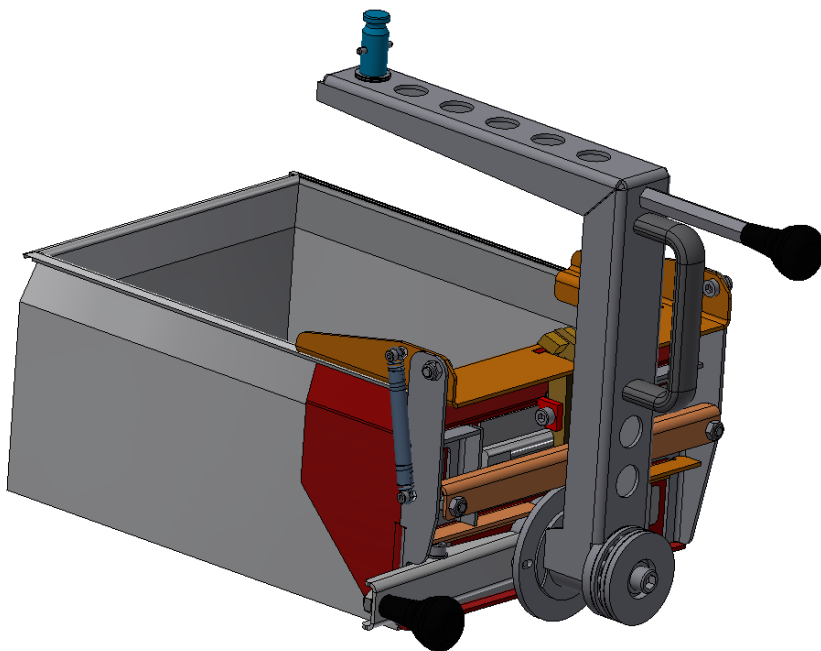


Instruction Manual

Crate Emptying Grab Type CGEZE



Carl Stahl Hebetechnik GmbH

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Content

1. INTRODUCTION.....	3
1.1 MANUFACTURER/ SERVICE	3
1.2 TERMS AND CONDITIONS	3
1.3 EU DECLARATION OF CONFORMITY.....	4
2. INFORMATION PROCESSING	5
2.1 SYMBOLS AND DESIGNATIONS	5
2.2 HANDLING INSTRUCTIONS AND ENUMERATIONS	6
3. SAFETY	7
3.1 BASIC SAFETY INSTRUCTIONS	7
3.2 INTENDED USE	8
3.3 UNINTENDED USE.....	8
4. TECHNICAL DATA	9
5. DELIVERY AND TRANSPORT	10
5.1 SCOPE OF DELIVERY	10
5.2 TRANSPORTATION.....	10
5.3 STORAGE	10
6. STRUCTURE AND FUNCTION	11
7. USAGE.....	12
7.1 INSPECTION BEFORE USAGE	12
7.2 ATTACHING THE CRATE GRAB TO THE CRANE SIDE	12
7.3 LIFTING, TRANSPORTING, LOWERING AND EMPTYING THE LOAD	13
8. CRATE GRAB MAINTENANCE.....	17
8.1 CLEANING	17
8.2 INSPECTION DOCUMENT	18
8.3 MAINTENANCE/TEST PLAN.....	19
8.4 TEST CRITERIA.....	19
8.5 VISUAL AND FUNCTIONAL TESTING.....	20
9. DECOMMISSIONING AND DISPOSAL	21
9.1 DECOMMISSIONING	21
9.2 DISPOSAL.....	21

1. Introduction

The crate emptying grab CGEZE is used for vertical lifting, lowering and emptying of non-guided loads.

Before using the CGEZE crate emptying grab for the first time, read through the operating instructions completely. The operating instructions explain how to safely use, maintain, check and dispose of the CGEZE crate emptying grab. This manual is an integral part of the product and must be available to all users. Keep the operating instructions for reuse. The crate emptying grab CGEZE is referred to below as the crate grab.

1.1 Manufacturer/ Service

Carl Stahl Hebeteknik GmbH

Tobelstraße 2
73079 Süßen

Phone hotline

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INFO

We are pleased to answer your questions about your product.

1.2 Terms and Conditions

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

1.3 EU Declaration of Conformity

Reproduction of content:

For the product described below

Designation:	CondorGrip crate emptying grab
Type:	CGEZE

it is hereby declared that it complies with the **essential requirements** laid down in the harmonization legislation referred to below:

DIRECTIVE 2006/42/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 May 2006 on machinery and amending Directive 95/16/EC (recast) - in short: **Machinery Directive**

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

Reference	Issue date	Title
Harmonized standards for the machinery directive:		
DIN EN ISO 12100	2010-11	Safety of machinery - General principles for design - Risk assessment and risk reduction
+ Corrigendum 1	2013-08	
DIN EN 13155	2009-08	Cranes - Safety - Loose load-carrying equipment
Other technical specifications applied (not published in the EU Gazette):		
DIN ISO/TR 14121-2	2013-02	Safety of machinery - Risk assessment - Part 2: Practical guide and examples of processes
DIN SPEC 33885		

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

Company	Carl Stahl Hebeteknik GmbH
Address	Tobelstr. 2 D-73079 Süßen

The sole responsibility for the issuance of this declaration of conformity in relation to the fulfilment of the essential requirements and the preparation of the technical documentation lies with the manufacturer (or installing company):

Company	Carl Stahl Hebeteknik GmbH
Address	Tobelstr. 2 D-73079 Süßen

dispensed by:

Name, first name	Schwenger, Wolfgang
Function	Managing Director

This declaration certifies compliance with the mentioned harmonization legislation but does not include any assurance of characteristics.

Additional information:

This declaration shall apply to all specimens manufactured in accordance with the corresponding production drawings which are an integral 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.

2. Information Processing

This operating instruction contains symbols, designations, instructions and enumerations as illustrated in chapters 2.1 to 2.2.

2.1 Symbols and Designations

Warnings

The warnings are classified and presented as follows:



DANGER

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



WARNING

A warning with the signal word "WARNING" indicates a hazard that may result in serious injuries or death.



CAUTION

A warning with the signal word "CAUTION" indicates a hazard that may result in minor to moderate injuries.

ATTENTION

A warning with the signal word "ATTENTION" indicates a hazard which may lead to property damage.

In a **warning notice**, action steps are marked with ► and structured chronologically.

Pictograms for specific hazards



Meaning:

Warning of floating load.



Meaning:

Warning of danger of crushing.



Meaning:

Warning of hand injuries.

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

Useful information and tips



INFO

The symbol indicates useful information and tips.

Disposal



NOTE ON DISPOSAL

of packaging materials and load handling equipment.

2.2 Handling Instructions and Enumerations

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

1. Step 1
2. Step 2

The result of an action is indicated by an arrow:

- Result or device reaction

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

- Action step
- Action step

The result of an action is indicated by an arrow:

- Result or device reaction

Enumerations are indicated by arrows and indents:

- ▶ Enumeration
- Enumeration

3. Safety

Before using the crate grab, read the following safety instructions carefully.

Chapters 3.1 to 3.3 contain basic rules of conduct which you must observe when handling the crate grab. The instructions marked with a  symbol must be followed to avoid danger to persons. Warnings that belong to the individual instructions are always listed before the respective step.

3.1 Basic Safety Instructions

The crate grab has been built, tested and has left the company in a safety-related mint condition. To maintain this condition, you must follow the instructions in this operating manual.

- Read these operating instructions completely;
- Observe the warning and safety instructions;
- Make sure that these operating instructions are always available on the place of action;
- Please note that only suitable specialist personnel work with and on the crate grab (see Table 1);
- When using the machine, observe the locally applicable occupational safety obligations and the operator's operating instructions;
- Observe the local conditions;
- Observe the maximum load capacity;
- Note the dead weight of the bearing box, this must be added to the load:

Own weight + load weight = total weight

► **Consider the weight of all components in relation to the maximum load capacity of the crate grab.**

- Damage that impairs safety must be repaired immediately;
- Carry out all work with utmost care;
- Wear your personal protective equipment;
- Tie long hair together;
- Do not wear loose clothing, rings, chains or other jewelry;
- Never stay under a suspended load, that is forbidden;
- Never open a load handling attachment under load;
- Only use the crate grab with a clearly legible type plate;
- Pay attention to the inherent stability and condition of the storage box;
- Only use suitable storage boxes, in particular make sure that the load capacity of the storage boxes meets the requirements;
- When selecting the crane, note the additional dead weight of the storage box and the crate grab!

Own weight of crate grab + own weight of storage box + load weight = total weight

► **Consider the total weight of all components in relation to the maximum load capacity of the crane!**

Classification of the qualification areas with load handling equipment

Field of activity	Qualification	Expertise
Delivery and transport	Retailer, forwarder	– Proof of load securing instruction – Safe handling of load handling equipment
Storage	Storekeeper	– Safe handling of load handling equipment
Commissioning, maintenance and repair	Qualified personnel	– Qualified person: professional education and experience, sufficient knowledge of load handling equipment. – Safe handling of load handling equipment – Product specific knowledge
Operation, simple visual inspection	Qualified personnel	– Safe handling of load handling equipment, professional education and experience
Disposal	Qualified personnel	– Knowledge of the regulations for proper disposal and reuse

Tab1: Qualification areas

3.2 Intended Use

The following points belong to an intended use:

- Vertical lifting, lowering and emptying of unguided loads
- Observe the permissible load capacity: **Own weight of the individual components + load weight;**
- Temperature range from 0 °C to + 80 °C;
- Only for indoor use and storage;
- The even distribution of the load;
- Designed for a maximum of 20,000 load changes, the number of load changes is reduced depending on the external conditions.

In addition to the points listed here, further information must be noted and taken from the technical data (chapter 4).

3.3 Unintended Use

The following points belong to an unintended use:

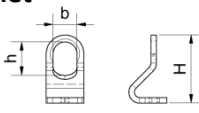
- Exceed the maximum load capacity;
- The carriage of persons and animals;
- The transport of liquids and hazardous substances;
- The diagonal pull and the asymmetrical load;
- Tearing loose stuck loads;
- Constructive changes;
- When people stay under suspended load;
- In explosive, salty, corrosive and/or alkaline environments;
- Pulling loads on the ground;
- Use of unsuitable or defective storage boxes
- Outdoor use and storage.

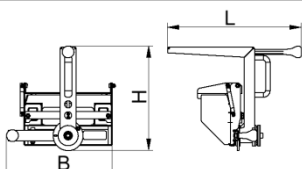
Chapter 3.3 does not guarantee completeness. Anything that is not expressly permitted is considered to be unintended use.

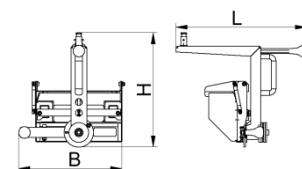
4. Technical Data

Designation:	Crate emptying grab
Type:	CGKE
Execution:	Optionally with eyelet or Demag DSM5

General information	Designation	Specification/unit
	Number of load cycles	Maximum 20.000
	Permissible diagonal pull	Maximum 6 °
	Surface texture	Galvanized
	Carrying capacity	30kg
	Dead weight	8kg
	Operating and storage temperature range	From 0 °C to + 80 °C

Dimensions crane connection	Designation	Specification/unit
With eyelet 	Maximum height h (inside dimension)	49mm
	Maximum width b (inside dimension)	35mm
	Maximum depth T	8
	Height H	100
With DSM5 	Diameter D	20mm
	Height X	45mm

Dimensions main body	Designation	Specification/unit
	Total width B	362mm
	Total length L	462mm
	Total height H	360mm

Dimensions	Designation	Specification/unit
	Total width B	362mm
	Total length L	462mm
	Total height with DSM5 H	405mm
	Total height with eyelet H	462mm

Tab2: Technical data

5. Delivery and Transport

5.1 Scope of Delivery

Check the delivery for completeness.

Quantity	Articles	Article number
1	Crate emptying grab CGEZE	25302600036080 version with DSM5
1	Original instruction manual	
1	Declaration of conformity	
1	Inspection document	

Tab3: Scope of delivery

If parts are missing or damaged, contact the manufacturer/retailer (chapter 1.1).

5.2 Transportation

The crate grab is tested, inspected and properly packaged before delivery.

Always transport the crate grab on a suitable transport system.

5.3 Storage

ATTENTION

Equipment damage due to improper storage!

Improper storage can damage the crate grab.

- ▶ Store the crate grab on suitable storage systems.
- ▶ Store the crate grab in a clean and dry indoor place.
- ▶ Protect the crate grab from damage:
 - Temperature influences that fall below or exceed the permissible temperature range (see chapter 4).
 - Moisture
 - Soiling
 - Damages
 - Corrosion

6. Structure and Function

The crate grab essentially consists of the following components:

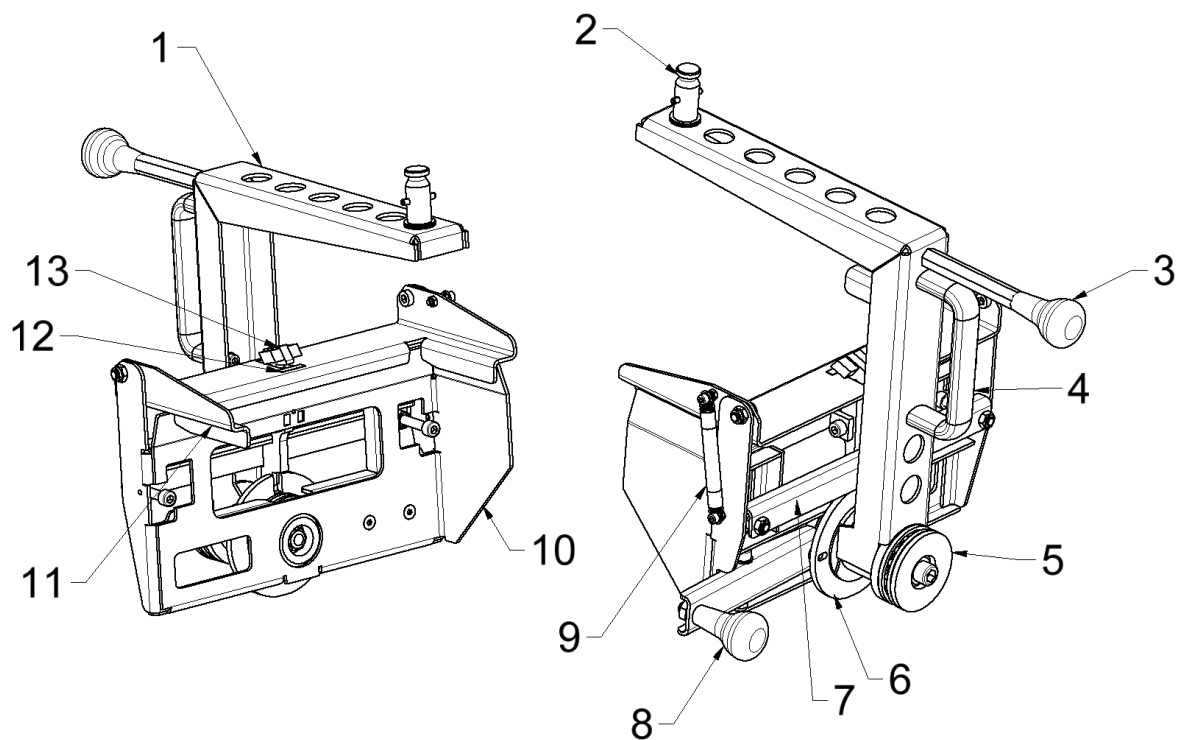


Fig.: Crate emptying grab CGEZE

Position	Designation	Function
1	Carrying arm	Suspension
2	DSM5 with bearing	Crane connection with Demag Manulift, alternatively with suspension eyelet
3	Upper handle	Guiding the grab / load
4	Bow handle	Guiding the grab / load
5	Pivot bearing	Turning the load
6	Locking washer	Positioning and locking the rotary motion
7	Actuator	Operating the pawl
8	Operating handle	Unlocking the rotary movement, turning
9	Closing spring	Closing the load lock
10	Main body	Holding the load
11	Load interlock	Locking the load
12	Mark	Control of the complete locking system
13	Pawl	Securing the load locking device

Tab4: Components

7. Usage

7.1 Inspection before Usage

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

The purpose of the test is to ensure that the crate grab is in perfect condition and ready for use.

The exact details of the respective tests can be found in the maintenance/test schedule. Please read chapter 8, in particular chapter 8.3 - 8.5.

Before you use the crate grab, you must observe the following:



DANGER

Danger to life due to load crash!

A load fall can result in serious injuries or death.

- ▶ Never stay under a suspended load.
- ▶ Never walk under a suspended load.
- ▶ Ensure that there is sufficient working space.
- ▶ Ensure that there are no persons in the work area.
- ▶ Only use suitable storage boxes that have been tested and approved for use.



WARNING

Risk of crushing due to lack of space!

There is a risk of crushing due to insufficient spacing at the load pick-up point, on the load transport route and at the load unloading point.

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

7.2 Attaching the Crate Grab to the Crane Side

Proceed as follows to attach the crate grab to the crane side:

1. Position the crane hook or Demag Manulift vertically above the crate grab.
- 2a. With eyelet: Hook the crane hook into the suspension eyelet.
 - Crane hook safety catch engages.
- 2b. With DSM5: Fix the Manulift to the crate grab
Please refer to the Manulift user information.
3. Check the crane hook safety catch or the correct seating of the Manulift.
4. Lift the crate grab slowly and carefully.

7.3 Lifting, Transporting, Lowering and Emptying the Load



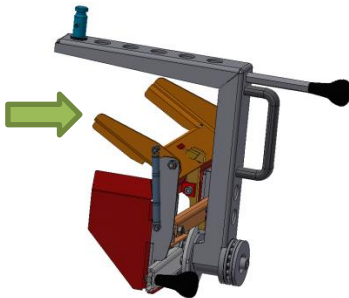
DANGER

Danger to life due to load crash!

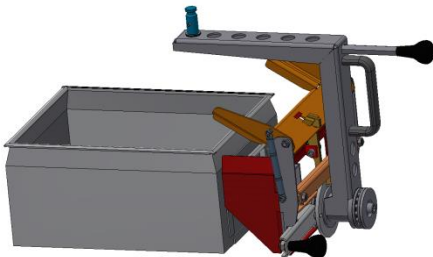
The use of unsuitable or defective storage boxes can lead to a load crash and to injuries or death.

- ▶ Only use suitable storage boxes which have been tested for use.
- ▶ Check the storage boxes for damage before use.

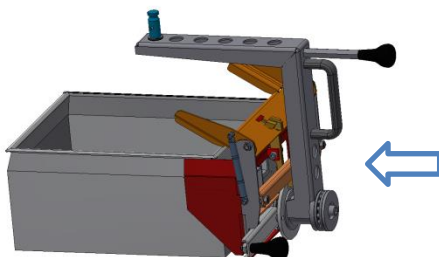
1. Check that the load lock is in the upper, open position.



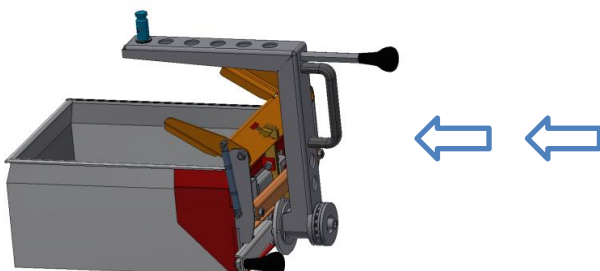
2. Position the crate grab in front of the storage box as shown.



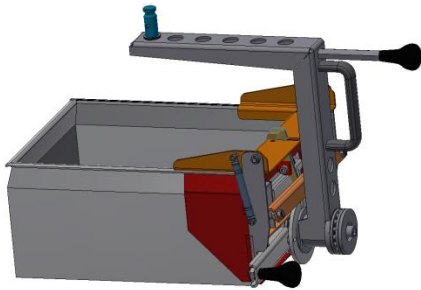
3. Guide the crate grab with the base frame under the edge of the box.



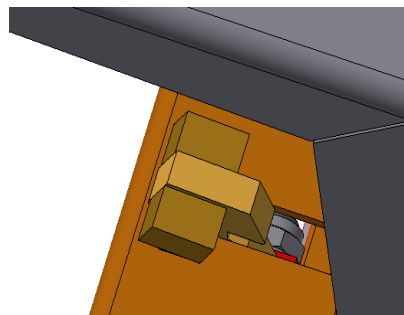
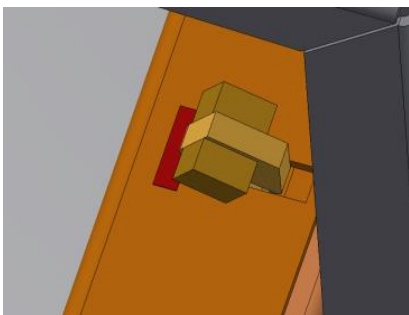
4. Push the crate grab with a swing to the box.



- The load lock closes and locks automatically



5. Check that the load lock is fully closed.
- The red marking must be completely covered by the pawl.
 - The red marking must not be visible even when lifting

**CAUTION****Risk of injury due to incorrect handling!**

Incorrect use may result in bruising of the fingers or hands.

- ▶ Hold the crate grab only by the bow handle and the operating handle.

**DANGER****Danger to life due to load crash!**

If the crate grab does not fit exactly to the storage box, this leads to instability and a load crash can occur.

- ▶ Always position the crate grab precisely on the storage crate.
- ▶ Always check that the load is properly locked.
- ▶ Take the crate grab out of operation if the load lock does not close completely.
- ▶ Take the crate grab out of operation when the pawl releases the red marking when opening.

6. Lift the storage box slowly and carefully using the crate grab.
7. Transport the load to the desired load unloading point.
8. Release the rotary movement by pulling out the operating handle.

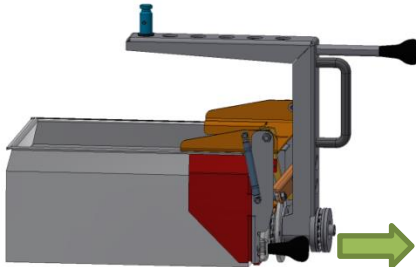


CAUTION

Risk of injury due to incorrect handling!

The storage box can now tilt independently and uncontrolled.

- Hold the storage box by the operating handle in the horizontal position.



- The rotary motion of the bearing box is now enabled.

9. Guide the crate grab with your right hand on the bow handle and turn the storage crate to the left with your left hand on the operating handle for emptying.



CAUTION

Risk of injury due to incorrect handling!

Incorrect use may result in bruising of the fingers or hands.

- Hold the crate grab only by the handles.



The storage box is now empty.

10. Guide the crate grab with your right hand on the bow handle and turn the crate back to the right to its horizontal position with your left hand on the handle.

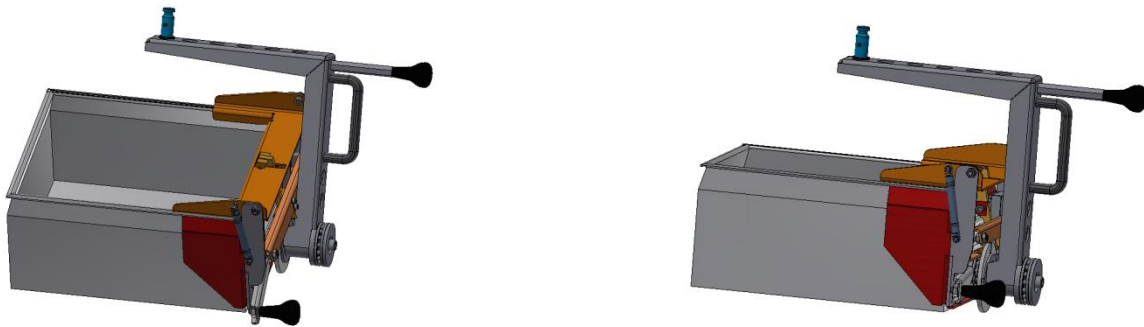


CAUTION

Risk of injury due to incorrect handling!

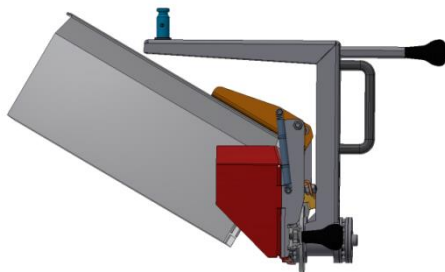
Incorrect use may result in bruising of the fingers or hands.

- Hold the crate grab only by the handles.



- The rotation is now automatically locked again.

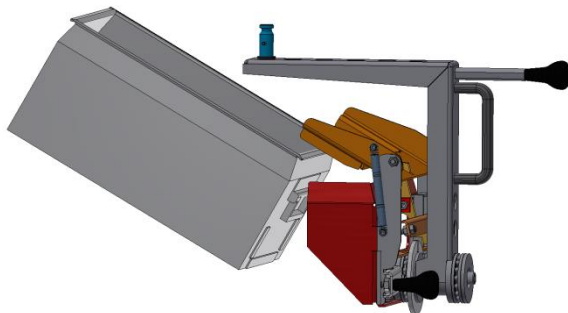
11. Hold the crate grab by the bow handle with your right hand and tilt the crate upwards with your left hand as shown.



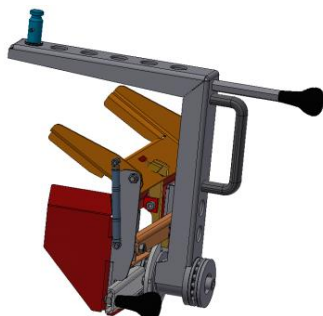
The load lock is opened again and engaged.

12. Remove the box from the crate grab.

- ▶ If necessary, you may have to shake something for this.



- The crate grab is back in its normal position.



8. Crate Grab Maintenance

A load handling attachment must be cleaned, maintained and checked regularly. The maintenance/test intervals can be found in the maintenance/test schedule.

8.1 Cleaning



INFO

Regular cleaning and careful handling ensure that the storage crate grab remains in place for the entire life cycle.

Component	Cleaning criteria	Actions
Main body/suspension	The contact surfaces must be clean	Clean contact surfaces
Storage of suspension	The bearings must be smooth-running	Clean and lubricate stiff bearings
Rotary bearing	The bearings must be smooth-running	Clean and lubricate stiff bearings
Latch	The locking device must be smooth-running	Clean and lubricate stiff locking device

Tab.: Cleaning

8.2 Inspection Document

The test document serves as proof of the tests performed. In addition, all the deficiencies noted must be rectified and the evidence provided presented to the authorities where necessary. The test document below is only an example. The original test document was attached as a separate document.

Hersteller/Manufacturer Carl Stahl Hebe-Technik GmbH Tobelstr. 2 73079 Sößen		Kunde/Customer		
Prüfdokument für Lastaufnahmeeinrichtungen			Inspektion document for load lifting appliances	
Bezeichnung Kistenentleergreifer CGEZE			Description	
CS-Artikel-Nr./ CS-Item-No.	Kunden Bestell-Nr./ Customer-No.	CS-Auftrag-Nr./ CS-Order-No.	CS-Fertigungs-Nr./ CS-Manufacturing-No.	
25302600036080				
Zeichnung-Nr./ Drawing-No.	Identifikationsnummer/ Identification Number		Baujahr/ Year of Manufacture	
25302600036080	30.000001		2019	
Tragfähigkeit/ load capacity	Krananbindung/ Crane Connection	Einsatztemperatur/ operating temperature	Eigengewicht/ Dead Weight	
30kg	DSM5	0°C - 80°C	8kg	
Werksabnahme Hiermit wird bescheinigt, dass die hier beschriebene Kistenentleergreifer CGKE nach der DIN EN 13155:2009 geprüft wurde und diese im vollen Umfang bestanden hat.		Factory Approval This is to certify that the Kistenentleergreifer CGKE described here according to DIN EN 13155:2009 has been tested and it has passed the full extent.		
Prüfdatum/ Test Date	Prüfbefund/ Test Result		Unterschrift/ Signature	
Prüfung vor der Erstinbetriebnahme Die Prüfung vor der Erstinbetriebnahme wurde durchgeführt und es wurden keine Mängel festgestellt.		Testing before the Initial Operation The test before the initial operation was carried out and no defects were detected.		
Prüfdatum/ Test Date	Prüfbefund/ Test Result		Unterschrift/ Signature	
Wiederkehrende Prüfungen		Periodic Inspections		
Prüfdatum/ Test Date	Prüfbefund/ Test Result		Unterschrift/ Signature	

Fig.: Inspection document

8.3 Maintenance/Test Plan

Maintenance/test interval	Activity
Before first use (first commissioning)	– Visual and functional testing
Before each recurring use of the storage crate grab without extraordinary incidents	– Visual inspection
Annual	– Visual and functional testing
Extraordinary inspection	– Depending on external conditions, the annual audit cycle may be shortened. This includes the following points: – After damage, repair or special occurrences, – continuous operation in shift operation, – increased wear, – corrosion, exposure to heat due to environmental influences, – etc.

Tab.: Maintenance/test plan

8.4 Test Criteria

The test criteria in the following table are used to determine the discard maturity of the crate grab. The basic value, indicated in mm, can be found in the Technical Data (see chapter 4).

Component	Test criteria	Actions
Suspension eyelet	Any kind of deformation and wear	Decommissioning and contact manufacturer/service
Main body	Any kind of deformation and wear	Decommissioning and contact manufacturer/service
Nameplate	Any kind of deformation and wear, and legibility	Decommissioning and contact manufacturer/service
Rotary bearing	Any kind of deformation and wear	Decommissioning and contact manufacturer/service
Latch	Any kind of deformation and wear	Decommissioning and contact manufacturer/service

Tab.: Test criteria

8.5 Visual and Functional Testing

The crate grab must be inspected and tested before each use. In the table under 8.4 criteria are listed, which can lead to the fact that you must take the crate grab out of operation.



DANGER

Danger to life due to load crash!

Deformation and wear of the individual components can reduce the load carrying capacity and lead to a load crash.

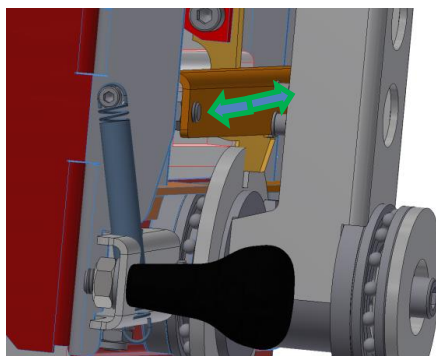
- ▶ Check the crate grab for defects.
- ▶ Check to what extent the individual components are functional.
- ▶ The crate grab is taken out of operation by marking if it is no longer functional and irreparably damaged (see chapter 9.1.).
- ▶ If necessary, contact the manufacturer/service (see chapter 1.1).
- ▶ If necessary, dispose of the crate grab (see chapter 9.2).

Visual inspection

1. Check the crate grab for visible defects such as:
 - Tears
 - Deformation
 - Wear
 - Completeness
2. Take the crate grab out of operation if the crate grab is defective.

Functional test

1. Check all moving parts for ease of movement.
2. Check the functionality of the crate grab. Take the crate grab out of operation if its function is impaired.
3. Check the setting of the pawl actuator.
 - ▶ The actuator must be slightly preloaded when the crate is attached and unloaded and must have no clearance.



9. Decommissioning and Disposal

9.1 Decommissioning

1. Take the crate grab out of operation by marking it.
2. Contact the manufacturer/service (see chapter 1.1).
3. If necessary, dispose of the crate grab.

9.2 Disposal

Disposal

**NOTE ON DISPOSAL**

If the crate grab is no longer repairable or functional, the crate grab must be disposed of in accordance with the applicable legal regulations.

Disposal of packaging material

**NOTE ON DISPOSAL**

Under the Packaging Ordinance, the retailer is obliged to take back the packaging of his products that do not bear the sign of a system of comprehensive disposal (such as the Green Dot of the Duales System Deutschland AG) and to ensure that it is reused or disposed of.
