

Operating instructions

Click screw series

Pfanzelt Hebetchnik GmbH
Dolche 3
D-87675 Rettenbach aA
Germany

These operating instructions are part of the click screw. The click screw must not be operated without operating instructions. The operating instructions must be made available to users at all times for information. If the click screw is sold, the operating instructions must be included.

1 Table of contents

1	Table of contents	2
2	Basic safety instructions	3
2.1	General Instructions	3
2.2	Intended Use and Application Limits	3
2.3	Obligations of the Employer & Operator.....	4
2.3.1	Hiring	4
2.3.2	Business / Commitment.....	4
2.3.3	Information on the Load Capacity of the Click Screw on Site	5
2.3.4	Load.....	5
2.3.5	Installation of the Click Screw with the Attachment Point	6
2.3.6	Picking Up and Setting Down the Load.....	6
2.3.7	Especially Risky Loads.....	7
2.3.8	Damage Protection	7
2.3.9	Storage	7
2.3.10	Defects.....	7
2.3.11	Repair & Maintenance	7
2.3.12	Tests & checks during operation	9
2.3.13	Determination for discard	10
2.4	Basic Provisions	10
2.5	Other Applicable Documents.....	10
2.6	Staff qualifications	11
2.7	Personal protective equipment.....	11
2.8	Responsibility of the Operator	12
2.9	Safety Briefing	12
2.10	Danger Zones / Sources of Danger.....	13
2.10.1	Danger Zone 1: Crushing Points.....	13
2.10.2	Danger zone 2: Under the lifting equipment (crane, chain hoist, etc.)	13
2.10.3	Dangers due to mechanical influences	13
2.10.4	Danger to other people.....	13
3	General Instructions	14
3.1	ID the click screw.....	14
3.2	Manufacturer and Contact.....	14
3.3	Notes regarding this operating manual	14
3.4	Handling instructions	14
3.5	Documentation	14
3.6	Additional documentation	14
3.7	EC Declaration of Conformity	15
4	Test documents / checklists.....	16
5	Importance of safety instructions and features.	18
6	Glossary	19

2 Basic safety instructions

This chapter contains important information on how to use the click screw safely. Be sure to read the following sections carefully before starting work. In the following chapters, the information given here is assumed to be known.






2.1 General Instructions

- These operating instructions describe the operation of the click screw and are aimed at experienced specialists.
- To use the click screw load suspension devices (e.g. crane hook, lifting strap, shackle, eye bolt, ...) from other suppliers must be connected to it.
- Information and precise explanations on the use, maintenance and care of these components from other suppliers are contained in the original instructions of these suppliers and are binding.
- Further Information (e.g. operational regulations, risks when handling chemicals or information on occupational safety) for the operating personnel in the form of work instructions. These work instructions are not part of these operating instructions.

2.2 Intended Use and Application Limits

The click screw is only to be used for the following application.

- Only approved for lifting loads that have suitable and appropriate holding threads in the load. The thread in the load must be capable of safely and permanently transferring to the load the force acting on load.
- The split thread of the click screw must be able to be freely inserted into the thread of the load and it must be fully immersed in the thread of the load.
- The thread must be clean, free of chips, paint, etc.
- The base body of the click screw must rest on the load. **!!!UNTRANSLATED_CONTENT_START!!!Es dürfen keine Störkonturen der Last an der Click Screw anliegen.!!!UNTRANSLATED_CONTENT_END!!!**
- The click screw is not intended for the transportation of people! It is forbidden to lift people!
- Max. load according to the load capacity on the click screw. The transverse forces are calculated and released with the "folded" bracket / the center of a standard eye bolt in the load direction and are briefly described in the respective operating instructions.
- Use not below -10 ° C and not above + 60 ° C
- Humidity 20% to 90% rel. moist, non-condensing.
- The click screw is designed for 20,000 load changes and must then be checked by a specialist.
- No contact with aggressive substances and chemicals.
- The use of the click screw in the Ex-area (hazardous area) or in a potentially explosive atmosphere is prohibited!
- No use with toxic substances and liquids that are set out in § 9 and / or §10 of the Hazardous Substances Ordinance.
- The use of the click screw is only permitted in the intended manner, any other use is an abuse.

 		Warning!	 
	<p>Damage to the click screw, the load and the load bearing capacity is possible.</p> <p>Danger from falling parts.</p> <ul style="list-style-type: none"> ➤ Read and follow instructions. ➤ For use only by qualified and trained personnel. ➤ Maximum load up to the specified load capacity. ➤ Exclusively for use on a hoist with a load capacity equal to or greater than the load capacity of the click screw. ➤ Lifting / transporting persons is prohibited! ➤ The safety instructions must be observed to avoid accidents! ➤ The national regulations of the country in which the click screw is used must be observed. 		

2.3 Obligations of the Employer & Operator

2.3.1 Hiring




The entrepreneur may only commission click screws to be handled independently by persons who are familiar with these tasks. This includes that the persons concerned have been instructed in accordance with the task and are familiar with the operating manual and the relevant operating instructions.




In particular, the following knowledge and skills must be imparted:



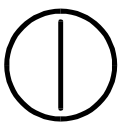
- Estimating the weight of the load and its center of gravity,
- Selection of suitable lifting gear,
- Their load capacity depending on the number of strands, type of attachment and angle of inclination,
- Behavior when working, striking, transporting, setting down and releasing (e.g. securing against unintentional unhooking, avoiding damage to lifting gear, movements),
- storage of lifting gear.

2.3.2 Business / Commitment

- The entrepreneur has to take care of it and the users have to ensure that the click screw is used in such a way that nobody is endangered.
- The potentially endangered group of people includes strikers and people who are in the area of the transport route. (See also BG information "Strikers" (BGI 556), "Ropes and Chains as Slings in Construction Operations" (BGI 876) and "Use of Lifting Straps and Round Slings Made of Man-Made Fibers" (BGI 873).)
- The entrepreneur has to take care of this and the users have to take care that no work is carried out / mounted on raised loads

		Warning!	
	<p>Injury, property damage, and environmental hazards are possible. You can hurt yourself or others or endanger the environment.</p> <ul style="list-style-type: none"> ➤ The operator must check the functions of the click screw when starting work. ➤ All measures described in the operating instructions, and information regarding the operational reliability and points of general safety and accident prevention, which must be attended to or carried out before, during, and after activation, must be strictly followed. Any failure to comply can result in accidents. ➤ If any defects are detected in terms of operational safety and reliability, the click screw is to be shut down or not put into operation immediately. ➤ Safety devices must not be overridden or altered contrary to their intended use. ➤ The click screw can only be operated if all protective devices and safety-relevant devices, e.g. color coding rings, are present and easily recognizable. 		

		Warning!	
	<p>Injury to the body or body parts is possible by crushing.</p> <ul style="list-style-type: none"> ➤ Dropping the load ➤ Approaching people and company equipment. ➤ Approaching people and operating equipment by swinging the load ➤ Injury / damage due to damaged slings. ➤ Mutual danger with other cranes. ➤ Do not stand under suspended loads. ➤ Always follow the operating instructions: Working with cranes 		


		Warning!	
	<ul style="list-style-type: none"> ➤ Before switching on / starting up the lifting equipment, make sure that nobody can be endangered while operating it! ➤ If the operator notices the presence of people who could be endangered by the operation of the lifting equipment, the operator must stop operation immediately and must not start it again until the people are outside the danger zone. ➤ Before each start-up, the operator must make sure that the suspension itself, the load suspension device and the click screw are in a safe and reliable condition. ➤ Special local conditions or special application cases may arise or occur, which were not known at the time this manual was prepared. In such cases the operator is to initiate special measures for safety purposes. 		


2.3.3 Information on the Load Capacity of the Click Screw on Site

- The entrepreneur must keep documents available at the place where the click screw is being used, in which the following information can be found:
 - Load capacity, especially when pulling at an angle
 - Dead weight of the entire load suspension device, provided that this exceeds 5% of the load capacity or 50 kg,
- The information in each section must ensure a clear assignment to the click screw and the load handler or lifting gear (eg type plate + brief operating instructions)
- The documents according to section are not required if the information is clearly recognizable and permanently attached to the load suspension devices and lifting gear.

2.3.4 Load



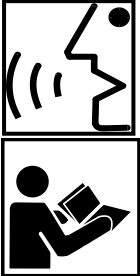
- The entrepreneur has to take care of it and the users have to consider that the load suspension devices are not loaded beyond the load capacity.
- When lifting loads, the load-bearing capacity of the hoist and the weight of the load handler must also be taken into account. Since suspension devices are fixed components of the hoists, their own weight is generally already determined when the permissible load on the hoists is taken into account.

	Note	
	<p>When working with several click screws, only two may be assumed to be load-bearing. This does not apply if it is ensured that the load is evenly distributed to other click screws, or if the permissible weight of the individual load is not exceeded due to uneven load distribution.</p> <ul style="list-style-type: none"> ➤ Observe the maximum load specifications (load capacities) of all components that are load-bearing when lifting the load. 	


	Note	
	<p>An uneven distribution of the load on the click screws of the hanger / LAM is always to be expected if the load is not sufficiently elastic, for asymmetrical loads, if the center of gravity is not in the center or if there is no compensation device (e.g. a compensation rocker).</p> <p>A load deviation of up to 10% in the click screws can be disregarded.</p> <p>Proof that the load is evenly distributed among other click screws or that the permissible weight of the individual load is not exceeded in the event of an uneven load distribution can be provided by trial or calculation.</p> <p>(See also the load capacity information in DIN 695 chain slings; hook chains, ring chains, individual parts; quality class 2 ", DIN 3088" wire ropes made of steel wires; rope slings in hoist operation; safety requirements and testing ", DIN 5688-3" chain slings; hook chains, ring chains, casket chains, Individual parts; quality class 8 ".)</p>	

2.3.5 Installation of the Click Screw with the Attachment Point

- The entrepreneur has to take care of it and the users have to make sure that the click screw is used in such a way that the load is secured against falling.
- Load hooks are to be used in such a way that unintentional unhooking of the load handler, the lifting gear or the load is prevented.





	 Warning!	
	<p>Body parts can be crushed. Danger from falling masses: If the click screw is installed incorrectly at the attachment point,</p> <ul style="list-style-type: none"> ➤ the load can fall. ➤ When installing the attachment points on the click screw, ensure that they are fastened correctly and securely. ➤ The specifications for secure fastening must be strictly observed. ➤ Installation must be done exclusively by trained and instructed personnel. 	




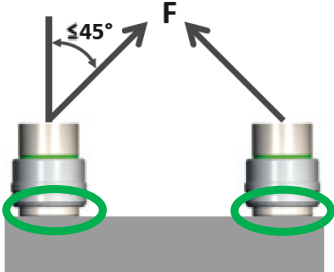
- Check that the lifting equipment, the crane, the chain and the crane hook are in perfect condition.
- Check that the load handling attachment (chain, crossbar, etc.) on the suspension device/crane is in perfect condition.
- Check whether the attachment point on the click screw is in perfect condition.
- Check whether the click screw itself is in perfect condition.
- Check whether the lifting point or the load handler is correctly attached to the click screw.
- Check that the safety catch on the crane hook is securely closed.

	Note	
	<p>Transport damage is possible.</p> <ul style="list-style-type: none"> ➤ Check all assemblies and accessories of the click screw for external transport damage. ➤ If the click screw or components of the click screw are damaged, inform the manufacturer. 	

2.3.6 Picking Up and Setting Down the Load

- Loads must be picked up and lowered in such a way as to prevent accidental overturning, pulling apart, sliding or unrolling of the load.

	 Warning!	 
	<p>The load can fall when lifting. Body parts can be crushed. Danger from falling masses.</p> <ul style="list-style-type: none"> ➤ Do not stand under suspended loads. ➤ Observe the maximum load information (load capacities). ➤ Fasten the load securely with the hoist for transport. ➤ Do not swing or rock loads, move calmly in the direction of the crane. 	

 	 Warning!	<p style="text-align: center;">Example picture</p> 
	<p>The click screw can be damaged when tilted and the load can fall.</p> <ul style="list-style-type: none"> ➤ When sloping the load got to the Click Screw with the base body rest on the load. ➤ Turn the click screw at the diagonal stop after the "click" always by hand in the mounting thread until the base body rests on the load. 	



2.3.7 Especially Risky Loads

- The entrepreneur has to take care of these and the user has to ensure that when transporting loads from which substances can spill if damaged and which are especially dangerous, the only load-bearing equipment that should be used is equipment that will not be damaged when being picked up, transported or put down.
- Dangerous goods whose packaging is damaged must not be picked up.
(Dangerous goods are substances and objects which, in the event of accidents or improper handling during transport, can pose a danger to people, animals or the environment. (Danger labels on containers or in transport documents show whether they are dangerous goods.)

2.3.8 Damage Protection

- The entrepreneur has to take care of it and the users have to ensure that:
 - Load suspension devices are used in such a way that damage that can lead to reduced load-bearing capacity is avoided.
 - Loads should not be placed on the sling if the sling can be damaged by them.
 - Sling and load suspension devices must be stored in such a way that protects them from the weather and aggressive substances because they can impair safety.

2.3.9 Storage

		Caution!	
	<p>Storage The click screw should be stored as follows:</p> <ul style="list-style-type: none"> ➤ Storage in a dry room with minimal temperature fluctuations protected from dust and moisture. ➤ Access to the storage room is only permitted to authorised specialist personnel. 		

2.3.10 Defects

- Users of the click screw must observe theirs for obvious defects during use.
- Obvious defects are, for example, deformations, cracks, breaks, incomplete markings.
- The entrepreneur must ensure that load-bearing equipment with defects that impair safety is withdrawn from further use.
- Regarding the maintenance and monitoring of load suspension devices in use, see also DIN 15 429 "Hoists, Load Suspension Devices, Monitoring in Use".

2.3.11 Repair & Maintenance

The click screw must be operated in such a way that its safety, functionality and availability are guaranteed. This chapter provides a general overview of the maintenance and repair work on the click screw in order to avoid errors and to quickly identify errors that have occurred.

Any errors and defects found must be eliminated immediately.

The maintenance / inspection work carried out must be documented by the operating personnel.

Organize the work according to

- Inspection / Check during operation
- Maintenance
- Inspection
- Repairs

The diagram below gives you an overview of the organisation.

Maintenance Overview




Inspection / Control during operation	Maintenance	Inspection	Repairs
by	by	by	by
Operator / striker *)	Operator / striker *)	Expert / manufacturer	Manufacturer
Used every day	Once a year	Once a year	As needed
Cleaning	Cleaning	Incoming visual inspection	Repair work
Inspect	Lubrication	Load test	
Visual inspection		Functional test	
		Safety check	

*) Operating personnel (operators / strikers)

Much of the work can be carried out by qualified operating personnel who have been commissioned to do this by the operator. For certain jobs, however, further qualifications or knowledge are required that are only available to the manufacturer's personnel. When in doubt, the manufacturer must be commissioned to do the work.

Expert

Special qualifications are required for certain work (e.g. tests on load suspension devices may only be carried out by experts).

		Caution!	
		<p>Injury and environmental hazards are possible. You can hurt yourself or others or endanger the environment.</p> <ul style="list-style-type: none"> ➤ The operating instructions must be available for testing, maintenance and repair. ➤ This work may only be carried out by authorised operating personnel with the necessary knowledge. 	

Maintenance

- If necessary, the click screw should be cleaned with a cloth. No caustic, metal-attacking cleaning agents and no water may be used for cleaning.
- If necessary, the two-part thread of the click screw can be lightly oiled with a non-resin spray oil. Wipe off excess oil with a soft cloth.
- After maintenance, the click screw must be checked to ensure that it is functioning properly.
- The maintenance measures carried out and the result of the subsequent functional test must be documented by the operating personnel.

Regular maintenance work at least once a year

What action should be taken?	Who?
Clean the click screw.	Operator
Lubricate the click screw.	Operator
Visual inspection for legibility of the information: load capacity, serial number, month / year of the last test.	Expert
Thorough visual inspection for wear or damage to the two-part thread and expanding mandrel.	Expert
Thorough visual inspection for wear or damage to the entire click screw.	Expert
Thorough visual inspection for deformations, cracks or breaks on the entire click screw.	Expert
Measure the thread thickness at the lower end of the two-part thread. Check for discard.	Expert
Thorough visual inspection for corrosion damage to the entire click screw.	Expert
Functional check of the sleeve and the two-part thread.	Expert
Functional check of the entire click screw.	Expert
Load test of the click screw with a test load attached.	Expert
Documentation of this recurring test with signature.	Expert

2.3.12 Tests & checks during operation

The operating personnel who operate the click screw must carry out a visual and functional inspection of the click screw at least once a day and check the current status. Observed errors must be documented by the operating personnel and, if necessary, the click screw withdrawn from use.

Visual inspection

The visual inspection serves to identify external defects or damage to the components and assemblies of the click screw / system at an early stage.

Detected defects and damage must be documented by the operating personnel and rectified immediately.


What action should be taken?
Visual inspection for legibility of the information: load capacity, serial number, month / year of the last test.
Visual inspection for wear or damage to the two-part thread and expanding mandrel.
Visual inspection for wear or damage to the entire click screw.
Visual inspection for deformations, cracks or breaks on the entire click screw.
Visual inspection for corrosion damage on the entire click screw.

Functional test

To assess the functionality, it is generally sufficient to carry out the manufacturing process and to ensure that the click screw / system functions properly.

What action should be taken?
Functional check of the entire click screw.

- According to § 3 para. 3 of the Ordinance on Industrial Safety and Health, the employer must determine the type, scope and deadlines for the necessary inspections of work equipment. These tests are intended to systematically identify and eliminate safety deficiencies.
- Inspection before the first start-up
The entrepreneur must ensure that the Click Screw is only put into operation if it has been inspected by a specialist.
- Regular inspections
The entrepreneur has to ensure that the click screws are inspected at intervals of no more than one year / 20,000 load changes by trained people.
- Depending on the operating conditions of the load-bearing equipment, tests may be required at shorter intervals than one year. This applies, for example, in the event of particularly frequent use, increased wear, corrosion, the effects of heat or if increased susceptibility to failure is to be expected.
- Extra Tests
The entrepreneur has to ensure that the entire load suspension equipment is subjected to an extra inspection by a specialist / the manufacturer after damage or special events that can affect the load capacity, as well as after repair.
- Scope of the test
The test before the first start-up and the regular test are essentially visual and functional tests.
 - Breaks, deformations, cracks, damage, heavy wear, corrosion damage,
 - malfunctions in safety devices.
 - Prior to the visual and functional test, the load suspension devices may need to be cleaned. This applies particularly to load-bearing devices that are dirty or are contaminated with substances such as paints or salts from their previous use.
- Proof of Test
The entrepreneur must ensure that proof of the click screw tests is in the vicinity of the click screw and it is not damaged or worn.

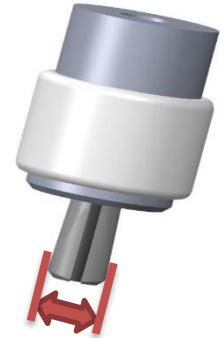
	Note	
	There are tables to document the checks in included the annex to these operating instructions.	

2.3.13 Determination for discard

Incoming visual inspection for wear or damage to the split thread and expanding mandrel.
Incoming visual inspection for wear or damage to the entire click screw.
Incoming visual inspection for deformations, cracks or breaks on the entire click screw.
Incoming visual inspection for corrosion damage to the entire click screw.
Measure the thread thickness at the lower end of the two-part thread.

The visual inspection is particularly concerned with the following defects:

- Cracks in the two-part thread.
- Corrosion scars that impair load capacity.
- Deformation of the two-part thread.
Deformation due to bending. Deformation by twisting
- Wear of the threads.
- Deformation of the threads.
- Missing threads.
- Decrease of the determined thread thickness at the lower end of the two-part thread (wear). Measured when closed:



The discard is different for each type / thread type and is in the briefly described in the operating instructions.

2.4 Basic Provisions

The click screw was manufactured in accordance with the latest technological standards. As with any technical device, incorrect operation or inappropriate behaviour can cause personal injury or property damage.

- The operating instructions must be kept ready for access by the user of the click screw.
- The quick start guide is always ready to hand in the immediate vicinity of the click screw.
- The operating instructions must be kept for as long as the click screw is operated.
- Do not make any changes, additions or modifications to the click screw! This also applies to the installation and settings of safety devices.
- If any changes in the click screw or its operating behavior are detected, stop the click screw immediately.
- Report any discrepancies to the relevant authority/person!
- Comply with all regular tests/inspections prescribed or specified in the operating instructions!
- Observe the prescribed periods for maintenance / servicing or those specified in the operating instructions!
- Have maintenance work carried out by qualified personnel only .
- Have inspections carried out by experts (qualified personnel) only.

2.5 Other Applicable Documents

These operating instructions are only valid in connection with the listed documents.

- Test plan user verification
- brief operating Instructions
- operating instructions for the operator
- regulations of the accident insurer of the company in which the device is operated,
- all documents of the respective operator such as maintenance plans etc.
- In order to be used, load suspension devices / lifting equipment from other suppliers must be connected to the click screw. The original instructions from these suppliers for the use, maintenance and care of these components are binding.

2.6 Staff qualifications

The use of the click screw is only permitted for employees who have been instructed on how to use it, have been instructed on the existing hazards and who have been explicitly instructed to use hoists.

The click screw and the associated operating instructions are only approved for commercial use. Apprentices are not allowed to operate the click screw.

This specialist knowledge is an essential prerequisite for any work with the click screw. These operating instructions contain necessary information.

Minimum age	The minimum age for operation is 18 years.
Transport	The transport of loads using the click screw may only be carried out by experienced specialists. The qualification required to operate lifting equipment (crane etc.) must be fulfilled.
Assembly	The initial assembly may only be carried out by the manufacturer.
Disassembly	Disassembly work may only be carried out by the manufacturer.
Initial commis- sioning	Initial commissioning may only be carried out under the control of authorised spe- cialist personnel.
Recommissioning	Recommissioning must be carried out only under the control of trained and qualified or authorised personnel.
Operating	The click screw may only be operated by instructed and trained personnel with the appropriate authorisation.
Crane operator	Specially trained and instructed personnel with in-depth knowledge of handling lift- ing equipment according to DGUV regulation 52 and DGUV information 209-013
Striker	Specially trained and instructed personnel with in-depth knowledge of how to handle load-handling equipment for fastening loads in accordance with DGUV Information 209-013
Servicing	Maintenance work (servicing and repairs) may only be carried out by trained person- nel with the necessary expertise.
Tests	Tests may only be carried out by qualified experts.
Expert	Checking, maintenance and repairs on the click screw may only be carried out by experts. An expert is someone who can assess and carry out the tasks assigned to him as well as recognize possible dangers based on his many years of professional training and his practical knowledge and experience along with his knowledge of the relevant laws, guidelines, standards and other regulations.
Alcohol, Drugs, Medicine	Staff must <u>not</u> be under the influence of alcohol, drugs or other intoxicants. Also, the staff must <u>not</u> be under the influence of drugs that affect reaction time.
Operating Proce- dures	The local accident prevention regulations and operating procedures must be ad- hered to.
Training, Instruc- tion	Personnel who are to be trained, taught, instructed or educated in the context of general education may only be trained by experts!

2.7 Personal protective equipment

Staff are required to wear the necessary personal protection equipment.

Hands may be injured by being cut or crushed.

- **Sharp parts can injure your hands.**
- **Components can cut your fingers.**
- **Use protective gloves during operation, maintenance and repair.**

Injury possible to feet through crushing.

- **Heavy components may injure your feet.**
- **Components can crush your feet.**
- **Use protective shoes with protective caps.**

2.8 Responsibility of the Operator

To ensure safe operation, the operator must ensure

- that the personnel have the necessary qualifications and receive the necessary training,
- that the personnel have read and understood the operating instructions,
- that the personnel have read and understood the operating instructions for performing the work with the click screw,
- that the personnel have the necessary qualifications and instruction in handling lifting equipment and hoists,
- that the staff has the necessary qualifications and instruction in how to fasten the load,
- that the personnel have access to the operating instructions at all times,
- that the staff can see the quick start guide at any time. This must be kept near the click screw,
- that the local accident prevention regulations are implemented and observed,
- that the local regulations for environmental protection are observed,
- that the operating personnel are instructed by the responsible supervisor,
- that the inspection, maintenance and care intervals are observed,

- that unauthorised people are kept away from the click screw,
- that the click screw is only operated in a safe and functional condition,
- that damage to the click screw is immediately remedied or the damaged click screw is immediately shut down,
- that the operating and maintenance personnel operates, checks and repairs the click screw in such a way

that the click screw poses no danger to people or things.

Technical Changes

- Technical changes to the click screw are not permitted.
- This also applies to the subsequent installation of safety devices.
- Safety devices must not be taken out of service.
- Only original spare parts and original accessories from the manufacturer of the click screw should be used.
- Technical changes must be documented by the operator according to European Union guidelines.

Obligation to notify the manufacturer

If accidents and damage occur to the click screw, which can be attributed to a failure of the click screw, these must be reported to the manufacturer immediately.

Only thus can the manufacturer fulfil its statutory duty to monitor its products.

2.9 Safety Briefing

Injuries, damage to the click screw and environmental hazards are possible.

You can hurt yourself or others or endanger the environment.

- **All employees responsible for operating and maintaining the click screw must be instructed at the click screw before starting work.**
- **Instruction by the responsible supervisor in occupational safety, health and environmental protection must be carried out according to the legal requirements of the country in which the click screw is used.**

The operator is responsible for other required safety equipment, such as:

- **Personal protective equipment**
- **First aid equipment**
- **Fire extinguishers**
- **Safety barriers**
- **Escape route signs**
- **Emergency showers**
- **Operating instructions**
- **Instruction of staff members**

2.10 Danger Zones / Sources of Danger

2.10.1 Danger Zone 1: Crushing Points.

By inserting and locking the click screw into the load the fingers / hands can be squeezed.

The fingers / hands can be squeezed by moving / actuating the click screw

- Do not touch the pinch points. (Marked with yellow arrows)

!!The click screw must not be touched when lifting, transporting and lowering !!

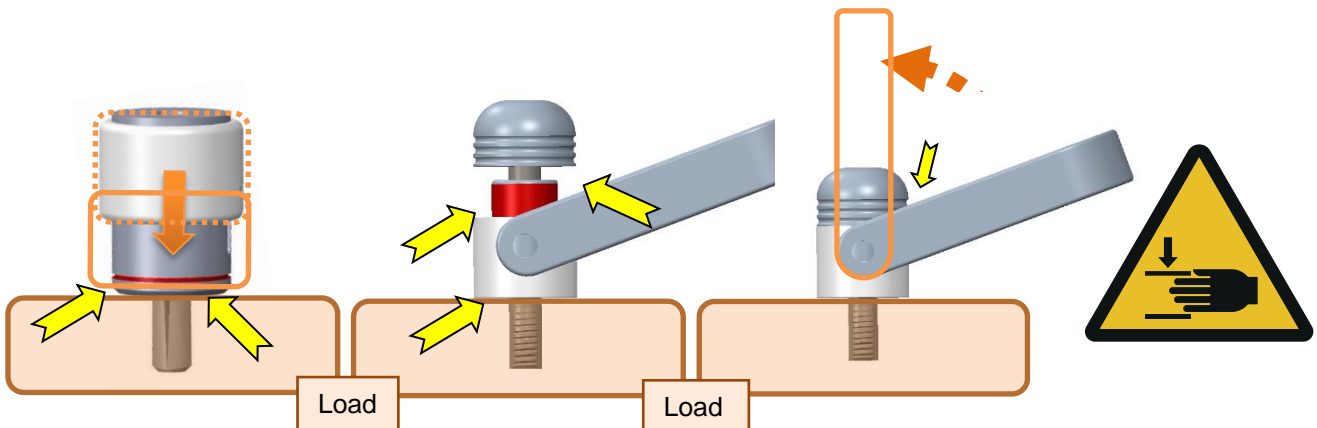


Illustration: Pinch points fingers / hands

2.10.2 Danger zone 2: Under the lifting equipment (crane, chain hoist, etc.)

The entire area under the load-bearing equipment (e.g. crane, chain hoist, etc.) is considered a hazardous area.

Injury to the body or body parts is possible by crushing.

- Dropping the load
- Approaching people and company equipment.
- Approaching people and operating equipment by swinging the load
- Injury to damaged slings.
- Mutual danger with other cranes.
- Do not stand under suspended loads.
- Always follow the operating instructions when it comes to working with cranes.

2.10.3 Dangers due to mechanical influences

Risks related to lifting modules or components

When using the click screw, loads are lifted with the lifting gear (e.g. crane).

Hands may be injured by squeezing.

- Components can crush your fingers / hands.
- Use protective gloves during operation, maintenance and repair.

!!The click screw must not be touched when lifting, transporting and lowering !!

Injury possible to feet through crushing.

- Heavy components may hurt your feet.
- Components can crush your feet.
- Use protective shoes during operation, maintenance and repair.

2.10.4 Danger to other people

Other people or employees can be endangered.


- Make sure that no other employee has his hands in the dangerous areas.
- Make sure that no other employee is endangered by the crane, the load, the equipment or the movements of the load.

3 General Instructions

The directions in these operating instructions refer to the general operation of the click screw described here. Should problems arise that are not dealt with in these operating instructions, the manufacturer can be contacted for more detailed information and technical help.

3.1 ID the click screw

The identification plate on the click screw contains the following information for identification:

Manufacturer	Logo + Pfanzelt Hebeteknik GmbH	
Description	...	The number indicates the size
Serial number	...	Serial number of the manufacturer
Load capacity	... kg	Max. vertical load capacity (load) in kg.
Label		

3.2 Manufacturer and Contact

Pfanzelt Hebeteknik GmbH
Dolche 3, D-87675 Rettenbach a.A.
Contact person: Niko Pfanzelt
Telephone: +4916096486661
Email: info@pfanzelt-hebeteknik.de

3.3 Notes regarding this operating manual

This document is protected by copyright and may not be reprinted either in whole or in part, reproduced, translated, or converted to any electronic medium or machine-readable form without the written permission of the manufacturer.

Copyright © 2019 by Pfanzelt Hebeteknik GmbH
Dolche 3, D-87675 Rettenbach a.A.

3.4 Handling instructions

In this manual, steps are explained with instructions.

Instructions are structured with letters: a) b) c)

Always follow the instructions from top to bottom, this is the only way to ensure safe handling of the click screw.

3.5 Documentation

The complete documentation of the click screw includes numerous documents from the manufacturer. All documents are part of the click screw and must be accessible to operating personnel throughout their lifespan. If the click screw is possibly passed on, the complete documentation must also be supplied.

3.6 Additional documentation

The following (included) documentation supplements this operating manual:

Applicable documents (see chapter 2.6)

To use the click screw, suspension elements from other suppliers must be connected to the click screw.

- The original instructions from these suppliers contain information and precise explanations on the use, maintenance and care of these components and are binding.

When changing the location or selling the click screw, hand over all instructions and documents to the new owner or operator!

3.7 EC Declaration of Conformity

EC Declaration of Conformity



after

Appendix II of the EC Machinery Directive 2006/42 / EC

The

Pfanzelt Hebetchnik GmbH
Dolche 3,
D-87675 Rettenbach a.A.
Germany

declares that the load handler

Labelling:

click screw

Design type:

Lifting anchor (loose load handler)

Type:

CS1.0 M8 to M30 and CS2.0 M6 to M36

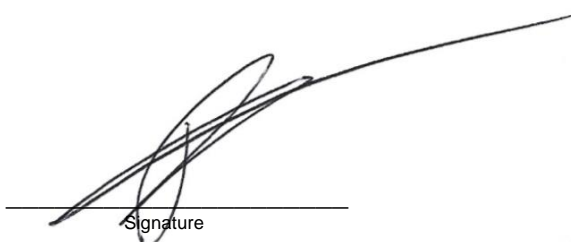
In its design and construction, as well as in the version we have placed on the market, it complies with the basic safety and health requirements of the EC directive mentioned. This declaration shall lose its validity if the load handling equipment is modified without our agreement.

Responsible for documentation:

Pfanzelt Hebetchnik GmbH
Dolche 3
D-87675 Rettenbach aA
Germany

Rettenbach 02/16/2020
Date

Niko Pfanzelt
Name


Signature

4 Test documents / checklists

Click Screw Expert Test					
Manufacturer: Pfanzelt Hebeteknik GmbH Rettenbach Dolche 3 D-87675 Rettenbach a.A Germany	Serial No.				
	Internal- No. User:				
	Cost centre user:				
	Type/ Design:				
	Load capacity (0 °): kg				
	Net weight: kg				
	Test load (1.5 x load capacity): kg				
Year built:					
Periodic inspection by an expert according to BGR 500 chap. 2.8.					
Qualified person / expert within the meaning of the Industrial Safety Ordinance	Name:		Name:		
Perform the test after a maximum of one year.					
Visual inspection for legibility of the information: load capacity, serial number, month / year of the last test.					
Thorough visual inspection for wear or damage to the two-part thread and expanding mandrel.					
Thorough visual inspection for wear or damage to the entire click screw.					
Thorough visual inspection for deformations, cracks or breaks on the entire click screw.					
Thorough visual inspection for corrosion damage to the entire click screw.					
Checking the wear (measuring the thread thickness at the lower end of the two-part thread).					
Functional check of the sleeve and the two-part thread.					
Functional check of the entire click screw.					
Load test of the click screw with a test load attached.					
Documentation of this recurring test with signature.					
Periodic inspection according to BGR 500					
Complaint at the time of the examination:	Inspected		Result		
	on:	by:	OK	Not OK	Set down
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Prior to the visual and functional test, the load suspension devices may need to be cleaned. This applies in particular to load-bearing equipment that is soiled or contaminated with substances, e.g. paint or grease, from its previous use.



Minimum scope of testing for the assembly test

Type/ Design:	Serial No.
Internal- No. User:	Cost centre user:

Questions about how the test is carried out	Yes	No	Does not apply
External impression of the click screw			
Is the click screw in a clean and tidy condition?			
Is the click screw obviously undamaged?			
Testing done by an expert according to BGR 500 chap. 2.8.			
Visual inspection of the information: Are the load-bearing capacity, serial number, month / year of the last test easy to read?			
Thorough visual inspection of the split thread and expanding mandrel. Can wear damage or corrosion damage be identified?			
Thorough visual inspection of the split thread and expanding mandrel. Can deformations, cracks or breaks be identified?			
Thorough visual inspection of the entire click screw. Can wear damage or corrosion damage be identified?			
Thorough visual inspection of the entire click screw. Can deformations, cracks or breaks be identified?			
Checking the wear (measuring the thread thickness at the lower end of the two-part thread).			
Load test of the click screw with a test load attached.			
Mechanical Check of the Click Screw			
Are all supporting parts firm?			
Are all screwed parts tight?			
Are all moving parts easy to move?			
Function of the Click Screw			
Are all parts that can be moved by hand in working order?			
Is the sequence of click screw functions in the proper order?			
Is the actuation easy to slide up and down and can the bracket be moved if necessary?			
Are the expanding mandrel and the split thread moving properly?			
Can the characteristic click be heard and felt when the click screw is closed?			
Can the characteristic click of the click screw be heard and felt when the click screw is opened			
Attachment of the load suspension point / load suspension device			
Is the load capacity of the lifting point, lifting gear or load suspension device greater than 1 times the load capacity of the click screw?			
If several click screws are attached to one lifting device or load handler: Is the load capacity of the lifting device / load handler greater than the sum of 1 times the load capacity of all click screws combined?			
Are all screws tightened to the intended tightening torque?			
Are all components securely attached?			
Check that the click screw is working properly.			
Test carried out			
Have all screw connections been checked and tightened if necessary?			
Have the load tests been carried out with the prescribed test load?			
Have all safety-relevant components been checked and are they OK?			
Have all safety-relevant functions been checked and are they OK?			
Machine meets the requirements: machine is OK.			

Test carried out: Expert examiner


Place, date

Name in block letters




Signature

5 Importance of safety instructions and features.

Warnings are surrounded by a border with an additional field on either side. They are structured according to the following principle:

Danger Symbol		Highlighted signal word with signal color	Other symbols if necessary
	<u>Type and source of hazard</u> Explanation of the nature and source of the hazard > Measures to prevent the hazard		

The warnings are graded with warning signs and signal words regarding the severity of the potential hazard as follows:







		Danger!	
	<u>Imminent danger</u> resulting in serious bodily injury or death. <u>Potentially hazardous situation</u> which could result in severe personal injury or death.		
		Warning!	
	<u>Potentially hazardous situation</u> which could result in bodily injury or serious bodily injury.		
		Caution!	
	<u>Potentially hazardous situation</u> which could result in minor personal injury. <u>Potentially hazardous situation</u> , in which the component, the machine or something in the environment could be damaged.		
		Note	
	<u>Application Notes</u> and other useful information that facilitate the intended use of the Click Screw 2.0.		






Safety labels

- Warning signs (triangular and yellow) warn people of a risk or danger.
- Prohibition signs (circular and red border with crossbars) prohibit behavior that creates a danger.
- Mandatory signs (circular and blue) require certain behavior.
- First aid signs (rectangular, green with white symbol) indicate white first aid facilities.
- Hazardous material symbols (rectangular and orange) warn of the dangers posed by hazardous substances.

The icons for warnings, prohibitions and requirements in this manual have the following meanings:

Safety labels used

	Danger! Attention! Caution! Hazard locations / Dangerous situation		Work that only customer service or specially trained or trained specialist personnel may carry out
	Danger from suspended load		Read the manual/operating instructions
	Risk of hand injuries		Follow instructions

	Do not stand under suspended loads		Note: Damage possible
	Wear protective gloves		Note: Information for work
	Protective shoes must be worn		

6 Glossary

As far as possible, attention is paid to the uniform designation of the same parts or processes on the click screw and in the written documentation. The following technical terms and abbreviations are therefore used in these operating instructions.

Terms and abbreviations used

Term	Declaration
Component	Part of the workpiece
Operator	The operator is the company or department that has Click Screw 2.0. The operator is authorised to give instructions to the operating personnel.
Operating instructions	The operating instructions are the present document of the manufacturer of the Click Screw 2.0. The operating manual contains instructions and information for operating personnel on how to use the Click Screw 2.0 or part of the Click Screw 2.0 effectively and safely.
Working instructions	Document that contains the operator's binding instructions to the operating personnel. It may also be necessary to observe the operating instructions.
Operating personnel	Operating personnel are all persons who are instructed by the operator to take actions with the Click Screw 2.0. These actions include, for example, using, operating, testing or maintaining the Click Screw 2.0, etc.
Risk	Danger when operating a Click Screw 2.0, which cannot be removed constructively with reasonable effort or which inevitably results from the use of the Click Screw 2.0 in combination with lifting gear.
Click Screw	All parts of the Click Screw 2.0 including all components. They work together in their entirety.
Manufacturer	Manufacturer of the Click Screw 2.0.
Supplier	The supplier supplies anchor points, load suspension devices or suspension devices that are required to use the Click Screw 2.0 and are connected to the Click Screw 2.0.
Original Instruction	Document of the supplier of the attachment point, load suspension device or lifting gear, which provides information on the effective and safe handling of the component.
Control	The control of the lifting gear. The control system is the interface between people and the lifting gear. The Click Screw 2.0 has no control.
Load	The part that is connected to the lifting gear with the Click Screw 2.0 and other load handling devices.