



Operating Instructions

- Barrel turning tongs Type FWZ -



Original Operating Instructions

Barrel turning tongs

Type FWZ



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Operating Instructions

- Barrel turning tongs Type FWZ -



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Internal use is permitted for the operator of the machine in connection with the operation of the machine.

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Operating Instructions

- Barrel turning tongs Type FWZ -



Table of contents

	Page
1 Basic information.....	4
1.1 Information on the operating instructions.....	4
1.2 Abbreviations, symbols and technical terms.....	4
1.3 Conformity / standards and guidelines.....	5
1.4 Warranty and liability.....	5
2 Safety by the machine	5
2.1 Definitions.....	5
2.2 Warnings, symbols and markings.....	6
2.3 Working safely with the machine	7
3 Description of the Barrel turning tongs type FWZ.....	11
3.1 Intended use.....	11
3.2 Improper use	11
3.3 Structure Barrel turning tongs type FWZ	12
3.4 Technical data	13
4 Setup and commissioning.....	13
5 Operation.....	14
5.1 Safety information.....	14
5.2 Barrel transport Barrel turning tongs type FWZ.....	15
6 Troubleshooting and fault elimination.....	16
7 Maintenance.....	16
7.1 Safety.....	16
7.2 Maintenance.....	16
7.3 Repair.....	17
8 Decommissioning, disassembly and disposal	17
9 Spare parts list.....	18
10 Appendix	18
10.1 Declaration of conformity	18

Operating Instructions

- Barrel turning tongs Type FWZ -



1 Basic information

1.1 Information on the operating instructions

- It is necessary to read through the operating instructions carefully before starting any work and store them in the immediate vicinity of the system, accessible to the authorised personnel at all times. The operator of the load handling device determines who is authorised as a user.
- The operating instructions provide information about:
 - description of the dangers and instructions for safe handling of the LAM,
 - the intended use of the LAM,
 - the structure and description,
 - the mode of operation of the LAM,
 - measures to establish operational readiness and operational safety,
 - operation of the LAM,
 - maintenance and testing of the LAM.
- They are a component of the machine and therefore must be supplied with the machine.
- For better explanation, illustrations may be shown not to scale and differ from the actual model.

1.2 Abbreviations, symbols and technical terms



Note

The Note symbol is used to identify information on operation of the LAM and provides useful tips and recommendations, as well as information for efficient, economical, fault-free operation.

The following abbreviations are used in these operating instructions:

Abbreviation	Meaning
BAUER	BAUER Südlohn GmbH
FWZ	Barrel turning tongs
LAM	Load handling device
PPE	Personal protective equipment

The following design elements are used in these operating instructions:

Symbol	Meaning
(1)	numbered action steps
⇒	Result after performing action steps
\$	Enumeration
-	Enumeration, subgroup
<i>Italic text</i>	Indicates preconditions that must be fulfilled before an action description

Operating Instructions

- Barrel turning tongs Type FWZ -



Symbol	Meaning
Chapter <i>number</i> + <i>title</i>	Refers to a section in this manual or further applicable documents

Warnings are shown as follows in these operating instructions:

Each signal word is highlighted in a background colour (red, orange or yellow) according to the degree of risk of the hazardous situation.

Warning
symbol
opt. PPE
symbol(s)

SIGNAL WORD!

Nature, source and cause of a danger

Consequences of non-compliance

➤ Measures to prevent the danger; prohibitions

1.3 Conformity / standards and guidelines

This LAM has been designed and built according to state-of-the-art technology and recognised safety regulations. Conformity of the machine with the EU guidelines and standards is confirmed through the CE declaration.

1.4 Warranty and liability



Note

Conformity in accordance with the Machinery Directive 2006/42/EC and the CE marking in accordance with the Machinery Directive 2006/42/EC become invalid if unauthorised alterations of the components or their assemblies are made.

The manufacturer assumes no liability for damage due to failure to follow these operating instructions.

2 Safety by the machine



Note

This machine has been designed and built according to state-of-the-art technology and recognised safety regulations. Nonetheless, dangers to the life and limb of the user or third parties or negative effects on the machine or other property can occur during use.

2.1 Definitions

2.1.1 Warning

A warning is used to warn of a situation that can lead to injury or death.

Operating Instructions

- Barrel turning tongs Type FWZ -



2.1.2 Personal protective equipment (PPE)

If personal protective equipment (PPE) is required to be worn, this is indicated through additional symbols in the warnings of these operating instructions and the product safety labels/safety signs on the machine.

2.2 Warnings, symbols and markings

2.2.1 Understand warnings

DANGER!



... refers to a dangerous situation with a high degree of risk that will lead to death or serious injury if not prevented.

WARNING!



... refers to a dangerous situation with a medium degree of risk that could lead to death or serious injury if not prevented.

CAUTION!



... refers to a dangerous situation with a low degree of risk that could lead to slight or moderate injury if not prevented.

ATTENTION



... refers to a possibly dangerous situation that can lead to property damage if not prevented.

2.2.2 Understand warning symbols

The following symbols can be used in the operating instructions according to the type of danger:



General warning of danger.



Warning: Suspended load!

Operating Instructions

- Barrel turning tongs Type FWZ -



Warning: Danger of crushing!



Warning: Hand injury!



Warning: Obstacles on the floor!

2.2.3 Personal protective equipment symbols

The following symbols can be used in the operating instructions according to the area of use:



Wear helmet!



Use hand protection.



Wear safety shoes!



Read the operating manual!

2.2.4 Further symbols



Observe attachment points!

2.3 Working safely with the machine

The following section “Basic warnings and safety notes” deals with all warnings and safety notes that are valid for all stages of the machine’s life cycle. Warnings that are associated directly with an activity are an exception to this.

Operating Instructions

- Barrel turning tongs Type FWZ -



2.3.1 Basic warnings and safety notes

Information for the operator

This operating manual must always be stored within easy reach and readily available at the operating site of the LAM.

Local accident prevention regulations must be observed during all work on the LAM. Furthermore, observe the DGUV provisions, in particular DGUV 100-500, chapter 2.8, and DGUV information (per the latest engineering standards), or the nationally applicable regulations.

Personnel working with the LAM must be older than 18 years of age and familiar with the functionality and application of the LAM, as well as the dangers arising from it.

The respective personnel must have received instruction on the task, and must be familiar with the operating manual, as well as any further applicable internal instructions. They must possess the following knowledge and skills in particular:

- Ability to assess the weight of the load,
- Ability to assess the location of the centre of gravity of loads,
- Knowledge of the lifting gear available,
- Load bearing capacity of the lifting gear, depending on the number of lines, type of attachment and angle of inclination,
- Selection of the correct lifting gear,
- Protection against unintentional unhooking,
- Conduct during attachment, lifting and transportation,
- Signals and gestures,
- Avoiding damage to lifting gear,
- Conduct when lowering and releasing lifting gear,
- Storage of lifting gear.

The operator is responsible for sufficient lighting in the working and transport areas!

For additional purchased components, the manufacturer's indications must be observed!

The LAM is designed for max. 16000 load changes. Upon reaching the number of load changes, the LAM must be put out of operation and scrapped, or - if possible - fully overhauled.

Information for the user

Before use, check the LAM for damage, e.g. for deformations, cracks, breakage, incomplete labelling.

The LAM shall only be used for the specified load shapes and geometries, see chapter 3.1 *Intended use*.

The specified load bearing capacity must not be exceeded, see chapter 3.4 *Technical data*.

Select the load bearing capacity and attachment type of all lifting accessories and accessory parts in accordance with the technical data for the LAM.

Operating Instructions

- Barrel turning tongs Type FWZ -



Lifting and load handling devices must be stored such that they are protected from weathering and aggressive substances, if safety may be impaired by these influences.

LAM and lifting gear with mechanical damage or deformations must not be further used. For permissible cross section reductions refer to DGUV 100-500, chapter 2.8, or the national regulations.

LAM is only intended for vertical lifting, diagonal pulling is prohibited.

When moving the LAM, prevent oscillations or impacts with objects or building parts.

Lifting and transporting loads with particular hazards

Refer also in this regard to DGUV 100-500, chapter 2.8, no. 3.10 (D), or the national regulations.

Hazardous substances are substances and items that may pose danger to persons, animals or the environment in case of accidents or with incorrect handling during transport. These may be:

- Explosive substances and items; items loaded with explosive substances; igniting devices, fireworks and other goods,
- Compressed, liquefied and pressurised gases,
- Flammable liquids,
- Flammable solids; self-igniting substances; substances that produce flammable gases in contact with water,
- Igniting (oxidising) substances; organic peroxide,
- Toxic, repellent and contagious substances,
- Radioactive substances,
- Caustic substances,
- Other hazardous substances and items.

Note the following in this regard:

- ⇒ Use load-bearing equipment that will not cause damage to packaging when lifting, transporting or setting down, e.g. when transporting glass bottles, use suitable loading drawers or special transport frames.
- ⇒ In case of hazardous goods with damaged packaging, only pick these up with load handling devices that will prevent any leakage or escape.
- ⇒ Do not pick up hazardous goods with load handling devices that only hold the load through magnetic, friction or suction forces.

Operating Instructions

- Barrel turning tongs Type FWZ -



DANGER!



Falling or uncontrolled parts during lifting, transportation and lowering.

Risk of fatal injury and various risks of injury

- Persons are forbidden from dwelling under the suspended load or in the hazard area of the load!
- Transporting loads over the top of persons is prohibited.
- Observe the information about the intended attachment points!
- Make sure the LAM is securely attached! Observe the centre of mass!
- Only use approved lifting devices and lifting gear with sufficient load bearing capacity!
- Lifting gear must not be damaged!
- Adjust the movement of loads to the weather conditions!

WARNING!



Unauthorised alterations of the load handling devices can endanger safe operation of the LAM!

Risk of death and various injury hazards!

- Do not perform unauthorised design changes; all changes must be discussed with and approved by BAUER.
- Modifications of the protective/safety equipment.

WARNING!



Unexpected or unintentional load movements, load toppling, misconduct by the operator.

Injuries due to crushing and bumping.



- Maintain a sufficient distance when lifting, transporting and lowering the load.
- Wear PPE (protective gloves, safety footwear and hard hat).

CAUTION!



Risk of injury due to slipping, tripping and falling.

- Do not leave any materials or tools lying on walkways or driveways.
- Immediately absorb/remove oil and other slip-enhancing materials in walking areas; use oil binding agents.

Operating Instructions

- Barrel turning tongs Type FWZ -



2.3.2 Machine marking



Note

The year of manufacture and the manufacturer's number can be found in the type plate of the Barrel turning tongs. This data is not noted in the operating instructions.

The declaration of conformity and the operating manual are restricted to the LAM supplied. A crane or lifting system is not part of this declaration of conformity.

Identification of the LAM

Manufacturer	Bauer® Südlohn
Designation	Barrel turning tongs type FWZ
Manufacturer's number	see order
Mass of the load handling device without a load (painted/galvanised)	FWZ 60: 22 kg / 24 kg FWZ 200: 58 kg / 62 kg
Year of manufacture	see order
Load-bearing capacity	FWZ 60: 100 kg / FWZ 200: 300 kg
Permitted grip width	FWZ 60: 370-400 mm FWZ 200: 570-600 mm
Minimum load	20 kg

Fig. 2-1: Type plate Barrel turning tongs (example illustration)

2.3.3 Signage on the machine

The Barrel turning tongs bears the following pictogram:

- Pictogram - "Read the operating manual".

3 Description of the Barrel turning tongs type FWZ

3.1 Intended use

The Barrel turning tongs type FWZ are intended exclusively for the vertical and horizontal lifting and transportation of 60/200 l steel tight-head barrels and steel lidded barrels.

The Barrel turning tongs is to be used exclusively within the performance limits listed in section 3.4 *Technical data*.

3.2 Improper use

Improper use includes in particular:

- Any use other than the use of the machine described as "Intended use" in sec. 3.1 and further sections of these operating instructions without written permission of the manufacturer.
- Leaving the load in the raised condition.
- Use, installation, operation, maintenance or repair other than as described.

Operating Instructions

- Barrel turning tongs Type FWZ -



- Work performed by unqualified personnel.
- Use of unapproved, inappropriate accessories.
- Use of parts other than the original spare parts or accessories.
- Failure to follow safety and operating instructions, occupational safety and accident prevention regulations or applicable statutory regulations.
- Failure to eliminate faults in a timely fashion that could negatively impact safety.
- Lifting other loads or loads with different properties.
- Lifting the load in a manner or way that differs from the specifications.
- Transporting persons.
- Using the LAM on construction sites.
- Operating in an environment with a special atmosphere (high humidity, explosive, briny, corrosive, alkaline, etc.).

3.3 Structure Barrel turning tongs type FWZ

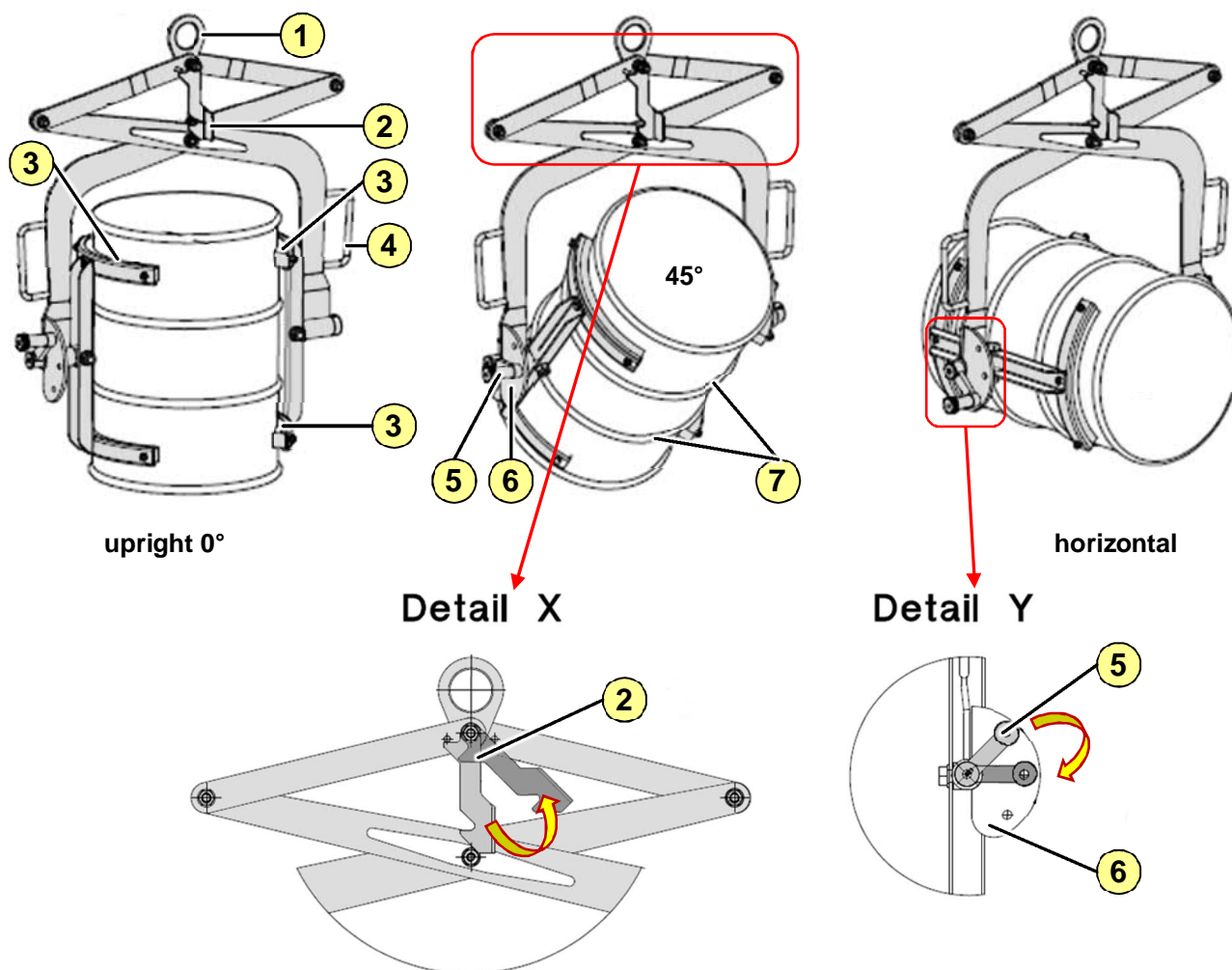


Fig. 3-1: Assemblies Barrel turning tongs type FWZ

Operating Instructions

- Barrel turning tongs Type FWZ -



Item	Description
1	Crane lug
2	Safety lever
3	Retainer with rubber coating
4	Handle (2x)
5	Switch crank
6	Ratchet disc
7	Barrel bead

3.4 Technical data

Dimensions	Type	FWZ 60	FWZ 200	
Length [mm]		320	425	
Width [mm]		805	1105	
Height [mm]		905	1350	
Permitted grip width [mm]		370-400	570-600	
Operating data				
Tare weight, painted / galvanised [kg]		22 / 24	58 / 62	
Load-bearing capacity [kg]		100	300	
Permissible max. number of load changes		16,000		
Environmental conditions				
Permissible ambient temperature		-20°C to max. 40°C		

4 Setup and commissioning

The LAM is delivered in completely assembled form, is ready for operation without special commissioning and can be used with the specified lifting equipment (crane).

Before initial use, the operator checks whether the LAM corresponds to the model ordered and that the scope of delivery is complete.

A qualified person must perform an inspection before first commissioning. Only perform commissioning once any detected defects have been eliminated.

Operating Instructions

- Barrel turning tongs Type FWZ -



5 Operation

5.1 Safety information



DANGER!

Persons inside the transport and movement range of the LAM or the transportation of persons on the load / with the LAM.

Risk of death and danger of crushing during lifting and transportation.

- Never step underneath the raised container!
- Only lift and transport with direct visual monitoring!
- If unobstructed visibility is not possible, have a second person located outside the danger zone provide guidance.
- Ensure that persons maintain a sufficient safe distance.
- It is prohibited to transport persons on the load / with the LAM.



WARNING!

Use of unapproved lifting equipment may cause the load to fall!

Risk of fatal injury and crushing hazard in the movement area of the container.

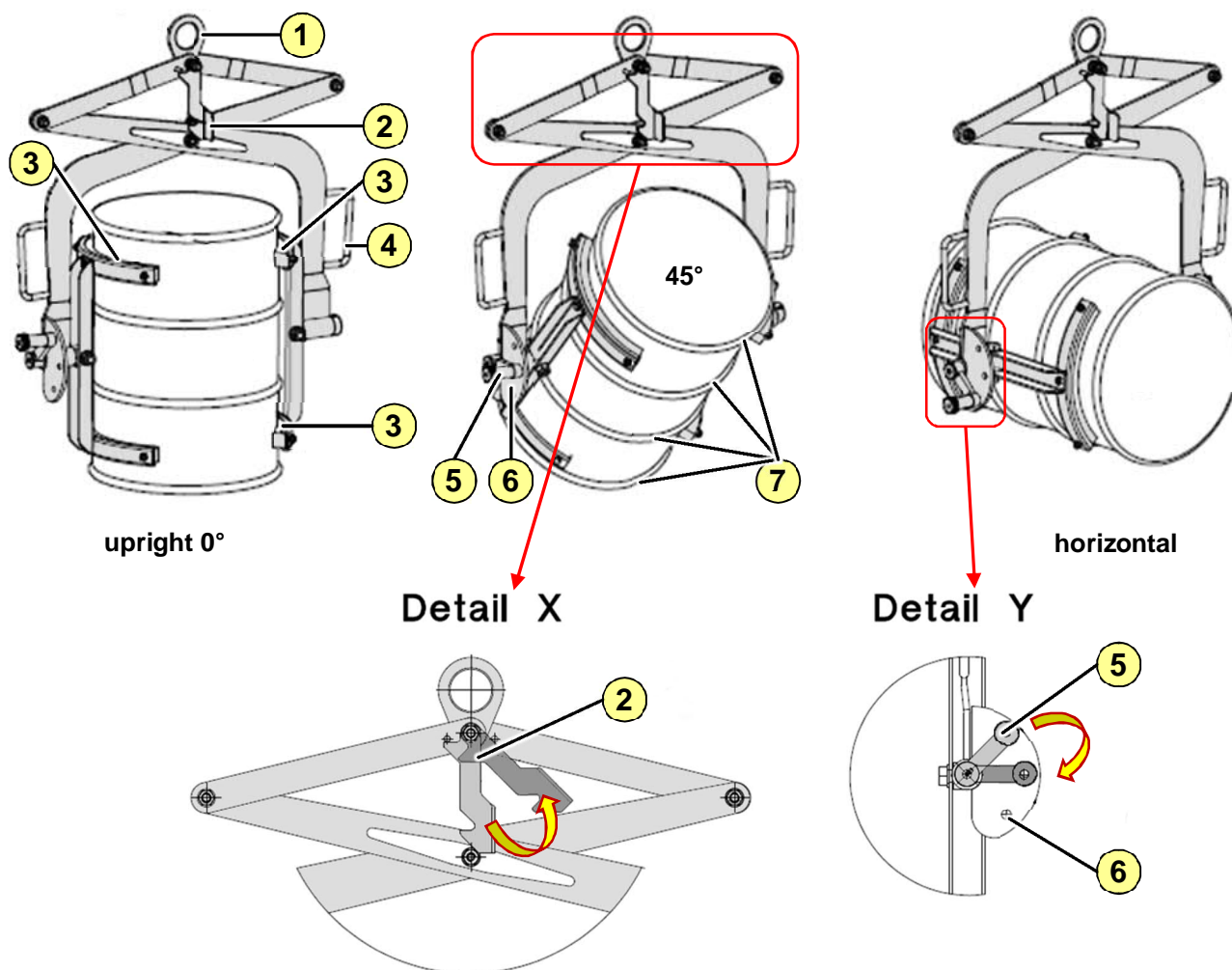
- Only use permissible, undamaged lifting devices and lifting gear with sufficient load-bearing capacity.

Operating Instructions

- Barrel turning tongs Type FWZ -



5.2 Barrel transport Barrel turning tongs type FWZ



- Attach the lifting equipment to the crane lug (1) with the hook lock.
WARNING: Only use tested and technically faultless lifting equipment.
- Turn the retainers with rubber coating (3) into position such that they face the barrel.
- Drive towards the barrel. The retainers (3) must be positioned between the beads (7).
- As soon as the FWZ hangs in position at the barrel, release the safety lever (2, detail X).
⇒ The barrel is clamped by the tongs.
- Lift the barrel with the lifting gear and slowly drive it to the location of use. When doing so, guide the FWZ by the handle (4).
ATTENTION: Only move barrels in an upright position.
ATTENTION: Avoid oscillating movements.
- At the location of use, lift the barrel sufficiently that it moves without difficulty.
- Pull on the switch crank (5, detail Y).
⇒ The locking pin in the ratchet disc (6) is released.
- Turn the barrel by hand and allow the locking pin to latch back in the ratchet plate (6, detail Y) in the corresponding hole.

Operating Instructions

- Barrel turning tongs Type FWZ -



- Empty the barrel.
- Pull on the switch crank (5).
 - ⇒ The locking pin in the ratchet disc (6) is released.
- Swivel the barrel back into an upright position and allow the locking pin to latch in place.
ATTENTION: Avoid uncontrolled swivel movements.
- Drive the barrel with the lifting gear to the set-down location. When doing so, guide the FWZ by the handle (4).
- Set the barrel down and lower the FWZ.
 - ⇒ The FWZ is automatically held in an open position.
- Lower the FWZ further, until the safety lever (2, detail X) latches and the FWZ is held in an open position.

6 Troubleshooting and fault elimination

After unusual incidents such as an overload, the Barrel turning tongs must be visually inspected by a qualified person, even outside of the specified inspection periods.

The Barrel turning tongs must be checked for mechanical damage and deformations, and the supervisor must be informed if applicable.

Deformed parts may only be repaired after consultation with the manufacturer.

7 Maintenance

7.1 Safety



WARNING!

Servicing and repair work performed improperly can lead to various risks of injury!

- Have repair work performed only by authorised personnel.
- Use specified spare parts.

7.2 Maintenance

The Barrel turning tongs and the attachment elements must be checked by an expert for good condition, function, completeness, deformation, wear, damage and cracks as a minimum:

- Before first commissioning
- At least yearly
- After a repair or renewed assembly

The results must be documented in an inspection report.

Operating Instructions

- Barrel turning tongs Type FWZ -



7.2.1 Maintenance plan and work (operator)

Any parts that have become defective and must be replaced during maintenance can be found on the assembly drawing.

Inspection and maintenance checklist

Frequency	Object	Activity
Daily	Complete Barrel turning tongs	Check for wear and defects of the LAM Verify proper function
Monthly	Complete Barrel turning tongs	Check for wear, permanent deformation, cracks and corrosion that negatively impacts the function or load-bearing capacity

7.2.2 Maintenance plan and work (specialist personnel)

The following maintenance work must only be performed by specialist personnel of BAUER or an authority commissioned by BAUER.

Object	Activity
Complete Barrel turning tongs	Inspection by qualified person (in accordance with BetrSich [Industrial Safety Ordinance] sec. 10 and 11)*
Safety equipment	Inspection by qualified person

*All inspections must be documented. Barrel turning tongs with identified defects must be de-commissioned immediately.

7.3 Repair

Repairs of the Barrel turning tongs must be performed exclusively by the manufacturer or authorities commissioned by it.

Only original spare parts must be used.

8 Decommissioning, disassembly and disposal

No special requirements on decommissioning, disassembly and disposal exist.

Operating Instructions

- Barrel turning tongs Type FWZ -



9 Spare parts list



Ordering spare parts:

Bauer GmbH
Eichendorffstr. 62
D-46354 Südlohn
Tel.: +49 2862 709 – 0
Fax: +49 2862 709 – 156
Email: info@bauer-suedlohn.de

To process your order quickly, we need the following information:

- our spare part item number
- our spare part item name
- order quantity
- name of the container, manufacturing number and year of manufacture

10 Appendix

10.1 Declaration of conformity

The declaration of conformity is included in the delivery in the machine documentation.