

Translation of the Original Operating Instructions

ZRO 250/ZRO 500



Fig.1

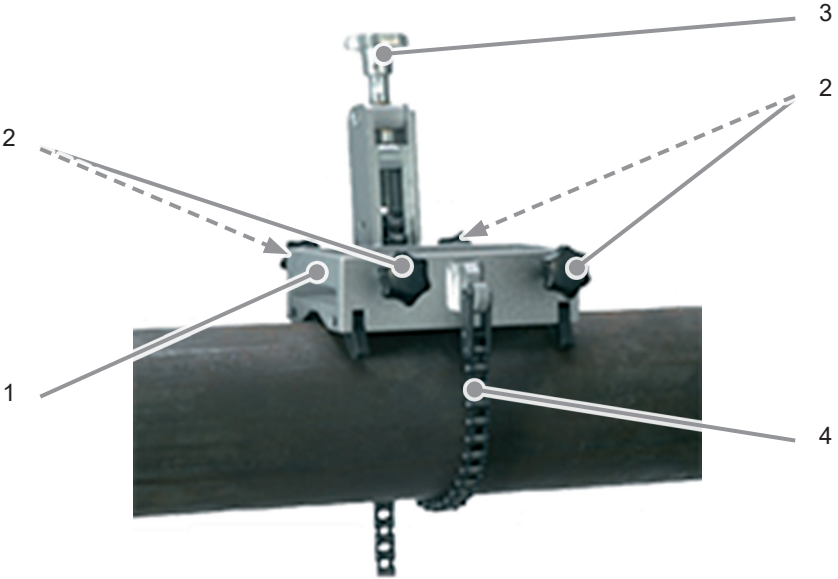


Fig.2

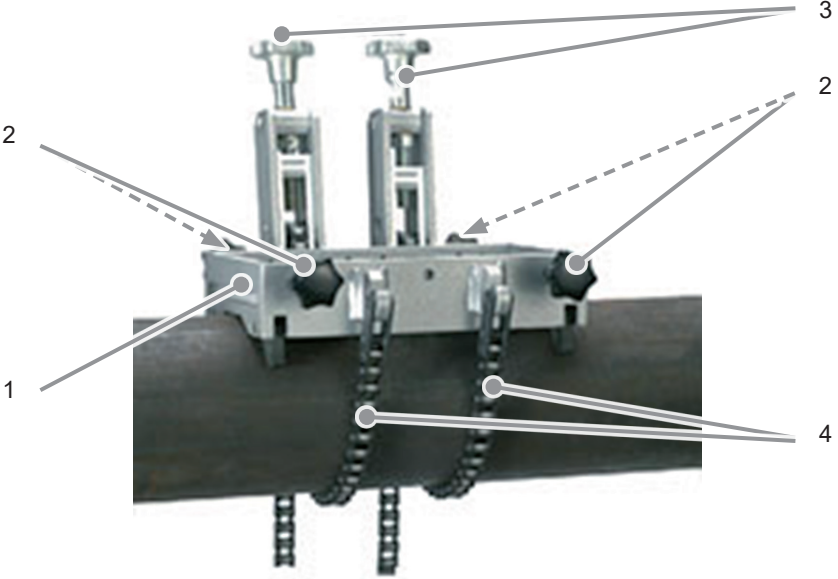


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Dear Customer,

Before using the clamping equipment, please read the instructions contained in these operating instructions on startup, safety, intended use as well as cleaning and care.

The links and illustrations in these instructions refer to the illustrations on the inside of the cover.

Keep these operating instructions for later use and pass them onto the next owner of the machine.

General instructions

Copyright

This document is subject to copyright. Duplication or reprinting, even in part as well as reproduction of the illustrations, even if modified, is only permitted with written consent of the manufacturer.

Liability disclaimer

All technical information, data and instructions contained in these operating instructions for startup, operation and care correspond to the latest requirements at the time of printing.

The manufacturer assumes no liability for damage or injury resulting from failure to observe the operating instructions, use for other than the intended purpose, unprofessional repairs, unauthorised modifications or use of non-approved spare parts and accessories, tools and lubricants.

Instructions on disposal



The packaging materials used can be recycled. When no longer required, dispose of the packing materials according to local environmental regulations.



This product may not be disposed of in the European Union via the normal household refuse. Dispose of the device via communal collection points.

NOTE

- ▶ Observe the disposal instructions from the lubricant manufacturer.

Safety warning structure

The following warnings are used in these operating instructions:

WARNING

A warning of this category indicates a potentially dangerous situation.

If the dangerous situation is not avoided, it may lead to injuries.

- ▶ Follow the instructions in this warning to avoid possible danger of injury to persons.

ATTENTION

A warning of this category indicates potential danger to property.

If the situation is not avoided, it may lead to material damage.

- ▶ Follow the instructions in this warning to avoid material damage.

NOTE

- ▶ A note indicates additional information that simplifies the use of the clamping equipment.

Intended use

The clamping equipment is intended to be used for fixing a magnetic drilling machine to a pipe during drilling.

The magnetic drilling machine must be fixed to the magnetic surface of the holder by magnetic force.

The pipe diameter must correspond to the technical specifications of the clamping area.

Any use other than previously stated is considered as improper use.

WARNING

Danger due to improper use!

If not used for its intended purpose and/or used in any other way, the clamping equipment may be or become a source of danger.

- ▶ Use the clamping equipment only for its intended purpose.
- ▶ Observe the procedures described in these operating instructions.

No claims of any kind will be accepted for damage resulting from use of the system for other than its intended purpose.

The risk must be borne solely by the user.

NOTE

- ▶ If used commercially, pay attention to compliance with the accident prevention and occupational safety regulations.

Safety

Fundamental safety instructions

- Persons, who are unable to safely operate the clamping equipment due to their physical, mental or motor abilities, may only use the clamping equipment under the supervision or instruction of a person responsible.
- Children are not permitted to use the clamping equipment.

- Before using, check the clamping equipment for damage and do not put damaged clamping equipment into operation.
- Before beginning work, check the condition of the clamping equipment and the fixture if necessary.
- Repairs to the clamping equipment may only be carried out by an authorised specialist workshop or by the works customer service. Improper repairs can cause considerable danger to the user.
- Repairs to the clamping machine during the guarantee period may only be performed by a customer service authorised by the manufacturer, otherwise the guarantee is invalid.
- Defective parts may only be replaced with original spare parts. Only these parts ensure that the safety requirements are met.
- Do not leave the combination of the clamping equipment and magnetic drilling machine unsupervised during operation.
- Store the clamping equipment in a dry, temperate location out of the reach of children.
- Do not allow the clamping equipment to stand outside and do not expose to moisture.
- Make sure that your work area is sufficiently lit (>300 Lux).
- Pay attention to cleanliness at the workplace.
- Keep the clamping equipment clean.
- Only use suitable magnetic drilling machine for the intended tasks.
- Also pay attention to the documentation from the manufacturer of the magnetic drilling machine.

Risk of injury!

WARNING

Improper handling of the clamping equipment increases the risk of injury!

Pay attention to the following safety instructions in order not to injure others or yourself:

- ▶ Operate the clamping equipment only with the protective equipment stipulated in these operating instructions (see section **Personal protective equipment**).
- ▶ Pay attention to the safety instructions from the manufacturer of the magnetic drilling machine used.
- ▶ Before using each time, check for secure seating of the electromagnets of the magnetic drilling machine on the machine holder of the clamping equipment see section **Preparation**).
- ▶ Check for secure seating of the clamping equipment on the pipe.

Preventing damage

ATTENTION

Potential damage to property if the clamping equipment is improperly used!

Observe the following instructions to avoid damage to property:

- ▶ During setup of the clamping equipment, make sure that the chain/s is/ are sufficiently tensioned. Otherwise the unit can go out of control and slip away.
- ▶ Check for secure seating of the clamping equipment on the pipe.

Personal protective equipment

NOTE

- ▶ Pay attention to the local regulations on personal protective equipment.

Components / delivery contents

Overview of the ZRO 250 (fig.1)

1	Holder for the magnetic drilling machine
2	Adjusting screw
3	Clamping spindle
4	Chain

Scope of supply

ZRO 250 clamping equipment

Overview of the ZRO 500 (fig.2)

1	Holder for the magnetic drilling machine
2	Adjusting screw
3	Clamping spindle
4	Chain

Scope of supply

ZRO 500 clamping equipment

Before using for the first time

Transport inspection

NOTE

- ▶ Check for visible signs of damage or missing items (see section **Scope of delivery**) on delivery. Report an incomplete or damaged delivery to your dealer/supplier immediately.

Preparation

This section contains important instructions on the required preparation before beginning any work.

Setting up the clamping equipment

WARNING

Improper setting up of the clamping equipment increases the risk of injury!

Pay attention to the following safety instructions in order not to injure others or yourself:

- ▶ Check for secure seating of the clamping equipment on the pipe.
 - ▶ Secure the clamping equipment against slipping, toppling and falling over.
- ◆ Turn the chain tensioner on the tensioning spindle (3) completely to the upper position (release).
 - ◆ Put the clamping equipment onto the pipe to be processed and hook into the chain immediately.
 - ◆ Subsequently pull the chain(s) (4) through as far as possible. Only pre-tension the chain lightly with the chain tensioner (3) and bring the pipe clamping equipment into position.
 - ◆ The chain (for ZRO 500, two units) can be tightened after positioning.

Attaching the magnetic drilling machine

WARNING

Risk of injury!

Considerable risk of injury when handling the magnetic drilling machine.

- ▶ Pay attention to the warnings in the documentation of the manufacturer.

WARNING

Risk of injury!

Risk of injury in the event of an improperly clamped magnetic drilling machine.

- ▶ Only use the magnetic drilling machine when the magnetic clamps completely cover the upper surface of the machine holder (1).
 - ▶ Adapt the position of the magnetic drilling machine on the upper side of the machine holder (1) so that the magnet clamps cover the entire surface and the tool or the drilling spindle does not collide with the clamping equipment.
- ◆ Check for secure seating of the clamping equipment.
 - ◆ Attach the magnetic drilling machine onto the machine holder (1).
 - ◆ Set up the position of the magnetic drilling machine with the help of the adjusting screw (4).

- ◆ Switch on the magnetic clamps of the drilling machine.

NOTE

- ▶ Pay attention to the documentation from the manufacturer of the magnetic drilling machine.

Remove the magnetic drilling machine.

- ◆ Switch off the magnetic clamps of the drilling machine.
- ◆ Remove the magnetic drilling machine.

NOTE

- ▶ Pay attention to the documentation from the manufacturer of the magnetic drilling machine.

Preparing the magnet drilling machine.**NOTE**

- ▶ Pay attention to the documentation from the manufacturer of the magnetic drilling machine.

Using**⚠ WARNING****Risk of injury due to improper use!**

Pay attention to the following safety instructions in order not to injure others or yourself:

- ▶ Before using each time, check for firm stability of the clamping equipment (see section **Preparation**).
- ▶ Before using each time, check for secure seating of the electromagnets of the magnetic drilling machine on the machine holder of the clamping equipment see section **Preparation**).
- ▶ Secure the clamping equipment and the magnetic drilling machine used against slipping, toppling and falling over.

Drilling with the magnetic drilling machine**NOTE**

Pay attention to the instructions from the manufacturer when using the magnetic drilling machine.

Removing the clamping equipment

- ◆ Release the clamping spindle (3).
- ◆ Unhook the chain(s) (4) and take the clamping equipment off the pipe.

Cleaning

WARNING

- ▶ When using compressed air for cleaning, wear protective goggles and gloves and protect other persons in the working area.

ATTENTION

- ▶ Never immerse the clamping equipment in water or other liquids.

After each use

- ◆ Remove the magnetic drilling machine.
- ◆ Remove swarf and coolant residues.
- ◆ Clean the clamping equipment.
- ◆ Store the clamping equipment as described in the section “**Storage**” on page 9.

Maintenance

WARNING

Danger caused by unqualified repairs!

Unqualified repairs can lead to considerable danger for the user and cause damage to the clamping equipment.

- ▶ Repairs may only be carried out by the works customer service or by specialists trained by the manufacturer.
- ◆ Check the clamping spindle of the clamping equipment at regular intervals and grease if required.

Customer service/service

Should you have any questions on customer service/service, please contact BDS. We will be happy to give you the address of your nearest service partner.

Storage

If you do not intend to use the clamping equipment for a longer period of time, clean it as described in the section “**Cleaning**”. Store the clamping equipment and all accessories at a dry, clean and frost-free location.

Troubleshooting

NOTE

If you have problems with the clamping equipment that cannot be resolved, please contact the customer service.

Technical data

Model	ZRO 250	ZRO 500	Unit
Approx. net weight.	6.6	12.0	kg
Approved magnetic drilling machine from BDS Maschinen GmbH	MAB 455 MAB 485 MAB 525	MAB 825 MAB 845 MAB 855	
Clamping area (permissible pipe diameter)	80 - 250	150 - 500	mm
Chain length	900	1650	mm

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