

Instruction Manual

Manual Pipe notcher

— MRA 2

— MRA 3



MRA 2

MRA - SERIES

Imprint

Product identification

Pipe notcher	Item number
MRA 2	3772992
MRA 3	3772993

Manufacturer

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Original operating instructions

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1 Introduction

With the purchase of the Manual Pipe notcher you have made a good choice.

Thoroughly read the operating instructions before commissioning the Manual Pipe notcher.

It informs you about the proper commissioning, the intended use as well as the safe and efficient operation and maintenance of your device.

The operating instructions are part of the Manual Pipe notcher. It must always be stored at the place of use of the device. In addition, the local accident prevention regulations and general safety regulations apply to the area of application of the device.

The illustrations in these operating instructions serve the general comprehension and may deviate from the actual type.

1.1 Copyright

The contents of these instructions are copyright. Their application is admissible in the frame the device utilisation. An application beyond the described application is not allowed without written approval of the manufacturer.

For the protection of our products, we shall register trademark, patent and design rights, as this is possible in individual cases. We strongly oppose any infringement of our intellectual property.

1.2 Customer service

Please contact your dealer if you have any questions about your machine or technical information. There you will be happy to help with expert advice and information.

Germany:

Stürmer Maschinen GmbH
Dr.-Robert-Pfleger-Str. 26
D-96103 Hallstadt

Repair-Service:

Fax: 0049 (0) 951 96555-111
E-Mail: service@stuermer-maschinen.de

Spare part orders:

Fax: 0049 (0) 951 96555-119
E-Mail: ersatzteile@stuermer-maschinen.de

We are always interested in valuable experience and knowledge gained from using the application which then could be shared and be valuable to develop our products even further.

1.3 Limitation of liability

All information and notes in these operating instructions were summarised taking the applicable standards and rules, the state-of-the-art and our long-term knowledge and experiences into consideration.

In the following cases the manufacturer is not liable for damages:

- Non-observance of the operating instructions,
- Inappropriate use,
- Use of untrained staff,
- Unauthorised modifications,
- Technical changes,
- Use of not allowed spare parts.

The actual scope of delivery may deviate from the explanations and presentations described here in case of special models, when using additional ordering options or due to latest technical modifications.

The obligations agreed in the delivery contract, the general terms and conditions as well as the delivery conditions of the manufacturer and the legal regulations at the time of the conclusion of the contract are applicable.

2 Safety

This paragraph will give you an overview of all important safety packages for the protection of persons as well as for the safe and undisturbed operation. Other task-based safety notes are included in the individual chapters.

2.1 Symbol explanation

Safety instructions

The safety notes in these operating instructions are highlighted by symbols. The safety notes are introduced by signal words which express the concern of the risk.



DANGER!

This combination of symbol and signal words indicate an imminently dangerous situation which may lead to death or severe injuries if they are not avoided.



WARNING!

This combination of symbol and signal words indicate a possibly dangerous situation which may lead to death or severe injuries if they are not avoided.



CAUTION!

This combination of symbol and signal words indicate a possibly dangerous situation which may lead to minor or light injuries if they are not avoided.



NOTE!

This combination of symbol and signal words indicate a possibly dangerous situation which may lead to property and environmental damages if they are not avoided.

Tips and recommendations



Tips and recommendations

This symbol highlights useful tips and recommendations as well as information for an efficient and trouble-free operation.

It is necessary to observe the safety notes quoted in these operating instructions in order to reduce the risks for personal injuries and damages to property.

2.2 Qualification of the staff

This manual is intended for:

- the operators,
- the staff for maintenance work.



Tips and recommendations

All persons involved in operation and maintenance must

- have the required qualifications.
- Pay close attention to these operating instructions.

Only persons who are expected to carry out this work reliably are permitted for all work. Persons whose reactivity z. As influenced by drugs, alcohol or drugs are not allowed.

This manual identifies the qualifications of the persons listed below for the different tasks:

Operator:

The operator has been instructed in a briefing by the operator about the tasks assigned to him and possible dangers of improper behavior. The operator may only carry out tasks that go beyond normal operation if this is specified in this operating manual and the operator has expressly entrusted this to him.

Personnel:

Due to their technical training, knowledge and experience as well as knowledge of the relevant standards and regulations, qualified personnel are in a position to carry out the work assigned to them and to recognize potential dangers independently and to avoid hazards.

Manufacturer:

Certain work may only be carried out by specialist personnel of the manufacturer. Other personnel are not authorized to carry out this work. To carry out the work, contact our customer service.

2.3 Personal protective equipment

The personal protective equipment serves to protect persons against impairments of safety and health while working. The staff has to wear personal protective equipment while performing different works on and with the device which are indicated in the individual paragraphs of these instructions.

The personal protective equipment is explained in the following paragraph:



Eye protection

The goggles protect the eyes from flying parts and liquid splashes.



Protective gloves

The protective gloves serve to protect the hands against sharp components as well as against friction, abrasions or deep injuries.

2.4 General safety instructions

Please note the following:

- Keep the machine and its working environment always clean. Ensure adequate lighting.
- In principle, secure your workpiece when working with suitable clamping devices. Make sure there is sufficient contact surface.
- The notching machine shall not be modified in its design and shall not be used for purposes other than those foreseen by the manufacturer.
- Never work under the influence of concentration-disturbing illnesses, fatigue, drugs, alcohol or medicines.
- Keep children and persons unfamiliar with the notching machine away from their working environment.
- Eliminate disturbances that affect safety immediately.
- Before each use of the notching machine, make sure that no parts are damaged. Damaged parts must be replaced immediately to avoid any danger.
- Do not overload the notching machine! You work better and safer in the specified performance range.
- Only use original spare parts and accessories to avoid possible dangers and accident risks.

2.5 Safety signs on the machine

The machine has safety markings and instructions (Fig. 1) which must be observed and followed.



Fig. 1: Safety labels

Damaged or missing safety symbols on the machine can lead to malfunctions with personal injury and material damage. The safety symbols attached to the machine must not be removed.

Damaged safety symbols must be re-placed immediately. From the moment the signs are not immediately recognizable and comprehensible, the machine must be taken out of service until the new signs are fitted.

3 Intended use

The notching machine is designed exclusively for unlatching pipes made of steel, stainless steel, non-ferrous metals (aluminum, copper, brass) with the diameters specified in "Technical data" up to a maximum wall thickness of 3 mm (for S235JR steel). The notching takes place at a fixed angle (90 °).

The machine must not be operated in potentially explosive environments.

Proper use also includes compliance with all information in this manual. Any use beyond the intended use or otherwise is considered misuse.

For structural and technical changes to the notching machine, the company Stürmer Maschinen GmbH assumes no liability.

Claims of any kind due to damage due to improper use are excluded.

3.1 Misuse



WARNING!

Danger in case of misuse!

Misuse of the notching machine can lead to dangerous situations.

- Only operate the notching machine within the performance range specified in the technical data.
- Never bypass or override the safety devices.
- Only operate the notching machine in a technically perfect condition.

3.2 Residual risks

Even if all safety regulations are observed and the machine is used correctly, there are still residual risks listed below:

- There is a risk of injury to the upper limbs (e.g., hands, fingers).
- Danger from falling workpieces.

4 Technical Data

4.1 Table

Technical Data	MRA 2	MRA 3
Pipe diameter* [mm]	28 / 34 / 43	50 / 61
Max. Wall thickness* construction steel aluminium copper brass stainless steel**	3 mm 4,5 mm 4 mm 4 mm 2 mm	3 mm 4,5 mm 4 mm 4 mm 2 mm
Notcher dimensions without lever LxBxH [mm]	195x160x80	205x160x105
Notcher dimensions with lever LxBxH [mm]	1060x160x80	1090x160x105
Weight	8 kg	15 kg

* Performance data based on material with tensile strength 400 N / mm²;

** for stainless steel (VA): factor 0.67

4.2 Type plate

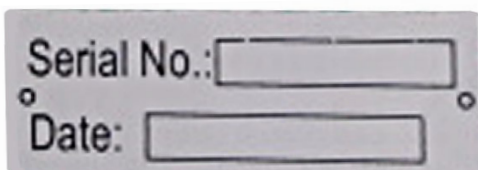


Fig. 2: Type plate

5 Transport, Packaging and Storage

5.1 Delivery

Check the notching machine after delivery for visible transport damage. If the notching machine is damaged, it must be reported immediately to the transport company or the dealer..



NOTE!

Protect the Manual Pipe notcher from moisture.

Transport



CAUTION!

Risk of injury from devices fall over and falling down-from forklifts, pallet trucks or transport vehicles.

Only use means of transport and load attachment means that can take the total weight.

Improper transport of individual devices, packaged or unpacked unsecured devices that are stacked on top of or next to each other is prone to accidents and can cause damage or malfunctions for which we do not provide any liability or guarantee.

Transport the scope of delivery secured against shifting or tipping with an adequately dimensioned industrial truck to the installation site.

General hazards during internal transport



CAUTION: RISK OF TOPPING OVER

The device may not be lifted more than 2cm unsecured.

Employees must be outside the danger zone, the reach of the load.

Warn employees and make employees aware of the risk.

The transport may only be carried out by authorized and qualified persons. Act responsibly when transporting and always consider the consequences. Refrain from daring and risky actions.

Inclines and slopes are particularly dangerous (e.g. driveways, ramps and the like). If it is unavoidable to drive on such passages, special care is required.

Before starting the transport, check the transport route for possible hazards, unevenness and imperfections as well as sufficient strength and load-bearing capacity.

Hazardous areas, bumps and imperfections must be inspected prior to transport. The removal of hazardous areas, bumps and obstructions at the time of transport by other employees leads to considerable dangers.

Careful planning of internal transport is therefore essential.

5.2 Packaging

All packaging materials and packaging aids used in the notching machine are recyclable and must always be recycled.

Cardboard packaging components are shredded and sent to the waste paper collection.

The foils are made of polyethylene (PE) and the upholstery parts are made of polystyrene (PS). These materials are to be handed in to a recycling center or to the responsible waste disposal company.

5.3 Storage

Store the notching machine thoroughly cleaned in a dry, clean and frost-free environment.

Apply protective oil to the tool to prevent it from rusting.

6 Description of the device

Illustrations in this operating manual serve the general understanding and may deviate from the actual design.

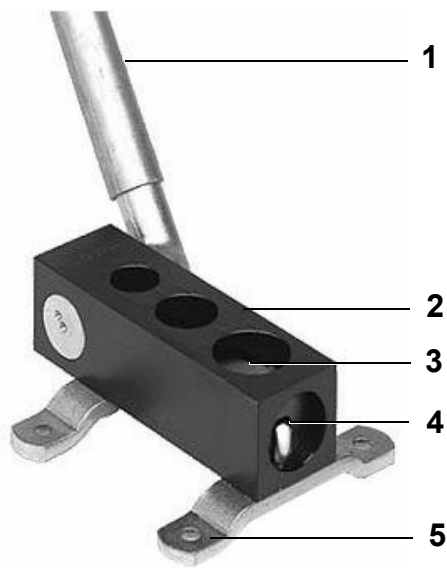


Fig. 3: Description of the device MRA 2

- 1 Release lever
- 2 Housings
- 3 Notch opening for 43 mm diameter pipes
- 4 Notching knives
- 5 Mounting hole

7 Set up



DANGER!

Before setting up the machine, check the load-bearing capacity of the substrate. The installation space must be able to bear the weight of the machine, the workpieces and the processing pressure.

In order to achieve a good function of the notching machine and a long service life, the site should meet the following criteria.

- The notching machine may only be set up and operated in dry and freezing conditions.
- The substrate must be suitable for the work. Pay attention to carrying capacity and evenness of the subsoil.
- Protruding parts, such as support tables, etc., are to be secured if necessary by on-site measures so that persons are not endangered.
- Provide enough space for operators and material handling.
- Ensure adequate lighting (minimum value: 300 lux)



NOTE!

Clean the notching machine before first use

- For this purpose use conventional solvents, for. B. Petroleum.
- No water, no nitrolic solvents or similar use!

After the notching machine has been cleaned, all bare parts must be lightly oiled. For this only resin u. use acid-free machine oil!



Tips and recommendations

For a secure footing, it is advisable to fasten the notching machine on a firm, stable and level surface through the holes in the machine base.

8 Operation



WARNING!

Risk of injury!

There is a risk of injury to the operator and other persons if they do not adhere to the following rules.

- The operator may not work while under the influence of alcohol, drugs or medication.
- The operator must not work when he is tired or suffering from concentration-impairing illnesses.
- The notching machine may only be operated by one person. Other persons must keep away from the work area during operation.



DANGER!

Risk of injury!

When working on the notching machine,

- is to wear tight-fitting clothing.
- no jewelry may be worn.
- Do not wear scarves, ties or similar.
- For long hair, a hairnet must be worn.



Wear safety glasses!



Wear safety gloves

8.1 Workflow



ATTENTION!

Risk of crushing!

When working with the notching machine can cause bruising of the upper limbs.



DANGER!

Always only one pipe, never work on several pipes at the same time.

Before starting work, check that the knives of the notching machine are sharp and there are no chips in the tool.



Tips and recommendations

Do some test cuts before you start production!

Step 1: Fix the notching machine horizontally or vertically on a suitable work table using the holes.

Step 2: Open the tool with the release lever and insert the pipe end into the appropriate opening.

Step 3: Make the cut by operating the release lever and remove the workpiece.

9 Care, Maintenance and Repair



Tips and recommendations

To ensure that the notching machine is always in good working condition, regular care and maintenance work must be carried out.



WARNING!

Danger due to insufficient qualification of persons!

Insufficiently qualified persons can not assess the risks involved in repairing the notching machine and expose themselves and others to the risk of serious injury.

All maintenance work should only be carried out by qualified persons.

9.1 Cleaning and lubrication of the machine



DANGER!

Never use solvents to clean plastic parts or painted surfaces. A surface release and consequential damage may occur.



Wearing safety gloves!

The notching machine should always be cleaned after each use.

Sweep or wipe all open machine parts with a broom or cloth at regular intervals.

Treat bare metallic work surfaces with anti-rust spray.

Lubricate all moving parts and bearings daily before starting work.

9.2 Maintenance of the machine



DANGER!

- Maintenance and repair work may only be carried out by qualified personnel.
- Only use original spare parts.

If the notching machine does not work properly, contact a dealer or our customer service. The contact details can be found in chapter 1.2 Customer Service.

10 Disposal, Recycling of old equipment

In the interests of the environment, care must be taken to ensure that all components of the machine are disposed of in the proper and approved way.

10.1 Decommission

Disused devices must be taken out of service immediately in order to prevent later misuse and endangering the environment or people.

- If necessary, disassemble the machine into manageable and usable components and components.
- Feed the machine components to the appropriate disposal channels.

10.2 Disposal of lubricants

The disposal instructions for the lubricants used are provided by the lubricant manufacturer. If necessary, ask for the productspecific data sheets.

11 Spare parts

11.1 Ordering spare parts



NOTE!

Using non-approved spare parts voids the manufacturer's warranty



DANGER!

Risk of injury due to incorrect spare parts!

The use of incorrect or faulty replacement parts can be dangerous to the operator and cause damage and malfunction.

- Only use original spare parts from the manufacturer or replacement parts approved by the manufacturer.
- In case of doubt, always contact the manufacturer.

The spare parts can be obtained from the dealer or directly from the manufacturer. The contact details are in chapter 1.2 Customer Service.

Specify the following key data when ordering spare parts:

- Device type
- Serial number
- Lot
- Description
- Desired shipping method (post, freight, sea, air, express)
- Delivery address

Spare parts orders without above given information can not be considered. If the shipping method is missing, shipping will be at the discretion of the supplier.

Information on the device type, article number and year of manufacture can be found on the type plate, which is attached to the device.

Example

The eccentric for the Pipe notcher MRA 2 must be ordered. The eccentric has the number 8 in the spare parts drawing 1.

By ordering spare parts, send a copy of the spare parts drawing (1) with the marked part (eccentric) and marked position number (8) to the dealer or spare parts department and provide the following information:

- Type of device: **Pipe notcher MRA 2**
- Item number: **3772992**
- Drawing number:
- Position number: **8**

11.2 Spare part drawing

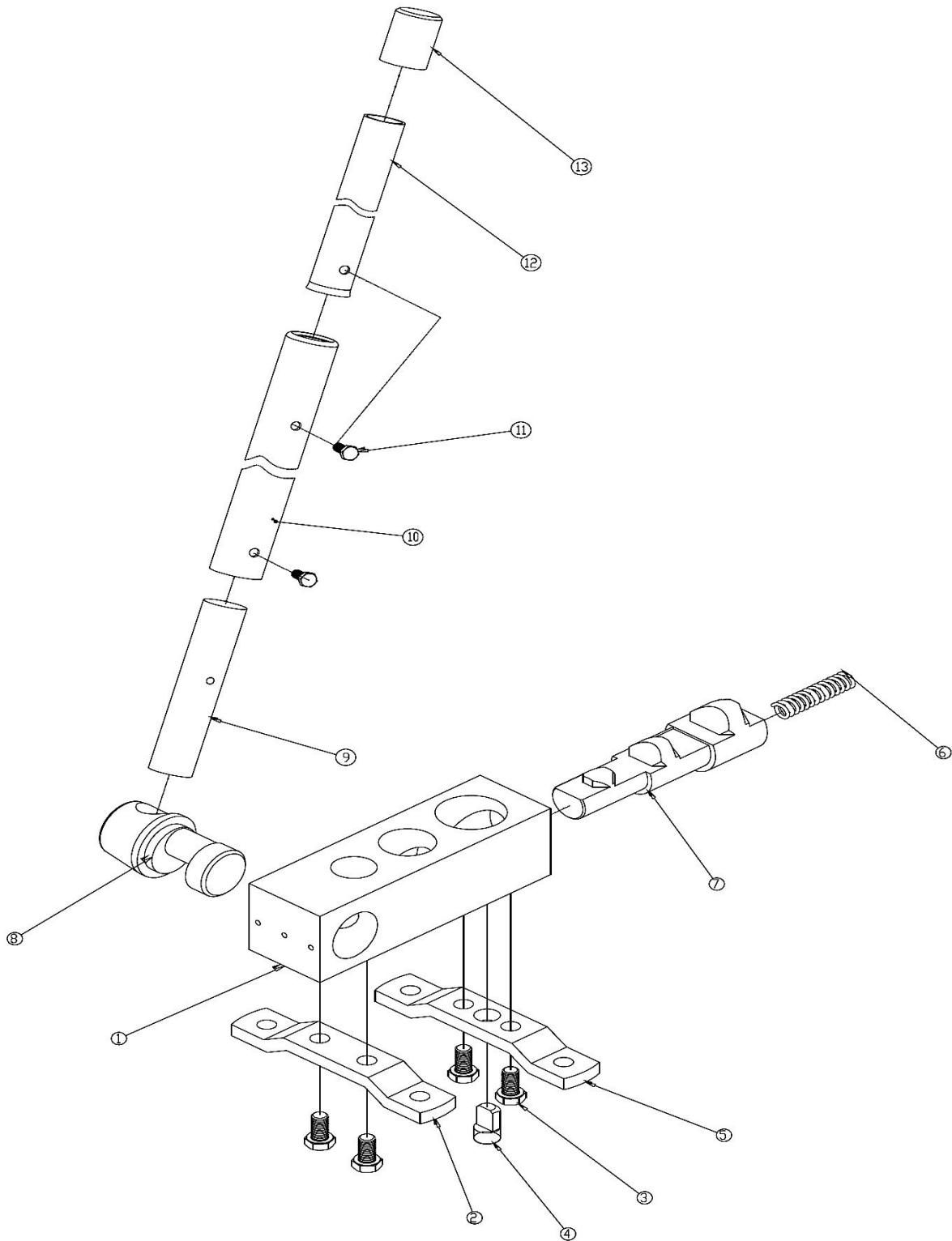


FIG. 4 Spare part drawing MRA 2 / MRA 3

12 Explanation

Manufacturer/distributor: Stürmer Maschinen GmbH
Dr.-Robert-Pfleger-Starße 26
D-96103 Hallstadt

We hereby declare that the machine described below, due to its design and construction as well as in the version we have placed on the market, complies with the relevant basic health and safety requirements.

A declaration of conformity according to Machinery Directive 2006/42 / EC Annex 1 does not require this machine. In the event of a modification of the machine not agreed with us, this declaration shall lose its validity.

Product group: Metallkraft® Metal working machines

Type of machine: Manuelle Pipe notcher

Designation of the machine *: MRA 2
 MRA 3

Item number *: 3772992
 3772993

Serial number *: _____

Year of construction *: 20____

* please fill in according to the information on the type plate

Responsible for documentation: Kilian Stürmer, Stürmer Maschinen GmbH,
Dr.-Robert-Pfleger-Str. 26, D-96103 Hallstadt

Hallstadt, 19.12.2014



Kilian Stürmer
Manager



