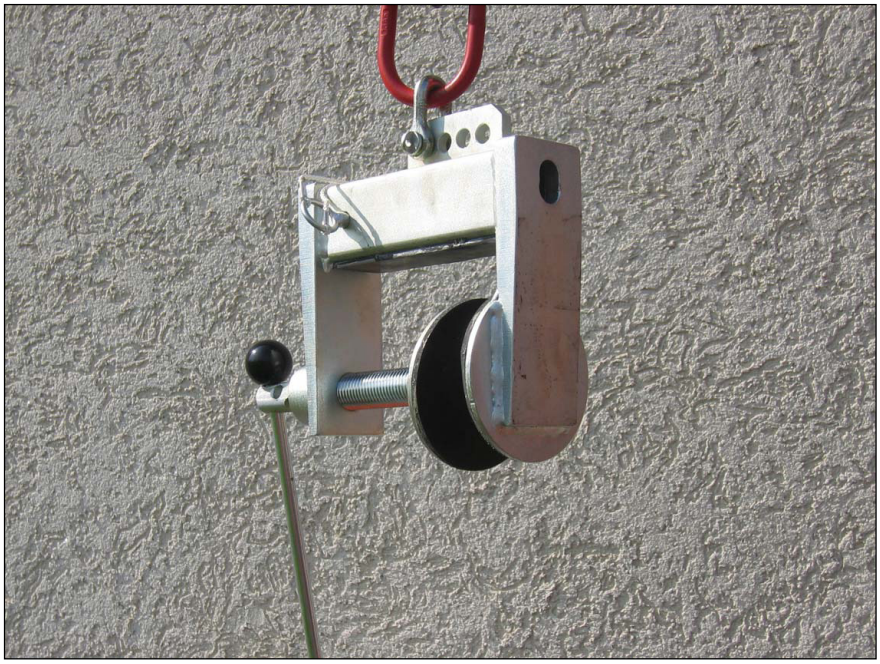
**These operating instructions are for use on the c o n s t r u c t i o n s i t e !**

**Caution** Please refer to the operating instructions and safety regulations prior to operation!



## Table Of Contents

# 1. Definitions

**Danger** indicates a dangerous situation. If it is not avoided, it will cause death or major injuries.
**Caution** indicates a dangerous situation. If it is not avoided, it can cause light or minor injuries or material damage. It also indicates incorrect use.

# 2. Safety Regulations

## 2.1. Utilisation As Directed

- The screw clamp may only be used for the vertical transport of stone- or concrete plates with parallel surfaces. **It is only allowed to handle one stone-or concrete plate at a time.** It is also possible to erect horizontal stone- or concrete plates and to put down upright stone- or concrete plates. No other type of use is allowed!
- Current safety regulations and the Accident Prevention Regulations must be respected.
- **The screw clamp may only be used near to the ground.**
- The plate must be of sufficient construction to withstand the forces during transport.

**Danger** The following is prohibited. There is a danger of the load being released:

- **Do not exceed** the safe working load.
- **Do not transport** several stone- or concrete plates at the same time.
- **Do not transport** smooth, wet, oily, dirty or icy stone- or concrete plates.
- No personnel are allowed to remain under the load or within the danger area: **life threatening!**
- **Do not transport** stone- or concrete plates whose specification do not correspond with the screw clamp (e.g. wall thickness, weight) or do not transport any other elements.
- **Do not transport** conical elements.
- **Do not use** the equipment to transport people: **life threatening!**
- **Do not use** the equipment to transport animals.
- Always lift load vertically. It is unsafe to lift at an angle.
- **Do not lift** load outside the centre of gravity,
- **Do not allow** loads to break free, be pulled or dragged.
- **Do not allow** sudden movements and swaying of the load.
- Always lift jaw vertically. It is unsafe to lift at an angle.

**Ensure that only fully finished, set and dry (never icy) stone- or concrete plates are transported.**

## 2.2 Utilisation In Line With Safety Regulations

Although the screw clamp is technologically advanced in its construction, however, misuse or use against manufacturer's instructions may prove hazardous.

**Danger** The following must be respected:

- The contractor may only allow people who have been fully trained and instructed in its use to operate the equipment.
- Prior to operation of the equipment the operator must read in full and understand both the operating instructions and the safety regulations.
- Always work with safety in mind and avoid risks.

- **Never exceed** the safe working load.
- **Never use** the equipment, if there are any defects which may affect the safety of the screw clamp. No opportunity should arise whereby it is possible to use the equipment prior to repair.
- **Do not remove** any name plates from the screw clamp. Replace illegible or damaged plates.
- The individual protective clothing must comply with safety regulations: safety clothes, safety helmet, protective gloves and shoes.

## 2.3 Safety Measures

**Caution** The following must be respected:

- Only personnel who have been fully trained or instructed in its use can operate the equipment.
- At regular intervals, check that work is being carried out safely.
- Store the operating instructions within easy reach of where the equipment is used.
- Do not allow the equipment to get dirty.

## 2.4 Duties Of The Operator Of The Material Handling Lifting Equipment

- The material handling lifting equipment and the rigging equipment must be in good working condition to operate safely.
- **Do not exceed** the safe working load of the material handling lifting equipment/rigging equipment!
- The operator must make sure that the load is safely fitted in and that no personnel remain within the hazardous area of the load to be lifted.
- The operator must be able to see the entire working area. If not, seek assistance.
- Only authorised personnel may operate the material handling lifting equipment.

## 2.5 Visual And Functional Inspection

- Prior to any operation, the functioning and the working condition of the material handling lifting equipment and the screw clamp must be examined. **Should there be any defects which may affect the safety of the equipment, the screw clamp must only be used following repair!** No opportunity should arise whereby it is possible to use the equipment prior to repair.
- In case of cracks, distortions or other defects found with the screw clamp, the equipment must be switched off immediately: **safety hazard!**

## 2.6 Inspections

Inspection prior to initial operation

The contractor must ensure that the screw clamp is only operated once it has been checked by an expert and only if defects have been repaired.

Regular inspections

The contractor must ensure that the screw clamp is checked by an expert at least once year.

Special inspections

The contractor must ensure that following damage or particular incidents, which may have affected the safe working load of the equipment, as well as following repairs, the screw clamp is subjected to a special inspection by an expert.

Recording

The contractor must ensure that all inspections are recorded. We recommend that all regular inspections and repairs are carried out by the manufacturer.

## 3. Specification

| Order No. | Model | Safe Working Load | Clamping Range | Weight |
|---|---|---|---|---|
| 309 050 | SC 0.5-17 | 500 kg | 60 - 170 mm | 12 kg |

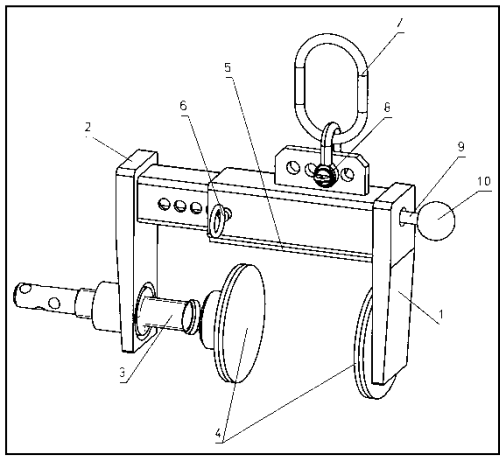
The WIMAG screw clamp is designed for the safe transport of stone- or concrete plates with parallel surfaces close to the ground. The suspension eye (7) of the screw clamp can be fitted in any material handling lifting equipment. The equipment is completely assembled and ready for use. It must be taken care that the safe working load and the clamping range are not exceeded. The position of the suspension eye (7) can be individually adjusted.

The screw clamp has one narrow and fixed jaw in order to erect horizontal stones- or concrete plates.

## 4. Initial Operation And Control

The screw clamp is delivered fully assembled. Remove package material and check quantity, and damage, if any.

### 4.1 Adjustment Of The Screw Clamp




- Carry out functional and visual inspection prior to every operation.
- Turn spindle (3) as far as possible anticlockwise to achieve the maximum opening width.
- Adjust opening width required by means of the bolt (6).
- Place screw clamp in the centre of the stone- or concrete plate and move the fixed jaw (1) as close as possible to the stone- or concrete plate.
- Turn spindle (3) clockwise by means of the tensioning lever (9) until both jaws are pressed against the stone- or concrete plate to be lifted.
- Fit in suspension eye (7) into the material handling lifting equipment and lift for max. 10 cm.

**Danger** If the screw clamp slips, put down load and readjust by tightening screw clamp **otherwise there is a danger of the load being released!**

- Only if the stone- or concrete plate is safely held by the clamp and if it does not slip, the stone- or concrete plate can be slowly and carefully lifted close to the ground. If this is not the case, put down load and readjust again.
- The position of the suspension eye can be adjusted by moving the shackle (8).

**Caution** **Resecure shackle!**

- After putting down secure load, to prevent load falling. Turn spindle (3) anticlockwise using the tensioning lever (9). Now the screw clamp can be removed.
- Also horizontal stone- or concrete plates can be grabbed and erected, move fixed jaw (1) underneath the stone- or concrete plate and tension in the centre

### 4.2 Control Of The Adjusted Screw Clamp

- Carry out functional and visual inspection prior to every operation.
- After the adjustment of the clamping range and suspension eye (7) according to item 4.1 the screw clamp is ready for the lifting of the corresponding width of stone- or concrete plate. If the width of the elements to be lifted are different to the width adjusted, the adjusting procedure must be carried out again according to item 4.1, **otherwise there is a danger of the load being released!**
- Place screw clamp in the centre of the stone- or concrete plate, turn spindle (3) clockwise using the tensioning lever (9) until both clamping jaws are tightly pressed against the stone- or concrete plate to be lifted. Now lift stone- or concrete plate for max. 10 cm.

**Caution** If the screw clamp slips, put down load and readjust by tightening screw clamp, **otherwise there is a danger of the load being released!**

- Only if the stone- or concrete plate is safely held by the clamp and it does not slip, the stone- or concrete plate can be slowly and carefully lifted close to the ground. If this is not the case, put down load and readjust again.
- After putting down secure load, to prevent load falling. Turn spindle (3) anticlockwise using the tensioning lever (9). Now the screw clamp can be removed.

## 5. Maintenance

- Do not allow the clamp to become dirty.
- The complete unit must be protected against water and humidity.
- Only original WIMAG spare parts may be used.

To guarantee perfect operation of the clamp, the following maintenance works must be regularly carried out prior to operation:

| | |
|---|---|
| **After delivery:** | Complete inspection |
| **Before each operation:** | Visual and functional inspection:<br>- Examine tightening of all parts, distortions, cracks in welded joints.<br>- Examine that spindle is easy to move.<br>- Examine safety elements and replace them, if necessary. |
| **Weekly:** | - Clean and lubricate spindle. |
| **Monthly:** | - Clean and lubricate spindle.<br>- Remove dirt and grease of rubber profile and examine wear and tear; replace them, if necessary.<br>- Repaint, if necessary. |

## 6. Troubleshooting

As with all technical devices, the screw clamp may develop failures. Please consult the following checklist in the first instance in order to find out whether the failure can be easily solved. If not, please contact the manufacturer.

| Problem | Solution |
|---|---|
| The clamp does not tension. | 1. Check correct adjustment of the clamping range.<br>2. Clamping force is too low.<br>3. The dimensions of the load do not correspond to the clamping range.<br>4. The weight of the load is too high. |
| The clamping force is too low. | 1. The rubber profiles of the clamping jaws are dirty or worn.<br>2. The spindle is hard to move: lubricate with oil.<br>3. Clamping force is too low.<br>4. The surface of the load is too smooth.. |
| The load is not in vertical position. | 1. Position screw clamp in the centre of the stone- or concrete plate.<br>2. Change position of the suspension eye. |

## 7. Repairs

- Repairs may only be carried out by experts or by the manufacturer.
- Only original spare parts may be used, otherwise the warranty will become invalid.
- Do not carry out any alterations or modifications.
- A special inspection must be carried out by an expert or by qualified personnel before the equipment can be operated again.

## 8. Warranty And Liability

The warranty and the liability are no longer valid, if the equipment has not been assembled, installed, operated, checked and maintained according to these instructions.

Any doubts about instructions should be raised with the manufacturer prior to use.

Prior to every operation the user must ensure that

- the equipment is suitable for the intended operation,
- the functioning and the working condition of the equipment is examined,
- the loads are suitable to be handled.

Failures are to be reported in writing to the supplier immediately, at the latest two weeks following delivery.

It is unacceptable for the client to repair failures or have them repaired by a third party, and then request to be reimbursed for the costs.

According to the manufacturer's general contract conditions the equipment is under warranty for a period of six months from the invoice date. Wearing parts are not covered by the warranty.

The manufacturer is not responsible for any damage occurring in the event of an installation error or insufficient training by a third party, negligence, misuse or excessive stress of the equipment.

It is within the responsibility of the client to check prior to operation the functional condition of the equipment, the suitability of the load to be handled as well as any damage to the load before and after transport/installation.

The manufacturer does not take responsibility for any additional claims, for instance, the right to compensation for damage not caused to the equipment itself.

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www.wimag.de

# Inspection Sheet

| | |
|---|---|
| Model | |
| Serial number | |
| Year of construction | |
| Contractor | |
| Date of first operation | |

The inspection of the load handling equipment is carried out by an expert according to BGR 500 Chapter 2.8 of January 2004.

## Inspection And Maintenance According To BGR 500 Chapter 2.8

| | |
|---|---|
| Inspection prior to initial operation according to 3.15.1: | Date Signature of expert |
| Special inspection according to 3.15.3: | Date Signature of expert |
| Regular inspection according to 3.15.2: | Result: Date Signature of expert |
| Regular inspection according to 3.15.2: | Result: Date Signature of expert |
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| Regular inspection according to 3.15.2: | Result: Date Signature of expert |

# EC Declaration Of Conformity
# As Defined By Machinery Directive 2006/42/EC

We hereby declare that the design and the construction of the equipment mentioned hereafter complies with the following Directive.

This declaration will become invalid, if a modification of the equipment is carried out which has not been agreed with us as manufacturer.

The validity will also expire, if the equipment is not used as directed in accordance with manufacturer's relevant operating instructions and/or all regular inspections are not carried out according to BGR 500 Chapter 2.8.

| | |
|---|---|
| Description: | **WIMAG Screw Clamp** |
| Directives: | EC Machinery Directive 2006/42/EC of 17 May 2006 |
| Harmonised Standards: | DIN EN 13 155 |
| National Standards: | BGR 500 Chapter 2.8 of January 2004 |

As stipulated in Annex VII of the EC Machinery Directive the following documents are available for inspection:

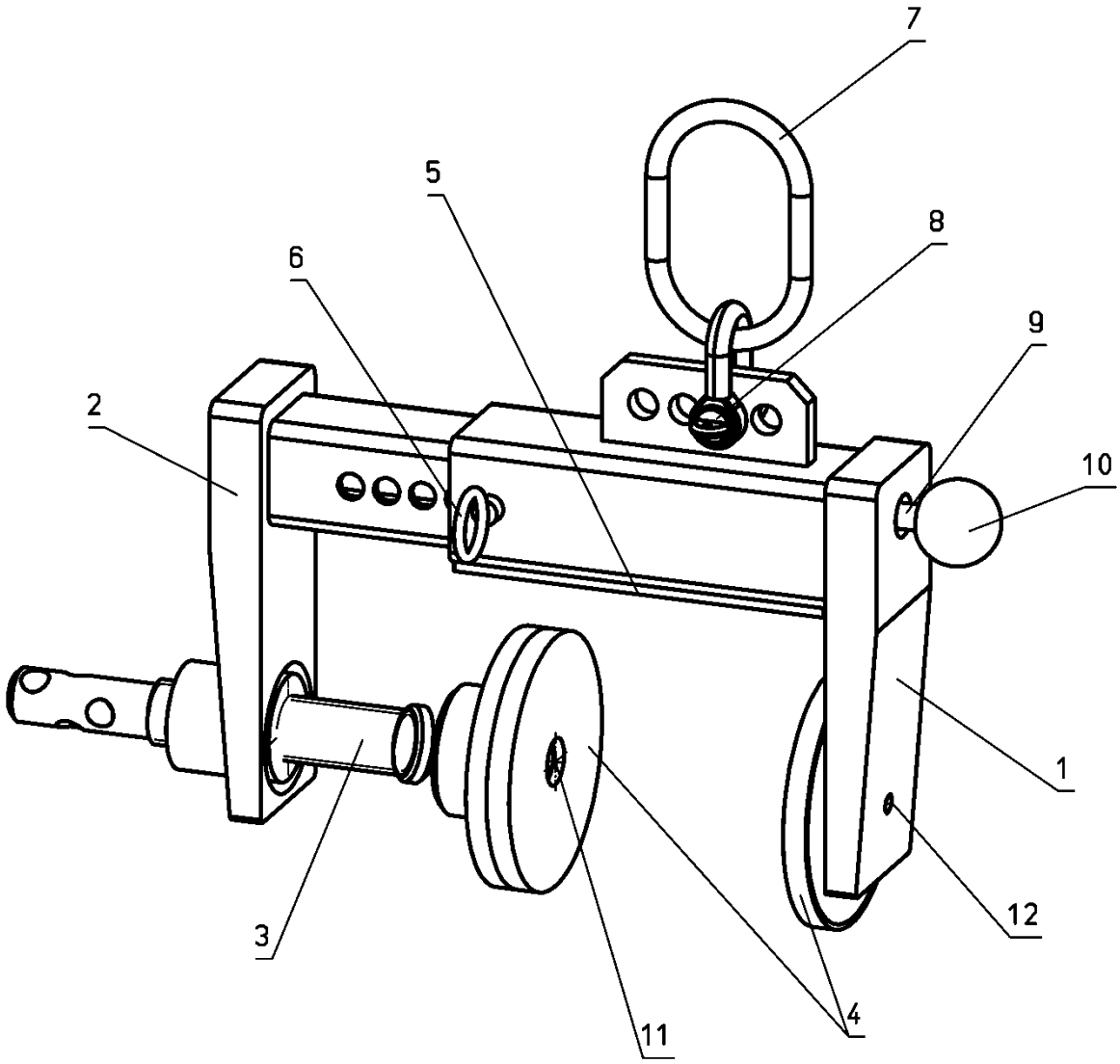
- Operating instruction
- Production drawings
- Production plans
- Static verification
- Certification of welding (DIN 18 800 Part 7)

The CE symbol is marked on the equipment.

Obernburg, 29 December 2009

Gerhard Gressbach
(Dipl. Ing.)

# E 309 SPARE PARTS LIST — Screw Clamp




| Item No. | Description | SC 0,5-17 309 050 | | | SC 1,0-26 309 100 | | |
|---|---|---|---|---|---|---|---|
| | | Unit | Order No. | Price €/Unit | Unit | Order No. | Price €/Unit |
| 1 | Fixed jaw | 1 | 049 208 | | 1 | 049 773 | |
| 2 | Adjustable jaw | 1 | 049 209 | | 1 | 049 776 | |
| 3 | Spindle | 1 | 049 211 | | 1 | 049 211 | |
| 4 | Plain washer | 2 | 046 884 | | 2 | 048 467 | |
| 5 | Rubber coating | 1 | 049 213 | | 1 | 049 778 | |
| 6 | Bolt | 1 | 049 182 | | 1 | 043 401 | |
| 7 | Suspension eye | 1 | 052 864 | | 1 | 052 864 | |
| 8 | Shackle | 1 | 052 302 | | 1 | 049 970 | |
| 9 | Tensioning lever | 1 | 049 212 | | 1 | 049 777 | |
| 10 | Spherical button | 1 | 053 303 | | 1 | 053 303 | |
| 11 | Locking nut | 1 | 049 695 | | 1 | 049 695 | |
| 12 | Locking nut | 1 | 049 693 | | 1 | 049 693 | |