

# Operating Instructions



## GRISOTUB MS-Serie

**Models:**  MS-2/3 Triple Fold - Double Fold  
 MS-S Saddle Fold

**Serial Number:** 3228.9 / 2008

v.e010101

### ATTENTION:

The operating instructions have to be read carefully before initiating the machine.  
We reject any liability for damages arised from unexpert handling of the appliance!

### **Manufacturer:**

Nähma AG  
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CH-6314 Unterägeri  
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Info@naehma.ch / www.naehma.ch

### **Agency:**

# **1 Safety**

## **1.1 Definition**

### **Manufacturer**

For the concerns of the present operating instructions, Nähma AG is hereinafter referred to as „manufacturer„.

### **User**

As superior legal person the user is responsible for the application of the machine as per the intended purpose. The user or his persons in charge guarantee to observe the points mentioned in chapter „safety„.

## **1.2 Use of the present operating instructions**

The present operating instructions are integral part of the machine and contain important instructions regarding the safety of operations.

All persons working with the machine are obliged to read carefully the chapters in reference with their specific tasks.

The machine may not be used for other applications than stated in the manufacturer's prescriptions „intended purpose„ (chapter 1.4).

Technical modifications are subject to change without notice.

## **1.3 Who is authorized to operate the machine**

Unqualified persons are not allowed to work with the machine. Non-observance of the warnings and advices stated in the operating instructions can cause physical injuries and/or material damages.

### **Qualified persons are:**

Skilled workers who have been authorized by the security officer to carry out their task in strength of their formation, experience, instruction, as well as their knowledge of the respective standard norms and regulations of the safety rules, and who are furthermore able to perceive eventual dangers and to avoid them.

Persons who have been instructed by technicians of the manufacturer.

Persons with sufficient instruction by the user.

## **1.4 Intended purpose**

GRISOTUB MS Serie is designed for the closing of metal tubes.

### **Furthermore the definition „intended purpose„ includes:**

- The observance of the details as per chapter „technical data„.
- The use of the delivered standard accessories.
- The observance of the present operating instructions.
- Each application of the machine for other intents than defined in this chapter shall be deemed contravention. In case of damages the manufacturer rejects any liability.

## **1.5 Non-observance of the safety regulations**

Non-observance of the safety regulations can cause physical injuries, destruction of the environs and material damages.

## **1.6 Safety of operations**

Each working sequence/range conceals various danger moments. We have made each possible efforts to avoid the risks. However, it is not possible to schedule all measures of precaution. In addition to the safety regulations of the present operating instructions, it is therefore important to observe the national and local safety rules, the rules for environmental protection and the factory specifications.

## **1.7 Arbitrary modifications and fabricating of spare parts**

Modifications of the machine are not allowed but with the expressed approval of the manufacturer. All repairs have to be carried out with the original spare parts of the manufacturer. The manufacturer rejects any liability for damages arising from the use of other parts.

## **1.8 Safety devices**

To avoid the contact with moving parts specific safety devices have been installed to the machine. These devices must only be dismantled for maintenance works and have to be remounted with subsequent performance test immediately after termination of the maintenance works.

## **1.9 Safety at the maintenance works**

Do not begin any maintenance or cleaning works before standstill of the machine.

# **2 General**

## **2.1 Receipt of the machine**

Examine the machine immediately on arrival. Eventual transport damages have to be announced without delay to the forwarding agent, resp. to the assurance company.

Check also the receipt of all parts as per the attached delivery note and inform us immediately on eventually missed items.

The manufacturer rejects any liability in case of delayed notification.



## 2.2 Transport prescriptions

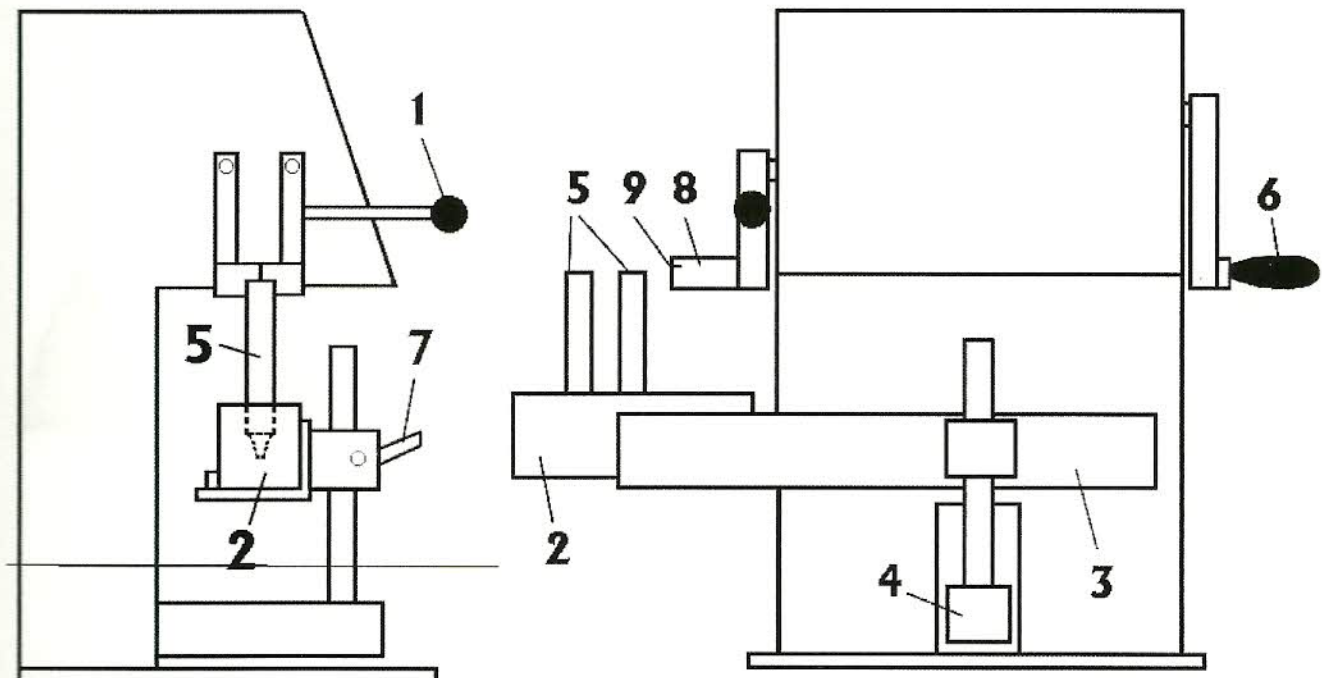
The machine is easy and handy to pack. Nevertheless observe the following important points::

- Screw the machine for transportation upright on a wooden board to avoid displacement during the transport and damaging of switches or instruments.
- A cardboard box with filling materials is absolutely insufficient.
- Net weight: approx. 26 kg
- Dimensions: Length: 530 mm (tube holder guide to crank handle)  
Depth: 350 mm  
Height: 515 mm

## 3 Operating

### 3.1 The main parts

1. Squeezing device
2. Multiple tube holder (MTH)
3. Slide for MTH
4. Lifting block
5. Tubes
6. Crank handle
7. Clamping lever
8. Squeezing beams
9. Mark



## 2.2 Transport prescriptions

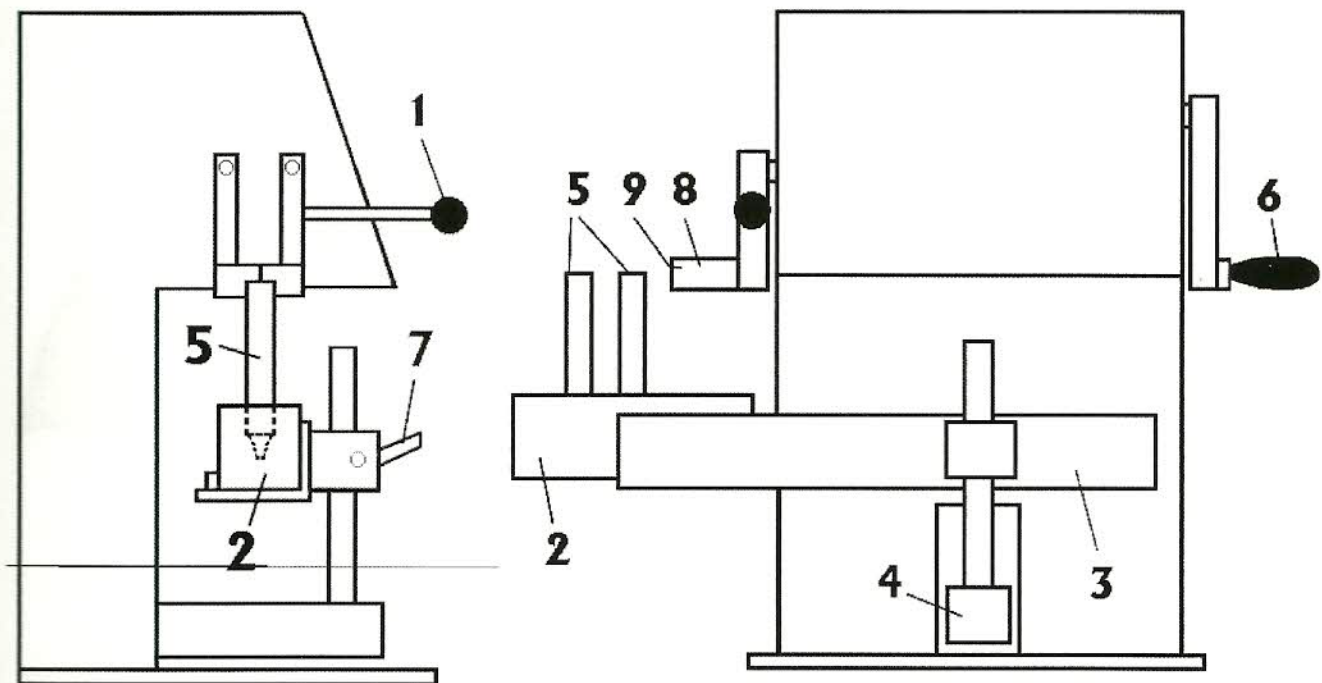
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### **3.2 Adjustment of the processing hight**

1. Insert the tubes (5) into the MTH (2)
2. Move the lifting block (4) to the start position by turning the crank handle (6)
3. Insert the MTH (2) into the slide (3) (see drawing page 5)
4. Loosen the clamping lever (7)
5. Adjust the slide for MTH (3) until the tube ends (5) are on equal hight with the mark (9) on the squeezing beams (8)
  - upper marking
  - lower markingFix the clamping lever (7)

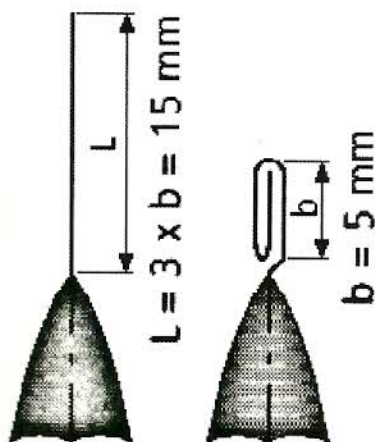
This procedure has only to be effected in case of change to another tube length or MTH.

### **3.3 Sequence of operations**

After adjustment of the processing hight (3.2) the folding process can be started. We recommend to work with at least 2 multiple tube holders to enhance the working flexibility and consequently the output.

### **3.4 Folding procedure / MS-2 Double fold**

1. Insert the filled tubes carefully into the multiple tube holder. The tubes must rest absolutely closed to the bottom of the holder to assure equal height of the folds.
2. Slip the filled multiple tube holder from the left side in the slide (3) and squeeze all tube ends.
3. Center the multiple tube holder with the positioning arrows to the marks on the slide (3)
4. With two clockwise turns of the crank handle (6) all tubes are closed with a double fold.



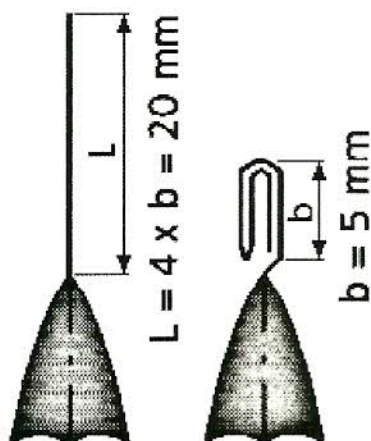
Do not fill the tubes to the brim to avoid soiling of the squeezing beams from squirting product



### **3.5 Folding procedure / MS-3 Triple fold**

1. Insert the filled tubes carefully into the multiple tube holder. The tubes must rest absolutely closed to the bottom of the holder to assure equal height of the folds.
2. Slip the filled multiple tube holder from the left side in the slide (3) and squeeze all tube ends.
3. Center the multiple tube holder with the positioning arrows to the marks on the slide (3).
4. With two clockwise turns of the crank handle (6) all tubes are closed with a triple fold.

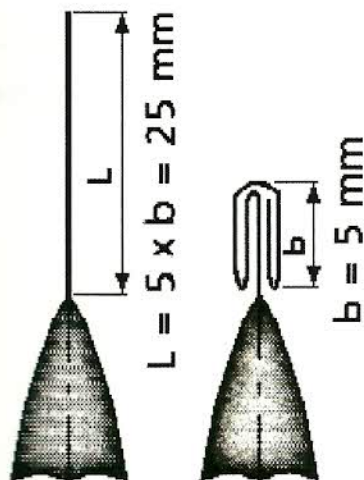
**Caution:** Do not fill the tubes to the brim to avoid soiling of the squeezing beams from squirting product.



### **3.6 Folding procedure / MS-S Saddle fold**

1. Insert the filled tubes carefully into the multiple tube holder. The tubes must rest absolutely closed to the bottom of the holder to assure equal height of the folds.
2. Slip the filled multiple tube holder from the left side in the slide (3) and squeeze all tube ends.
3. Center the multiple tube holder with the positioning arrows to the marks on the slide (3).
4. With two clockwise turns of the crank handle (6) all tubes are closed with two folds.
5. Remove the multiple tube holder (2).
6. Turn the multiple tube holder 180° and slip it again in the slide (3).
7. With a third clockwise turn of the crank handle (6) all tubes are now closed with a saddle fold.

**Caution:** Do not fill the tubes to the brim to avoid soiling of the squeezing beams from squirting product



#### **Caution**

min. tube length 55 mm