

# operating manual

# automatic hook

**GREIF ILS-tech**

**GREIF Mod. K-Series (not M/S-Series)**

Dear Customers,

We are pleased that you have decided on a device from the ILS-tech product range. ILS-tech offer you the highest quality and the latest technology.

To be able to fully use the capabilities of the device and many years

To be able to enjoy your device, please read these operating instructions carefully before using it and operate the device according to the instructions. The operational safety and the function of the device can only be guaranteed if both the general safety and accident prevention regulations of the legislature and the safety instructions in the operating instructions are observed. We assume no liability for damage caused by improper use, manipulation and incorrect operation. Please ensure that all persons operating the device have read and understood the operating instructions.

Keep the operating instructions in a safe place so that you can refer to them at any time if necessary.

**ILS-Tech GmbH**

**-Intelligent Lifting Systems-**

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1	FEATURES .....	3
1.1	Product Specific Information .....	3
1.1.1	GREIF .....	3
2	FOR YOUR SAFETY .....	4
2.1	Observe the operating instructions .....	4
3	safety instructions .....	4
3.1	General safety instructions .....	4
4	LIABILITY.....	5
4.1	Proper Use .....	6
4.2	Permitted attachment types.....	6
4.3	Improper use .....	6
5	DELIVERY and TRANSPORT .....	7
6	STORAGE.....	7
7	START-UP.....	8
7.1	General note.....	8
7.2	Connect with load chain .....	8
7.3	Possibility of Opening – A – opening handle.....	9
7.4	Possibility of Opening – B – .....	9
7.5	Possibility of Opening – C – telescopic rod .....	9
7.6	Closing / hooking in the load .....	10
8	Area of application GREIF .....	10
9	OPERATION .....	10
9.1	Use / principle of operation.....	10
9.2	Functional check .....	11
9.3	Connecting the GREIF to the crane hook (see item 7.2).....	11
9.4	Attach, lift, move and knock down the load (see points 7.3 -7.7) .....	11
9.5	Procedure for the triggering process .....	11
10	FAULT .....	12
10.1	Troubleshooting .....	12
11	CLEANING / MAINTENANCE.....	12
11.1	Visual inspection .....	12
11.2	Cleaning GREIF.....	12
11.3	Care Products.....	12
12	INSPECTION / MAINTENANCE .....	12

13	SERVICE LIFE .....	13
14	DISPOSAL .....	13
15	WARRANTY .....	13
16	REPLACEMENT PARTS .....	14
17	REPAIRS / SERVICE .....	14
18	TECHNICAL DATA .....	14
19	EG – DECLARATION OF CONFORMITY .....	14
19.1	Declaration of conformity within the meaning of the Machinery Directive Anhang II 1A	15

## 1 FEATURES

The GREIF automatic hook is a loose load handling device for vertical lifting and lowering of loads.

The GREIF is basically a mechanically independent and fully usable load lifting device and in many cases replaces the load hook.

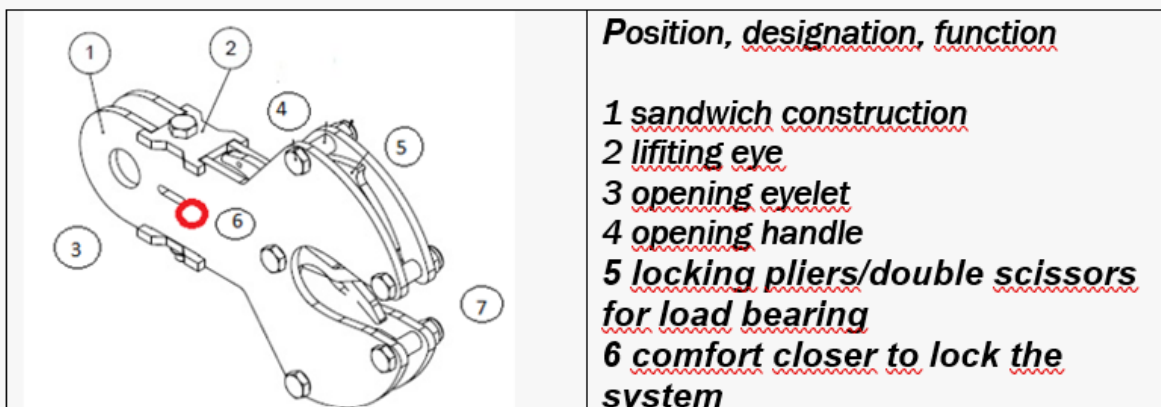
The GREIF is used to safely lift and move loads. A decisive advantage compared to conventional load hooks results from the simple positioning at attachment points outside the reach of the user, using a telescopic rod.

### 1.1 Product Specific Information

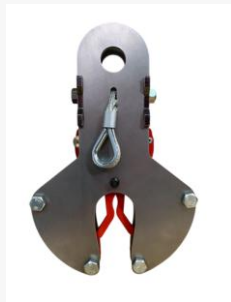
#### 1.1.1 GREIF

Mechanical, self-closing and locking load handling device (automatic hook) with specified load capacity.

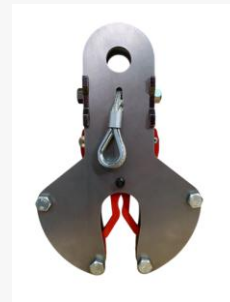
Structure and function GREIF



## GREIF K-Series



GREIF K  
open




GREIF K  
closed

## 2 FOR YOUR SAFETY

### 2.1 Observe the operating instructions


Any start-up and handling of the respective unit requires precise knowledge of and compliance with these operating instructions. The device is only for the described

intended use. In these operating instructions, particularly important remarks are highlighted as follows:

 **Warning** This is a warning that indicates risky situations and dangers. Ignoring this warning can lead to life-threatening situations. It is important to heed these warnings.

 **Information** This is information that points to certain characteristics that must be observed..

## 3 safety instructions

 **All service and repair work is only to be carried out by authorized persons**

Reserved for professionals. Any start-up and handling of the device requires precise knowledge of and compliance with these operating instructions. The device is only intended for the use described.

### 3.1 General safety instructions

The GREIF was tested and left the company in perfect condition in terms of safety. In order to maintain this condition, you must follow the instructions in the operating manual.

- Read this user manual completely
- Observe the warnings and safety information
- Ensure that this operating manual is always available at the place of use
- Only suitable specialist personnel may carry out work with and on the GREIF
- Note the local conditions
- During use, observe the locally applicable occupational safety obligations and the operator's work instructions
- Note the maximum carrying capacity
- Damage affecting safety must be repaired immediately by an expert
- Carry out all work with great care
- Wear your personal protective equipment
- Do not wear loose clothing, rings, necklaces or other jewelry
- Tie back long hair
- Never stand under a suspended load
- Never open a load handling device under load
- Note the additional dead weight of the GREIF and the load weight
- Consider the total weight of all components in relation to the maximum lifting capacity of the crane

#### 4 LIABILITY

In any case, liability for the function and damage to the device is transferred to the owner or operator if the device is improperly maintained, repaired or modified by persons who do not belong to an authorized specialist company, or if it is handled in a way that is not intended use.

The device must be maintained and operated in accordance with these operating instructions. Neither ILS-Tech GmbH nor the sales companies are liable for damage caused by non-observance of the above instructions.

Warranty and liability conditions of the sales and delivery conditions of ILS-Tech GmbH are not extended by the above information. Ensure that the operating manual is accessible at all times, that it is read and understood.

#### APPLICATION AREAS

The GREIF is for gripping, lifting, carrying, moving and safely releasing loads on/in

<ul style="list-style-type: none"> <li>• lifting cranes</li> </ul>	<ul style="list-style-type: none"> <li>• General areas</li> </ul>
<ul style="list-style-type: none"> <li>• Mobile cranes</li> </ul>	<ul style="list-style-type: none"> <li>• areas at risk of falling</li> </ul>
<ul style="list-style-type: none"> <li>• Vehicle cranes</li> </ul>	<ul style="list-style-type: none"> <li>• hard-to-reach areas</li> </ul>
<ul style="list-style-type: none"> <li>• Container lifting</li> </ul>	<ul style="list-style-type: none"> <li>• Anchorage points outside of reach</li> </ul>
	<ul style="list-style-type: none"> <li>• Areas with short residence times</li> </ul>

The user can attach and detach loads easily, very quickly and absolutely safely.

- Loads can be attached outside of the gripping range using a telescopic rod

- Danger reduction during attachment
- Avoiding prolonged stays in areas where there is a risk of falling
- Significant saving of time
- Detaching loads outside of the gripping range
- Significant increase in security
- Significant reduction in work accidents
- Avoiding staying in the swivel ranges
- Avoiding staying in danger areas (chemical/biological/mechanical)



Use the device exclusively for this area of application. It is designed and approved for material movement only.



PPE applications are prohibited! (PPE = personal fall protection equipment)

#### 4.1 Proper Use

- The vertical lifting, lowering of unguided loads
- Attachment and detachment possible outside of the gripping area thanks to the telescopic rod
- Detaching by guide line
- Observe permissible carrying capacity: dead weight + load weight
- equal load distribution
- Designed for >20,000 load changes
- Depending on the external conditions, the number of load changes is reduced
- A lifting and lowering process counts as a load change

#### 4.2 Permitted attachment types



Danger to life due to a load drop!

In the case of slings with more than 2 strands, only 2 strands may be regarded as load-bearing.



A higher load-bearing capacity can be achieved with suitable balancing devices. Please note the general regulations for compensating devices (e.g. compensating rocker)

#### 4.3 Improper use



Danger to life due to load crash!  
Improper use can result in the load falling, injuries or death

Among other things, the following is illegal:

<ul style="list-style-type: none"> <li>Exceeding the maximum load capacity</li> </ul>	<ul style="list-style-type: none"> <li>Transport of liquids and hazardous substances</li> </ul>
<ul style="list-style-type: none"> <li>Loading of the GREIF on bending, diagonal pull or over an edge</li> </ul>	<ul style="list-style-type: none"> <li>Tearing loose of stuck loads</li> </ul>
<ul style="list-style-type: none"> <li>Diagonal pull / bending whereby only the load is on the suspension eye</li> </ul>	<ul style="list-style-type: none"> <li>Constructional changes</li> </ul>
<ul style="list-style-type: none"> <li>Transport of people and animals</li> </ul>	<ul style="list-style-type: none"> <li>Long-term use in potentially explosive, salty, corrosive and/or basic environments and long-term storage in such areas</li> </ul>
<ul style="list-style-type: none"> <li>Pulling loads on the floor</li> </ul>	<ul style="list-style-type: none"> <li>Permanent outdoor storage</li> </ul>

The list does not guarantee completeness.



Anything that is not expressly permitted falls under improper use.

## 5 DELIVERY and TRANSPORT



It is important that any transport damage is recognized when unpacking. If necessary, an immediate assessment of the facts of the case is required. The GREIF is tested, checked and properly packaged before delivery.

Always transport the **GREIF** with a suitable transport system.

The scope of delivery includes at least: (observe the order quantity)

- GREIF**
- Operating instructions including declaration of conformity and test report

## 6 STORAGE

Optimal storage of the unpackaged product is in a normal temperature, dry place.

If possible, store away from sources of heat, high humidity, corrosive or chemical substances or other possible causes of mechanical damage.

Occasionally grease and oil according to the recommended care products.

## 7 START-UP

### 7.1 General note



Both locking pliers must be able to be fully closed and opened easily. Due to the scissor action of the locking pliers, an unintentional release of the load is not possible. Mechanical damage could lead to difficult opening or closing. However, if both locking pliers can be fully closed, the GREIF remains functional.

If you have any questions regarding the correct application, please contact us directly

[www.info@ils-tech.de](mailto:www.info@ils-tech.de)

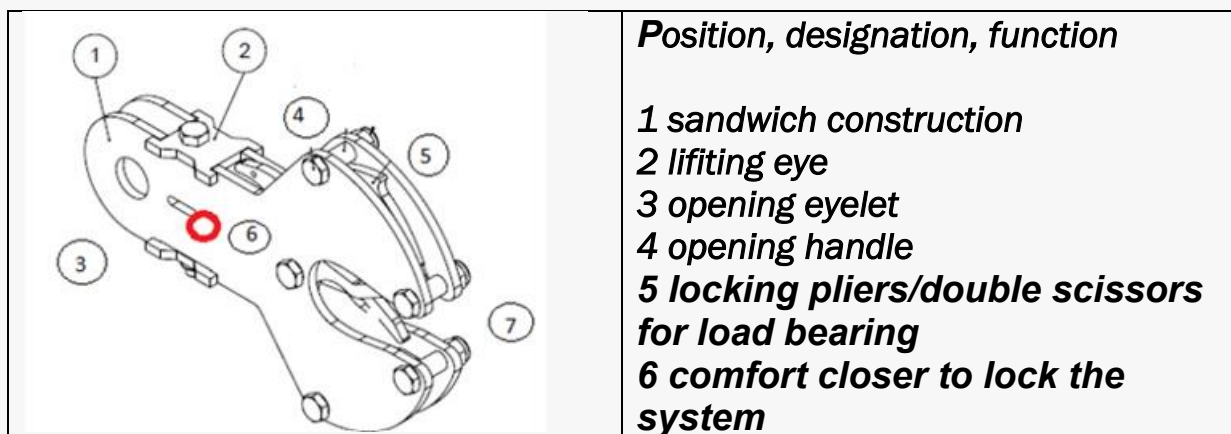


Abb.7.1.1

### 7.2 Connect with load chain



*The supplied shackle is screwed into the load eye (2) and connected to the load hook. Thus, the GREIF is always ready for direct attachment to the load or as a "chain lock". To do this, the chain used or the lifting sling is hung parallel to the load hook.*



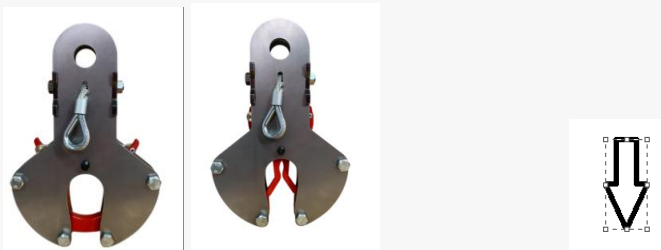
It is essential to pay attention to the load capacities of the chains, wire ropes and lifting straps. Follow manufacturer recommendations.

### 7.3 Possibility of Opening – A – opening handle



*Both opening handles (4) must be pressed simultaneously and completely as far as they will go. The GREIF opens both closing tongs (5) and remains in the open position. (see Fig. 7.1.1)*

### 7.4 Possibility of Opening – B –



*The crank eyelet (4) must be rotated 90 degrees. The rotation can be in either direction. The GREIF opens both locking pliers (5) and remains in the open position. (see Fig. 7.1.1)*

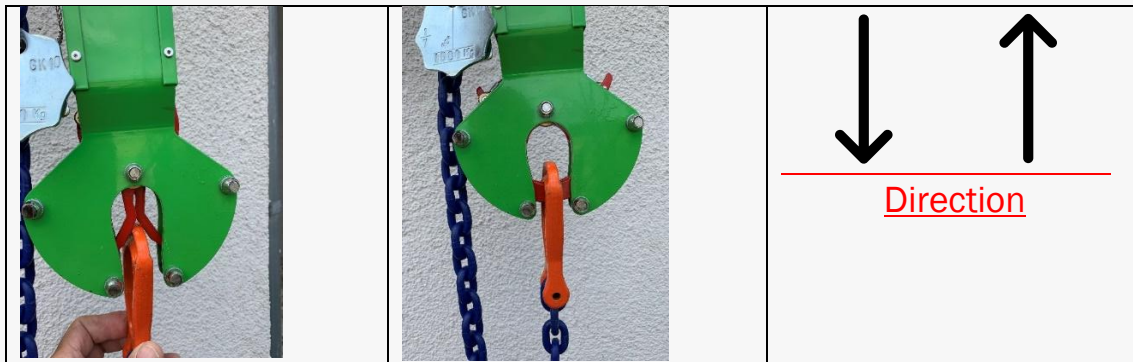
### 7.5 Possibility of Opening – C – telescopic rod

Using a telescopic rod, the GREIF can be pulled directly at the pull eye and thereby opened. The GREIF opens both locking jaws (5) and remains in the open position. (see Fig. 7.1.1)



*safety function. The line must always be checked for freedom of movement. The rubber band on the opening lever releases if the line gets tangled when swinging the load, preventing any risk that may arise. The GREIF stays closed and safe at all times.*

## 7.6 Closing / hooking in the load



*When the locking pliers (5) are open, the appropriate attachment point for the load (eyelet/ring/bar/eye etc.) is pressed against the comfort closer. The spring mechanism is triggered and the anchor point is completely surrounded by both locking pliers (5). The GREIF remains safe until reopened. (see 7.3-7.5)*

## 8 Area of application GREIF

The GREIF is manufactured according to DIN EN 13155 (>20,000 load cycles) - loose load handling equipment. (according to § 2 in the scope of the Machine Ordinance / (9th Ordinance on the Equipment and Product Safety Act - 9th ProdSV) When using the DGUV rule 109-017 must be observed.

Like any conventional load hook, the GREIF can be used from a single strand to multiple strands. The corresponding load distribution is explicitly pointed out.

Basically, the GREIF is a mechanically independent and fully usable load lifting device.



**Weight information/tonnage must be observed.**

A functional test must be carried out before each use. You must carry out the test before using it for the first time (initial commissioning), before each repeated use or after repairs.

The functional test should ensure that the GREIF is in perfect condition and ready for use.

## 9 OPERATION

### 9.1 Use / principle of operation

**Basically:** All possible uses and uses, as well as operation, maintenance, care and safety instructions can be obtained from [www.info@ils-tech.de](http://www.info@ils-tech.de).



**Risk of injury from crushing when closing and hanging. use gloves! Especially with flexible attachment points such as slings/straps etc.**



It is essential to comply with the load capacities and areas of use.



To open, the GREIF must be relieved due to its design.



The hindrance to the mechanism of the GREIF prevents it from opening. Therefore, when knocking off, make sure that there are no obstructions, blockages, jamming, crushing or other functional impairments.

## 9.2 Functional check

Check that the device is functioning correctly on a safe location without the risk of falling and/or injury. Check functionality before use.

## 9.3 Connecting the GREIF to the crane hook (see item 7.2)

Hang the GREIF correctly on the crane side: / Functional check of the GREIF has been carried out

- Position GREIF vertically under crane hooks or hooks on load chain
- Hang the GREIF in the suspension eyelet/shackle/if necessary, the swivel in the crane hook or load chain
- Snap in the crane hook safety device / hook safety device of the chain
- Checking the crane hook safety device / chain hook safety device

## 9.4 Attach, lift, move and knock down the load (see points 7.3 -7.7)

- Open GREIF manually / with telescopic rod / release lever possible at a distance with a leash
- Snap the opened GREIF onto the load (eyelets/holding brackets etc.) with pressure
- GREIF closes and locks itself
- Load is held until opening
- Lift load slowly and in a controlled manner
- Move the load slowly and controlled
- Completely relieve the load on GREIF
- Release the GREIF if it is safe to do so/with a telescopic rod/release lever with a leash at a distance
- Raise the GREIF in a controlled manner using the crane hook



Visual check to check the load release!

## 9.5 Procedure for the triggering process

- Make sure that there is no one in the area affected by the load to be released
- Relieve the load



Attention: Opening only possible if the load is less than 15 kg / visual inspection to check the load release!

## 10 FAULT

### 10.1 Troubleshooting

<ul style="list-style-type: none"> <li>• Most common cause GREIF is still under load</li> </ul>	<ul style="list-style-type: none"> <li>➤ Relieve the load</li> </ul>
<ul style="list-style-type: none"> <li>• Opening lever torn off</li> </ul>	<ul style="list-style-type: none"> <li>➤ Open the GREIF with telescopic rod or manually</li> <li>➤ Reattach the opening lever</li> </ul>
	<ul style="list-style-type: none"> <li>➤ If necessary, replace a defective <b>GREIF</b></li> </ul>

## 11 CLEANING / MAINTENANCE

### 11.1 Visual inspection

Before and after use, the correct function of the moving parts of the GREIF must be checked visually. (e.g. sticking due to concrete, sand, damage).



Clean visible parts with a dry cloth and dry. Do not use solvents. If necessary grease and oil.

### 11.2 Cleaning GREIF

Clean and maintain according to the manufacturer's instructions using the recommended care products. (e.g. grease and oil accordingly)

### 11.3 Care Products

Conventional machine greases and machine oils

## 12 INSPECTION / MAINTENANCE

In addition to the normal visual inspection, which must be carried out before, during and after use, this product must be checked by the manufacturer or a certified expert every 12 months, i.e. from the date of purchase of the product. This date and that of the subsequent inspections must be entered in the product data sheet. The documentation for control and reference must be retained throughout the life of the product and is crucial for warranty claims.



If one of the following defects is found, the product must no longer be used:

- Presence of cracks in any part
- Presence of permanent deformations on any component
- Unauthorized modifications to the product
- Missing inspection sticker
- Missing nameplate
- Corrosion, which seriously changes the surface condition of the components
- Malfunctions of the mechanical parts
- Significant wear of any part of the equipment



If the product, or any component of the product, has or even appears to have defects or severe wear and tear, it must be replaced immediately. Any damage caused by improper or excessive use of the system's components may occur and must be visually and functionally inspected before next use.

### 13 SERVICE LIFE

The service life of the product is not limited in time, provided that there are no circumstances that render it inoperative, provided that regular checks are carried out at least once a year from the date of purchase and the results are entered in the product data sheet.

The following factors reduce the lifespan of the product: intensive use, damage to one or more product components, contact with chemical substances, high temperatures, high humidity and water, extreme cold, extreme heat, improper use and storage.

If you suspect that the product is no longer safe and reliable, contact ILS-Tech GmbH or the responsible authorized dealer.



**ATTENTION: Improper handling can reduce the service life to a single use.**

### 14 DISPOSAL

Old devices can be disposed of at the manufacturer.

### 15 WARRANTY

For all material and manufacturing defects, you have the statutory guarantee for this product from the date of purchase. Excluded from the guarantee are: normal wear and tear, modifications or repairs, signs of corrosion, damage due to accidents or neglect, and use of the product for purposes other than those intended.



The warranty claims expire in the event of manipulation or independent opening of the GREIF or manipulation of individual components. The device must be serviced at least once a year by the manufacturer or a certified expert. The warranty claims expire if the maintenance intervals are culpably delayed by the buyer.

## 16 REPLACEMENT PARTS

A possible replacement or repeat order can be processed via ILS-Tech GmbH-Integrated Services or via the authorized dealers. [www.info@ils-tech.de](mailto:www.info@ils-tech.de)

## 17 REPAIRS / SERVICE

The annual inspection/maintenance can be carried out by the certified expert on site. You can find all the necessary data by contacting us at [www.info@ils-tech.de](mailto:www.info@ils-tech.de)

## 18 TECHNICAL DATA

Name: **GREIF K 30**

<b>WLL</b>	<b>3.0 t</b>
<b>Weight in grams</b>	<b>2100</b>
<b>Length in mm</b>	<b>233</b>
<b>Thickness in mm</b>	<b>36</b>
<b>Width in mm</b>	
<b>(Lifting accessory)</b>	<b>155</b>
<b>Jaw width in mm</b>	<b>30</b>
<b>Engaging outside of grip range</b>	<b>Yes</b>
<b>Remote disengagement</b>	<b>Yes</b>
<b>Comfort opening</b>	<b>Yes</b>
<b>Comfort closing</b>	<b>Yes</b>
<b>Self-locking lifting accessory according to DIN EN 1355</b>	<b>Yes</b>
<b>Food compatible</b>	<b>No</b>
<b>Corrosion-resistant</b>	<b>Yes</b>
<b>Suitable for saltwater</b>	<b>Temporary</b>

## 19 EG – DECLARATION OF CONFORMITY

In accordance with Section 3 of the Machinery Ordinance, a declaration of conformity must be issued for the load handling attachments mentioned and a CE mark must be attached.

**19.1 Declaration of conformity within the meaning of  
the Machinery Directive Anhang II 1A**

Original declaration of conformity

**Konformitätserklärung im Sinne der  
Maschinenrichtlinie Anhang II 1A**

Original-Konformitätserklärung



**Hersteller:** ILS-tech GmbH  
Auf Egerten 12  
72818 Trochtelfingen  
Deutschland

**Bevollmächtigter  
für die Zusammenstellung der  
technischen Unterlagen:** Roland Bruggen,  
Geschäftsführer ILS-tech GmbH  
Auf Egerten 12  
72818 Trochtelfingen  
Deutschland

**Produkt:** Loses Lastaufnahmemittel, Lasttraken,  
GREIF M10 – M100  
ab Seriennummer ab 23C100

Hiermit erklären wir, dass das oben genannte Produkt allen einschlägigen Bestimmungen der Maschinenrichtlinie 2006/42/EG entspricht.

Das oben genannte Produkt erfüllt die Anforderungen der folgenden einschlägigen Richtlinien:

- DIN EN 13155 (>20.000 Lastwechselzyklen) – loses Lastaufnahmemittel hergestellt
- D. Verordnung zum Produktsicherheitsgesetz (Maschinenverordnung) (V. ProDSY)
- gemäß § 2 in den Geltungsbereich der Maschinenverordnung eingeeordnet
- DIN EN 1050
- DIN EN 1577

Folgende harmonisierte Normen wurden angewandt:

- EN ISO 12100:2010, Sicherheit von Maschinen – Allgemeine Gestaltungsgrundsätze Risikobewertung und Risikominderung
- Maschinen-Richtlinie 2006/42/EG
- Herstellung in zertifiziertem Unternehmen

Trochtelfingen, den 01.05.2023

Roland Bruggen  
Vorname Name, Geschäftsführer

## data sheet / GREIF

- **Model**

<b>serial number</b>	
<b>serial number</b>	
<b>serial number</b>	
<b>serial number</b>	

- **Purchase date**
- **Date of first use**
- **Users**
- **Remarks**
- **Check every 12 months**
- **Date**
- **Name, signature**
- **Date of next review**