



DANGER

A warning with the signal word "DANGER" indicates a hazard that can lead directly and with certainty to death or serious permanent injury.



WARNING

A warning with the signal word "WARNING" indicates a hazard which may possibly lead to serious injuries or death.



CAUTION

A warning with the signal word "CAUTION" indicates a hazard which may possibly lead to minor or moderate injuries.

ATTENTION

A warning with the signal word "ATTENTION" indicates a hazard that could potentially result in property damage.

In a **warning** work steps are marked with ► and structured chronologically.

Pictograms for specific hazards



Meaning:

Beware of suspended loads.



Meaning:

Warning of crushing hazard.



Meaning:

Warning of hand injuries.

The pictograms are used in conjunction with the associated classification and the corresponding signal word.

Useful information and tips

**INFO**

The symbol indicates useful information and tips.

Disposal

**NOTES ON DISPOSAL**

of packaging materials and load handling equipment.

2.2 Work instructions and bullet points

All work instructions are structured and numbered in chronological order, e.g.:

1. Work step 1
2. Work step 2

The result of a process is indicated by an arrow:

- Result or device reaction

Work instructions that do not have to be executed in a particular sequence are marked as follows:

- Work step
- Work step

The result of a process is indicated by an arrow:


- Result or device reaction

Bullet points are indicated by indentations:

- Listing

3. Safety

Before using the load handling attachment, read the following safety instructions carefully.

Chapters 3.1 to 3.3 contain basic rules of conduct which you must observe when handling the load handling attachment. The instructions marked with a  symbol must be followed in order to prevent any risk to persons. Warnings that pertain to the individual work instructions are always listed before the actual work step.

3.1 Basic safety instructions

The load handling attachment is built, tested and has left the company in perfect condition with respect to safety. To maintain this condition, you must follow the instructions in this operating manual.

- Read this operating manual carefully
- Observe the warning and safety instructions
- Make sure that this operating manual is always available and kept on location
- Make sure that only suitably qualified personnel work with and on the load handling attachment (see Tab. 1)
- When using the equipment, observe the locally applicable occupational safety requirements and the operating company's work instructions
- Observe the on-site conditions
- **Pay attention to the weight of all attached components in relation to the maximum load capacity of the forklift! Net weight of the slings + net weight of slinging equipment + load weight**
- Observe the permissible load capacity of the forklift truck at the intended position of the traverse on the forks. Please read the manual and load diagrams for the forklift truck
- Damage that impairs safety must be repaired immediately
- Only use the VAS501011 slings provided
- Observe the operating manual for the VAS501011 slings
- In order to ensure permanent compliance with safety standards only use spare parts and additional components authorized by Carl Stahl GmbH for the load handling attachment
- Carry out all work with the utmost care
- Wear your personal protective equipment
- Observe the maximum lifting loads for occasional lifting and carrying
- Tie long hair together
- Do not wear loose clothing, rings, necklaces or other jewelry
- Never stay under loads while they are suspended, this is prohibited
- Never open a load handling attachment under load
- Only use the load handling attachment with a legible rating label

Classification of the qualification fields for load handling equipment

Field of work	Qualification	Expert knowledge
Delivery and Transport	Dealer, freight forwarder	<ul style="list-style-type: none"> – Documentation of load securing supervision – Safe handling of the load handling equipment
Storage	Warehouse clerk	<ul style="list-style-type: none"> – Safe handling of the load handling equipment
Commissioning, maintenance and repair	Qualified personnel	<ul style="list-style-type: none"> – Qualified expert: professional training and experience, sufficient knowledge in the field of load handling equipment – Safe handling of the load handling equipment – Product-specific knowledge
Use, simple visual inspection	Qualified personnel	<ul style="list-style-type: none"> – Safe handling of load handling equipment, professional training and experience
Disposal	Qualified personnel	<ul style="list-style-type: none"> – Knowledge of the regulations for proper disposal and recycling

Tab. 1: Overview

3.2 Designated use

The following items are considered to be designated use:

- The vertical lifting and lowering of high-voltage accumulators for vehicles within the parameters defined under the loading conditions of this operating manual
- Observe the permissible load capacity: **The sum of the weights of all components which are attached at the same time and which do not belong to the load handling attachment + load weight**
- Temperature range from -20 °C to +80 °C;
- Storage only indoors
- Observe the range permitted for asymmetrical loads: The load must be distributed in accordance with the load diagram from the release drawing, including the incline angles of the slings (see also Chapter 4)
- Designed for a maximum of 20,000 load cycle changes; wear caused by external influences is not taken into account and must be monitored at regular intervals by means of accident prevention inspections.

In addition to the items listed here, further information must be obtained from the technical data and considered (Chapter 4).

3.3 Improper use

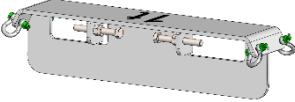
The following items are considered to be improper use:


- Exceeding the maximum load capacity
- The carriage of persons and animals
- The transport of liquids and hazardous substances
- The use of force to free loads that are stuck in place
- Structural changes
- When people are standing under suspended loads
- Use in explosive, salty, corrosive and/or alkaline environments
- Pulling loads on the ground

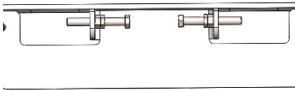
Chapter 3.3 does not guarantee to be exhaustive. Anything that is not specifically permitted falls under misuse.

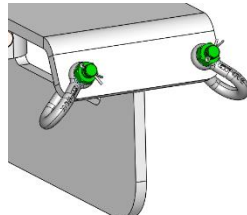
4. Technical Data

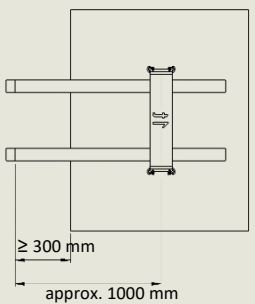
Name:	Traverse for HV accumulator including chain suspension GKL 8
Type:	TF 1000 kg / VAS 501 009 - 25302400039240
Design:	Rigid, without adjustment

General Information	Name	Specification/Unit
	Number of load cycle changes	Maximum 20,000
	Permitted angle of incline	Maximum 6 °
	Permitted load type	Vertical/perpendicular
	Surface composition	RAL 7040
	Load capacity	1000 kg
	Net weight	18 kg
	Operating and storage temperature range	From -20 °C to +80 °C
	Working width	684 mm

Dimensions of the main body	Name	Specification/Unit
	Overall height	170 mm
	Overall width	190 mm
	Overall length	725 mm

Dimensions forklift connection	Name	Specification/Unit
	Maximum height (inside dimension)	70 mm
	Maximum width (inside dimension)	145 mm

Dimensions load connection	Name	Specification/Unit
	Shackle type GreenPin curved with nut and cotter pin, (4 pieces)	WLL load capacity 1t

Dimensions forklift forks	Description	Specification/Unit
	Height	min. 35 mm-max. 60 mm
	Width	min. 80 mm-max. 135 mm
	Distance from the fork support arm to the center of the load handling equipment	approx. 1000 mm

Tab. 2: Technical Data

Loading conditions

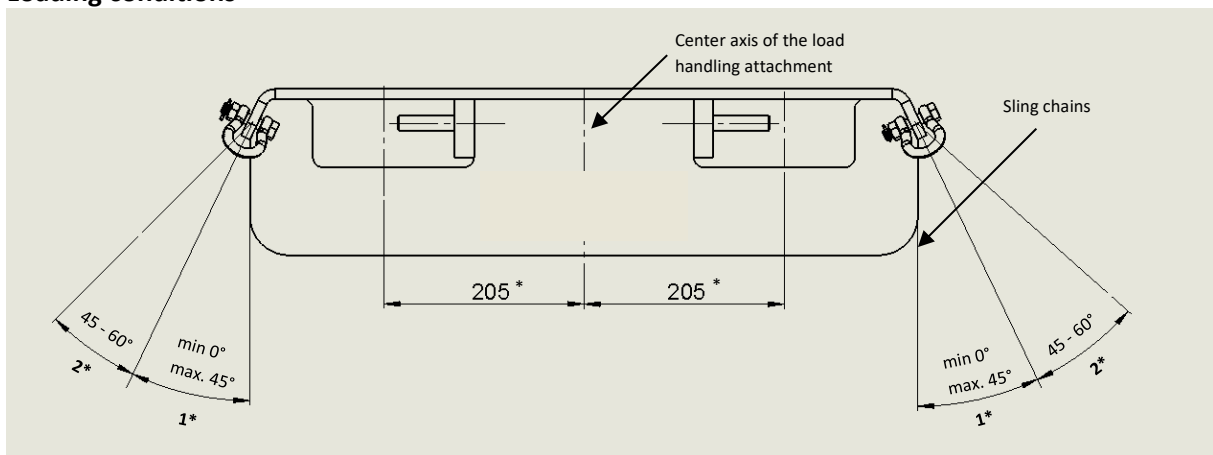


Fig. 1: Load diagram: Max. permissible offset of center of gravity including chain angle of incline

205* = maximum offset of the center of gravity to the center axis of the load handling attachment is 205 mm

Max. load capacity: 1000 kg
 Max. strand loading per chain: 1 * For chain angle of incline 0-45 ° = 400 kg
 2*At chain angle of incline 45-60° = 200 kg

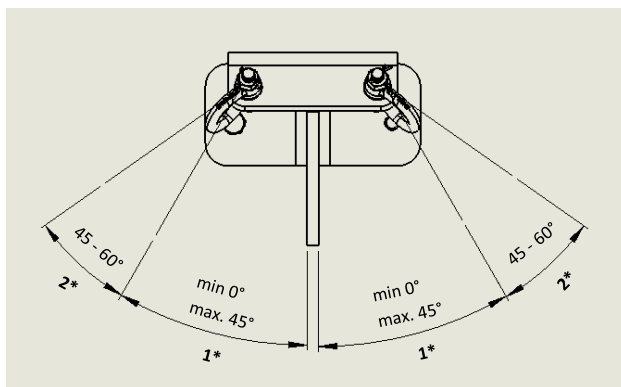


Fig. 2: Chain angle of incline

5. Delivery and Transport

5.1 Scope of delivery

Check the delivery for completeness.

Pieces	Item	Item number
1	Traverse for HV accumulator including chain suspension GKL 8	25302400039240
1	USB stick with the following files: <ul style="list-style-type: none"> ▪ Original operating manual (including inspection document) ▪ Declaration of conformity In 37 different languages <ul style="list-style-type: none"> ▪ Technical drawing 	- - - -

Tab. 3: Scope of delivery

If any parts are missing or damaged, contact us at:

Telephone hotline

+49 89/939445-0

Fax hotline

+49 89/939445-45

E-Mail

muenchen@carlstahl.com

5.2 Transport

The load handling attachment is tested, inspected and properly packaged before delivery. The product is delivered in a cardboard box.

Always transport the load handling attachment on a suitable transport system.

5.3 Storage

ATTENTION

Device damage due to improper storage!

Improper storage can damage the load handling attachment.

- ▶ Protect the load handling attachment from:
 - Temperature conditions that fall below or exceed the permissible temperature range (see Chapter 4).
 - Humidity
 - Contamination
 - Damage
 - Corrosion

6. Assembly and Function

The load handling attachment consists primarily of the following components:

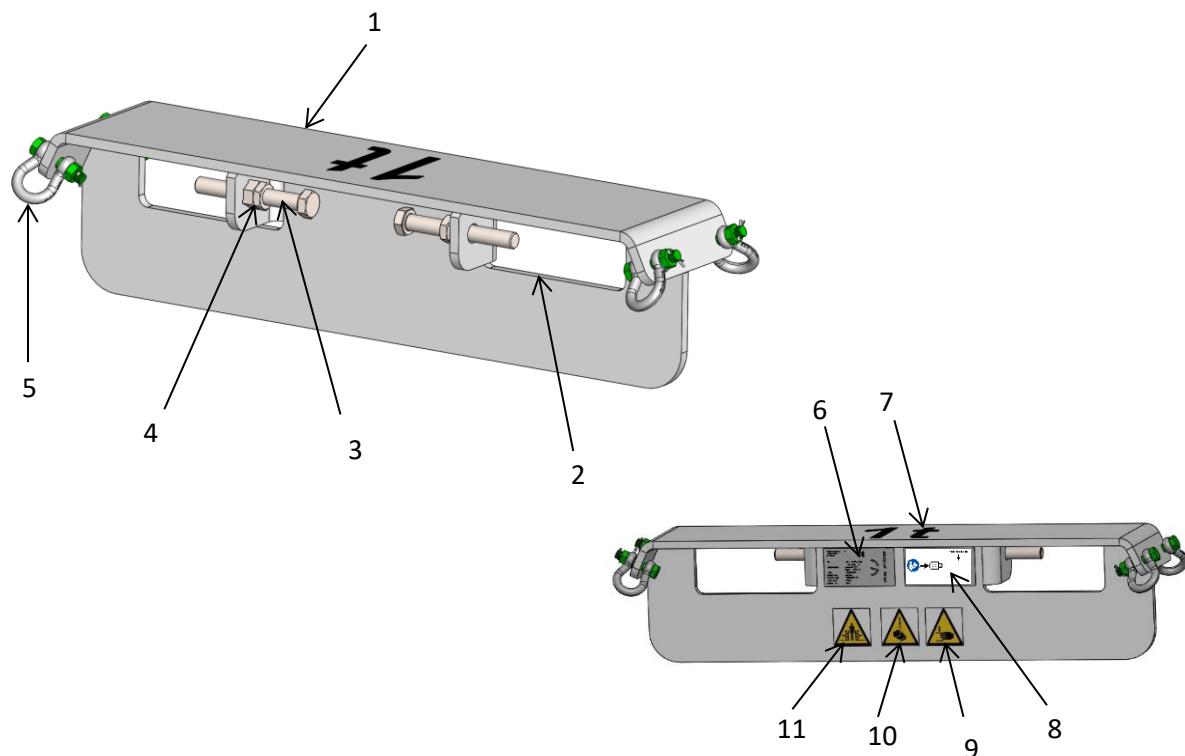


Fig. 3: Traverse for forklift trucks

Position	Name	Function
1	Traverse for forklift trucks	Supporting structure
2	Forklift connection	Direct connection forklift forks
3	Hexagon bolt	Secures the load handling attachment on the forklift truck
4	Lock nut	Secures the load handling attachment on the forklift truck
5	Shackles	Load connection
6	Rating label	Distinct identification of the load handling attachment
7	Load rating	Information on load-bearing capacity
8	Special labeling	Reference to the operating manual: <ul style="list-style-type: none"> - Operating manual can be found on the enclosed USB stick - Observe the operating manual Labeling Information about the next inspection
9	Pictogram	Warning of hand injuries
10	Pictogram	Beware of suspended loads
11	Pictogram	Warning of crushing hazard

Tab. 4: Assembly and Function

7. Use

7.1 Inspection before use

An inspection must be carried out before each use. You must carry out the inspection before the first use (initial commissioning), before each recurring use or after a repair.

The purpose of the inspection is to ensure that the load handling attachment is in good condition and ready for use.

The exact details of the respective inspections can be found in the maintenance / inspection plan. Please read Chapter 8, in particular Sections 8.3 - 8.5.

Observe the following before using the load handling attachment:



DANGER

Danger to life due to falling loads!

A falling load can result in serious injury or death.

- ▶ Never stay under loads while they are suspended.
 - ▶ Never walk under loads while they are suspended.
 - ▶ Make sure you have enough working space.
 - ▶ Ensure that there are no persons in the work area.
-



WARNING

Risk of crushing due to lack of space!

There is a risk of crushing due to insufficient clearance at the load lifting point, on the load transport route and at the load unloading point.

- ▶ Monitor your working environment.
 - ▶ Ensure sufficient clearance at the load lifting point, on the load transport route and at the load unloading point.
-

ATTENTION

Damage to the load handling attachment due to frost!

Use of the load handling attachment during frost formation can cause damage.

- ▶ During shipping, storage and operation, avoid conditions that could lead to frost formation on the load handling attachment.
 - ▶ Avoid, for example, significant and rapid changes in environmental conditions.
 - ▶ If there is concern that the load handling attachment has cooled or heated below or above the permissible temperature range, allow the load handling attachment to acclimatise. This may take some time.
-

7.2 Mounting the load handling attachment on the forklift truck

Proceed in the following manner when mounting the load handling attachment to the forklift truck:

1. Position the load handling attachment at a sufficient distance from the forklift truck to prevent the load from striking the forklift truck.



CAUTION

Finger and hand injuries can result when the forks of the forklift are inserted.

- ▶ Use work gloves.
- ▶ Push the load handling attachment onto the forklift truck forks in a controlled motion.

Note

According to the manufacturer's recommendation, the distance between the forklift and the load should be ≥ 300 mm. This corresponds to a distance of approx. 1000 mm between the fork carrier arm and the center of the load handling attachment.

2. Select the position so that the hexagon clamping bolts are completely secured on the forks.

Please observe the minimum fork height ≥ 35 mm (see Chapter 4).

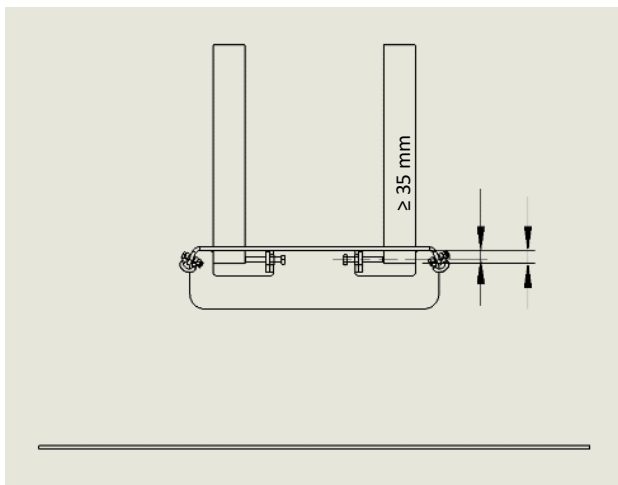


Fig. 4: Minimum fork height

3. Unscrew the two hexagon bolts to slide the load handling attachment onto the forklift forks.



CAUTION

Hand injury during positioning!

Finger and hand injuries can result when the forks of the forklift are inserted.

- ▶ Use work gloves.
- ▶ Push the load handling attachment onto the forklift truck forks in a controlled motion.

**CAUTION****Hand injury during positioning!**

Fingers and hands may be crushed during positioning and assembly due to the net weight of the load handling attachment.

- ▶ Avoid unintentional forklift movement during positioning.
- ▶ Keep fingers and hands out of the contact area of the components during positioning.

4. Carefully push the load handling attachment onto the forklift forks.
5. Check to make sure that the load handling attachment is correctly seated on the forklift forks.
6. Hand-tighten the two hexagon bolts to secure the load handling attachment to the forklift truck.
7. Hand-tighten the two lock nuts to prevent the hexagonal bolts from loosening in the case of vibrations.
8. Check to make sure that the forklift forks are secured between the hexagon head screw and the opposite edge of the forklift fork mounting. Gap dimensions are not permitted.
9. Lift the load handling attachment slowly and carefully.
10. Select the lifting height so that the load can be conveniently attached using four VAS 501011 slings.

7.3 Use slings

If the load handling attachment is used in combination with slings, the following items must be observed:

- Only use the load handling attachment in combination with four VAS 501011 slings.
- Observe the operating manual for the slings.

7.4 Lifting, transporting and lowering the load

1. Insert the matching slings in the four shackles. Proceed in the following manner:
 - a) Remove the cotter pin.
 - b) Loosen the nuts.
 - c) Pull out the threaded bolt.
2. Insert the oval ring of the VAS501011 sling into the shackle.
3. Secure the four shackles to the load handling attachment. Proceed in the following manner:
 - a) Reinsert the threaded bolt.

ATTENTION

Equipment damage due to improper installation!

Improper installation can damage the thread of the bolts and nuts.

- ▶ Do not screw in the thread at a slant or an angle.
 - ▶ Protect the thread from damage.
-



WARNING

Falling loads due to incorrect installation of the load connection!

Improper installation (slanted or not fully screwed in) of the bolts/nuts can cause damage to the threads and load could fall down.

- ▶ Screw in the nuts flat and all the way in.
 - ▶ No air gap between the components.
-

- b) Tighten the nuts.
 - c) Secure the assembly with a cotter pin.
4. Check to make sure the slings are properly connected.



CAUTION

Hand injury during positioning!

Fingers and hands may be crushed during positioning and assembly due to the net weight of the load handling attachment.

- ▶ Avoid unintentional forklift movements during positioning.
 - ▶ Keep fingers and hands out of the contact area of the components during positioning.
-

5. Position the load handling attachment above the load.

**CAUTION****Risk of crushing if the load tips over!**

If the load tips over during positioning and installation this can cause injuries.

- ▶ The load must be stored in its intrinsically stable position.

6. Insert the hooks of the slings into the load attachment points.
7. Check the attachment points on the slings.
8. Lift the load slowly and carefully.

**WARNING****Risk of crushing due to lack of space!**

There is a risk of crushing due to insufficient clearance at the load lifting, on the load transport route and at the installation point.

- ▶ Check the working environment for interference or other hazards.
- ▶ Make sure there is adequate space at the load lifting point, on the load transport route and in the installation area.

**WARNING****Risk of injury due to unpredictable load movement!**

When lifting the load, crushing and impact injuries can result from unpredictable load movements.

- ▶ Make sure there is enough space at the lifting point.
- ▶ Check the working environment for interference or other hazards.

9. Check the center of gravity:
 - The distance between the center of gravity and the central axis of the load handling attachment must not exceed 205 mm
 - Maximum angle of incline of the load handling attachment: 6°.

**DANGER****Danger to life due to falling loads!**

A falling load can result in serious injury or death.

- ▶ Never stay under loads while they are suspended.
- ▶ Never walk under loads while they are suspended.
- ▶ Make sure you have enough working space.
- ▶ Ensure that there are no persons in the work area.

10. If necessary, the center of gravity of the load can be positioned within the permissible range by shortening the chain of the VAS501011 sling. Note the max. permissible angle of incline, see Chap. 4 load cases.
11. Transport the load to the desired load unloading point.
12. Slowly and carefully lower the load until the load is stable.
13. Remove the slings from the load.

8. Maintenance

The load handling attachment must be cleaned, serviced and checked regularly. The maintenance/inspection intervals must be carried out by the operating company in accordance with TRBS 1201 criteria.

8.1 Cleaning



INFO

Regular cleaning and careful handling will ensure that load handling attachment is properly maintained for its entire life cycle.


Tab. 5: Cleaning

8.2 Inspection document

The inspection document serves as proof of the inspections carried out. In addition, all the defects identified must be rectified and the supporting documents submitted to the authorities if necessary.

Operating company-defined test interval: _____ / Year

Registered in the Integrated Service: Yes No

Inspected by manufacturer on (date) 18.02.2019	Inspector (name in block letters) Gunnar Lapko
Stamp Carl Stahl Süd GmbH (Munich location) Christa-McAuliffe-Str. 3 85521 Ottobrunn, Germany	Signature of the inspector 

Inspection before initial commissioning	
Date of implementation	Inspected by company (full name)
Number inspection protocol	Inspector (name in block letters)
Stamp	Signature of the inspector
Defects present Yes <input type="checkbox"/> No <input type="checkbox"/>	
Defects remedied on (date)	Defects remedied by company (full name)

Regular UVV inspection	
Date of implementation	Inspected by company (full name)
Number inspection protocol	Inspector (name in block letters)

Stamp	Signature of the inspector
Defects present	Yes <input type="checkbox"/> No <input type="checkbox"/>
Defects remedied on (date)	Defects remedied by company (full name)

Fig. 5: Inspection document page -1-

Regular UVV inspection	
Date of implementation	Inspected by company (full name)
Number inspection protocol	Inspector (name in block letters)
Stamp	Signature of the inspector
Defects present	Yes <input type="checkbox"/> No <input type="checkbox"/>
Defects remedied on (date)	Defects remedied by company (full name)

Regular UVV inspection	
Date of implementation	Inspected by company (full name)
Number inspection protocol	Inspector (name in block letters)
Stamp	Signature of the inspector
Defects present	Yes <input type="checkbox"/> No <input type="checkbox"/>
Defects remedied on (date)	Defects remedied by company (full name)

Regular UVV inspection	
Date of implementation	Inspected by company (full name)
Number inspection protocol	Inspector (name in block letters)
Stamp	Signature of the inspector
Defects present	Yes <input type="checkbox"/> No <input type="checkbox"/>
Defects remedied on (date)	Defects remedied by company (full name)

Regular UVV inspection	
Date of implementation	Inspected by company (full name)
Number inspection protocol	Inspector (name in block letters)
Stamp	Signature of the inspector
Defects present Yes <input type="checkbox"/> No <input type="checkbox"/>	
Defects remedied on (date)	Defects remedied by company (full name)

Fig. 6: Inspection document page -2-

Regular UVV inspection	
Date of implementation	Inspected by company (full name)
Number inspection protocol	Inspector (name in block letters)
Stamp	Signature of the inspector
Defects present Yes <input type="checkbox"/> No <input type="checkbox"/>	
Defects remedied on (date)	Defects remedied by company (full name)

Regular UVV inspection	
Date of implementation	Inspected by company (full name)
Number inspection protocol	Inspector (name in block letters)
Stamp	Signature of the inspector
Defects present Yes <input type="checkbox"/> No <input type="checkbox"/>	
Defects remedied on (date)	Defects remedied by company (full name)

Extraordinary UVV inspection	
Date of implementation	Inspected by company (full name)
Number inspection protocol	Inspector (name in block letters)
Stamp	Signature of the inspector
Defects present Yes <input type="checkbox"/> No <input type="checkbox"/>	
Defects remedied on (date)	Defects remedied by company (full name)

Fig. 7: Inspection document page -3-

8.3 Maintenance / inspection plan

Maintenance / inspection interval	Type of work
Before first use (initial commissioning)	– Visual and functional inspection
Before any recurring use of the load handling attachment without extraordinary incidents	– Visual inspection
Annually	– Visual and functional inspection
Extraordinary inspection	<ul style="list-style-type: none"> – Depending on external conditions, the annual inspection cycle may be shortened. This includes the following items: – After damage, repair or special occurrences – Continuous use in shift operation – Increased wear – Corrosion, heat effects due to environmental influences – etc.

Tab. 6: Maintenance / inspection plan

8.4 Inspection criteria

The discard condition of the load handling attachment is determined on the basis of the inspection criteria in the following table. The reference value, indicated in mm, can be found in the technical data (see chapter 4).

Component	Inspection criteria	Measures
Traverse for forklift trucks	Any kind of deformation and wear	Decommissioning and contacting the manufacturer/service department
Forklift connection	Any kind of deformation and wear	Decommissioning and contacting the manufacturer/service department
Shackles	Any kind of deformation and wear	Decommissioning and contacting the manufacturer/service department
Hexagon bolt	Any kind of deformation and wear	Decommissioning and contacting the manufacturer/service department
Lock nut	Any kind of deformation and wear	Decommissioning and contacting the manufacturer/service department
Rating label/ Labeling	Legibility	Decommissioning and contacting the manufacturer/service department

Tab. 7: Inspection criteria

8.5 Visual and functional inspection

Before each use, the load handling attachment must be checked and inspected. Sections 8.3 and 8.4 list criteria that may require taking the load handling attachment out of service.



DANGER

Danger to life due to falling loads!

Deformation and wear of the individual components can reduce the load carrying capacity and lead to falling loads.

- ▶ Check the load handling attachment for defects.
- ▶ Check the extent to which the individual components are functional.
- ▶ If the load handling attachment is no longer functional and is irreparably damaged (see Chapter 9.1), remove it from service by tagging it.
- ▶ Contact the manufacturer/service department if necessary (see Chapter 1.1).
- ▶ If necessary, dispose of load handling attachment (see Chapter 9.2).

Visual inspection

14. Check the load handling attachment for visual defects such as:

- Cracks
- Deformation
- Wear
- Incompleteness

15. Take the load handling attachment out of service if it is defective.

Functional inspection

1. Check all moving parts for freedom of movement.
2. Check the functionality of the load handling attachment.
3. Take the load handling attachment out of service if its function is impaired.

9. Decommissioning and Disposal

9.1 Decommissioning

1. Remove the load handling attachment from service by tagging it.
2. Contact the manufacturer/service department (see Chapter 1.1).
3. If necessary, dispose of the load handling attachment.

9.2 Disposal

Disposal of load handling attachment



NOTES ON DISPOSAL

If the load handling attachment is no longer repairable or functional, it must be disposed of in accordance with the applicable statutory regulations.

Disposal of the packaging material



NOTES ON DISPOSAL

According to the packaging ordinance, the dealer is obliged to reclaim the packaging of his products which do not carry the mark of a system of nationwide disposal (such as the Green Dot of Dual System Germany AG) and to ensure the packaging is reused or disposed of properly.

Carl Stahl Süd GmbH
Munich location
Christa-McAuliffe-Str. 3
85521 Ottobrunn, Germany

Telephone hotline

+49 89/939445-0

Fax hotline

+49 89/939445-45

E-Mail

muenchen@carlstahl.com

Internet

www.carlstahl-lifting.com