

Operating instructions

— Plate rolling machine

— RBM 610-8



RBM 610-8

RBM 610-8

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8 Notes

Preface


We are pleased that you have decided in favor of the RBM 610-8 plate rolling machine from Metalkraft Metallbearbeitungsmaschinen - Stürmer GmbH.


The illustrations of the bender may differ in some details from the illustrations in this manual, but this does not affect the operation of the bender.


Changes in construction, equipment and accessories are reserved for the benefit of further development. Therefore, no claims can be derived from the information and descriptions.
Errors reserved!

1 Safety

Conventions of presentation

 gives additional hints

 calls you to action

 enumerations

This part of the operating instructions

- Explains the meaning and use of the warnings in this manual,
- specifies the intended use of the bending machine,
- Draws attention to the dangers that could arise for you and others if these instructions are not followed,
- informs you about how to avoid dangers.
- Please note in addition to the operating instructions
- the applicable laws and regulations,
- the legal regulations for accident prevention,
- the prohibition, warning and mandatory signs as well as the warnings on the bending machine.

A nameplate is attached to the machine, which contains the name of the machine, the article number and the most important technical data. Always keep it clean and in a readable condition.

Always keep the documentation near the bender.



INFORMATION

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1.1 Safety instructions (Warnings)

1.1.1 Hazard classification

We divide the safety instructions into different levels. The table below gives you an overview of the assignment of symbols (pictograms) and signal words to the actual danger and the (possible) consequences.

Pictograms	Signal word	Definition / Consequences
	DANGER!	Immediate danger that will result in serious injury to persons or death.
	WARNING!	Risk: Hazardousness could result in serious personal injury or death.
	ATTENTION!	Dangerous or unsafe practices that could result in personal injury or property damage.
	CAUTION!	Situation that could damage the bender and the product and cause other damage. No risk of injury to persons.
	Information	Application tips and other important / useful information and instructions.No dangerous or harmful consequences for persons or property.

We replace the pictogram for specific dangers



1.1.2 Further pictograms



Wear safety glasses!



Wear ear protection!



Wearing safety gloves!



Wear safety shoes!



Wear a protective suit!



Pay attention to the protection of the environment!



Address of the manufacturer

1.2 Intended Use



WARNING!

If the plate rolling machine is not used as intended

- there are risks for the personnel,
 - the machine and other assets of the operator are endangered,
- the function of the Machine may be impaired.**

The RBM 610-8 is a plate rolling machine for the production of cylindrical and conical bends in sheet steel and other metallic materials, as well as materials that are suitable for processing due to their plastic deformability. Editing brittle and brittle materials is prohibited. The machine is intended and suitable for commercial use. The workpieces must be in the form of sheet metal or flat profiles so that they can be safely captured and transported by the rollers.

The machine may only be used as described in this manual. It may only be operated by persons trained and trained in the use and maintenance of bending machines.

If the round bending machine is used differently than stated above, without the permission of the company Stürmer Maschinen GmbH changed, the round bending machine is no longer used as intended.

We assume no liability for damage due to improper use.

We expressly point out that constructive, technical or procedural changes not approved by the company Stürmer Maschinen GmbH also invalidate the warranty.

Part of the intended use is that you

- adhere to the limits of the bender,
- observe the operating instructions,
- comply with the inspection and maintenance instructions.

☞ "Technical data" on page 12



WARNING!

Heaviest injuries.

Modifications and changes in the operating values of the bending machine are prohibited! They endanger people and can damage the bender.

1.3 Dangers emanating from the round bending machine

The round bending machine corresponds to the state of the art.

Nevertheless, there is still a residual risk, because the round bending machine works with rotating parts

We have minimized the risk to the health of persons through these hazards constructively and through safety technology.

In the case of operation and maintenance of the bender by insufficiently qualified personnel, dangers may arise from the bender due to incorrect operation or improper maintenance.



INFORMATION

All persons involved in assembly, commissioning, operation and maintenance must

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

In case of improper use

- can be dangerous for the staff,
- the machine and other property can be endangered,
- the function of the bender may be impaired.

Always turn off the bender when performing cleaning or maintenance or stop working on it.



WARNING!

The bender may only be operated with functioning safety devices.

Switch off the bending machine immediately if you find out that a safety device is faulty or disassembled!

All operator-side auxiliary systems must be equipped with the prescribed safety devices.

You as the operator are responsible!

☞ "Safety devices" on page 8

1.4 Qualification of the staff

1.4.1 Target group

This manual is intended for you

- the operators,
- the operators,
- the staff for maintenance work.

Therefore, the warnings refer both to the operation and to the maintenance of the bending machine.

Determine clearly who is responsible for the various activities on the machine (operation, maintenance and repair).

Unclear competencies are a security risk!

1.4.2 Authorized persons



WARNING!

Incorrect operation and maintenance of the bending machine creates risks for people, objects and the environment.

Only authorized persons are allowed to work on the bending machine!

Authorized persons for the operation and maintenance are the instructed and trained specialists of the operator and the manufacturer.

The operator must

- Obligations of the operator
- train the staff,
 - instruct the staff at regular intervals (at least once a year) about
 - all safety regulations concerning the machine,
 - the operation,
 - the accepted rules of technology,
 - check the level of knowledge of the staff,
 - document the training / instruction,
 - have the participation in the training / instruction confirmed by signature,
 - Check whether the staff works safety-conscious and follows the operating instructions.

The operator has to

- Obligations of the operator
- have received training in handling the bending machine
 - know the function and mode of action,
 - before commissioning
 - have read and understood the operating instructions
 - be familiar with all safety devices and regulations.

1.5 Operator positions

The operator position is in front of the bender.

1.6 Safety equipment

Operate the bender only with properly functioning safety devices. Stop the bender immediately if a safety device is faulty or becomes ineffective. You are responsible! After the response or the failure of a safety device, you must not use the bender again until you have

- have eliminated the cause of the disorder,
- have convinced themselves that this creates no danger to persons or property



WARNING!

If you bypass, remove or otherwise disable a safety device, you endanger yourself and other people working on the bending machine. Possible consequences are

- **Injuries from flung-off workpieces or workpiece parts,**
- **touching rotating parts.**

The round bending machine has the following safety features:

- Protective cover of the gearbox.
- a safety rope

1.7 Security check

Check the bending machine before each new start or at least once per shift. Immediately report damage or defects and changes in operating behavior to the responsible manager.

Check all safety devices

- at the beginning of each shift (in interrupted operation),
- once a week (during continuous operation),

- after each maintenance and repair.

Check that the prohibition, warning and information labels as well as the markings on the bending machine

- are readable (possibly clean),
- are complete (replace if necessary).



INFORMATION

Use the overview below to organize the exams.

Standard check		
Facility	Inspection	OK
Protective covers	Mounted, firmly screwed and not damaged	
Signs and Marks	Installed and readable	
Date:	Examiner (signature):	

1.8 Protective clothing



For some jobs you need body protection as protective equipment.

Protect your face and eyes: Wear a helmet with a face shield for any work that puts your face and eyes at risk.



Use protective gloves when picking up sharp-edged parts.



Wear safety shoes when attaching, removing or transporting heavy parts.



Wear ear protection if the noise level (immission) at your workstation is greater than 80 dB (A).

Before starting work, make sure that the prescribed body protection products are available at the workplace.



ATTENTION!

Contaminated, potentially contaminated body protection agents can cause illnesses. Clean them after each use and once a week.

1.9 For your own safety during operation

We refer you to concrete dangers when working with and on the bending machine in the description of this work.



WARNING!

Before switching on the bending machine, make sure that it does not endanger persons or damage things.

Refrain from any safety-related work:

Make sure that no one is endangered by your work.

- Be sure to adhere to the instructions in this manual during installation, operation, maintenance and repair.

- Do not work on the ring bending machine, if your ability to concentrate for some reason - such. B. the influence of drugs - is reduced.
- Make sure that nobody puts your work at risk.
- Only work on the machine when the bending rollers are free to run.
- Do not use the machine for purposes it is not intended to, for example for bending mineral materials.
- Observe the maximum dimensions of the workpieces + "Machine data" on page 12 given in the technical data.
- Note that using tools other than those recommended by the manufacturer may result in injury to you and other accessories.
- Do not leave any tools stuck. Before starting work, check that all repair and adjustment tools have been removed.
- Do not leave the machine unattended and keep a sufficient safety distance to the moving machine parts.

1.9.1 Using hoists



WARNING!

Severe to fatal injuries from damaged or unsuitable hoists and load lifting devices that break under load.

Check hoisting gear and load attachment

- sufficient carrying capacity,
- perfect condition.

Observe the accident prevention regulations of the professional association responsible for your company or other supervisory authorities.

Fix the loads carefully. Never step under suspended loads!

1.9.2 Mechanical maintenance

After your work, install all the protective and safety equipment removed for the maintenance work, such as:

- covers,
- Safety instructions and warning labels,
- Ground wire.

After the replacement, check their function!

1.9.3 Accident report

Inform supervisors and the company Stürmer Maschinen GmbH immediately about accidents, possible sources of danger and "near misses".

"Almost" accidents can have many causes.

The faster they are reported, the faster the causes can be resolved.

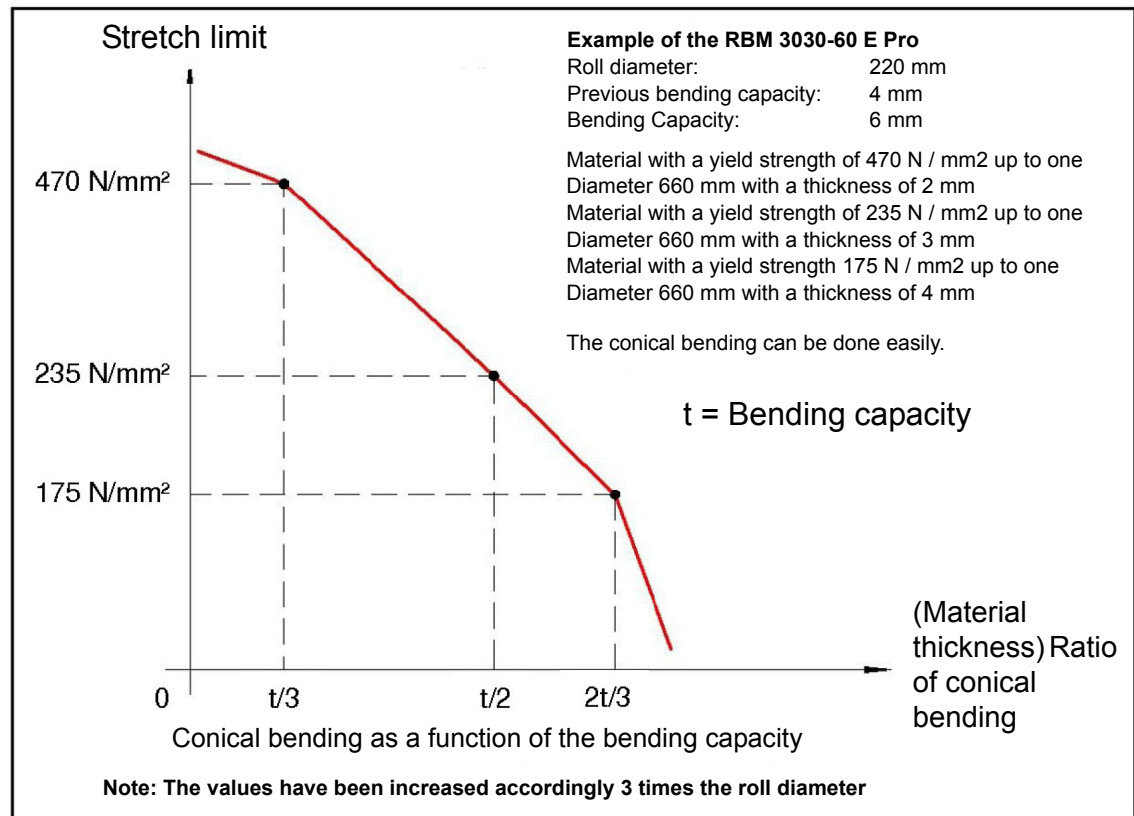
2 Technical Data

The following data are dimensional and weight specifications and the machine data approved by the manufacturer

2.1	Machine data	RBM 610 - 8
	Max. working width [mm]	610
	Max. sheet thickness [mm]	0,80
	Roller Ø [mm]	38
	Bending Ø min. min.	60
	Weight [kg]	37
	Dimensions LxBxH [mm]	885x220x340

2.2	Environmental conditions	
	Temperature	5 - 35 °C
	Relative humidity	25 - 80 %

* Bending power ratings refer to S235JR with a tensile strength of 400 N / mm²
 * Sheet bending capacity in VA = factor 0.75; Conical bending with half of the max. Sheet thickness possible



3 Assembly

3.1 Scope of supply

Check the round bending machine immediately after delivery for transport damage and shortages. Compare the scope of delivery with the enclosed packing list.

3.2 Transport

WARNING!



Severe to fatal injuries from falling and falling of machine parts from forklift or transport vehicle. Follow the instructions and information on the transport box.

WARNING!



Severe to fatal injuries from damaged or unsuitable hoists and load lifting devices that break under load. Check the lifting gear and load securing devices for sufficient load capacity and perfect condition.

Observe the accident prevention regulations of the professional association responsible for your company or other supervisory authorities.

Fix the loads carefully.

Never step under suspended loads!

3.3 Storage

WARNING!



Incorrect and improper storage can damage and destroy mechanical machine components.

Store the packed or unpacked parts only under the intended environmental conditions.

Follow the instructions and information on the transport box.

Contact Metallkraft Metallbearbeitungsmaschinen-Stürmer GmbH if the machine and accessories must be stored for longer than three months and under conditions other than those specified in the regulations + "Ambient Conditions" on page 12.

3.4 Setting up and mounting

3.4.1 Requirements for the installation site

Design the work space around the bender according to the local safety regulations.

INFORMATION



In order to achieve good functionality and high machining accuracy, as well as long life of the bender, the site should meet certain criteria.

The following points should be noted:

- The device may only be installed and operated in dry, ventilated rooms.
- Avoid places near chips or dusting machines.
- The substrate must be suitable for the round bending machine. Also pay attention to load capacity and flatness of the soil.
- The substrate must be prepared so that any lubricant used can not penetrate the soil.

- Protruding parts - such as stops, handles, etc. - are to be secured if necessary by on-site measures so that persons are not endangered.
- Provide enough space for set-up and operating personnel and material transport.
- Also consider the accessibility for adjustment and maintenance work.
- Ensure adequate lighting (minimum value: 500 lux, measured at the tip of the tool). With lower illuminance, additional lighting must be ensured, for example by means of a separate workplace luminaire.

3.4.2 Mounting the round bending machine



WARNING!

Danger of crushing when assembling, mounting and straightening the machine components.



WARNING!

Risk of crushing and tipping. The erection of the bending machine must be carried out by at least 2 persons.



INFORMATION

The Machine will be delivered already assembled.

3.5 Set up

- → Check the surface of the bender with a spirit level for horizontal alignment.
- → Check the substrate for sufficient load capacity and rigidity.
- → Place the round bending machine on the intended surface.
- → Attach the round bender to the provided through holes on the machine base.



WARNING!

The nature of the substrate and the method of fixing the machine base with the substrate must be able to absorb the stresses of the round bending machine. The substrate must be at ground level. Check the base of the bender with a spirit level for horizontal alignment.

3.5.1 Fixing

In order to achieve the required stability of the round bending machines, the round bending machine must be firmly connected to the base at its base.

We recommend the use of composite anchor cartridges or heavy duty anchors.

- Attach the round bender to the provided through holes on the base with the substrate.



Fig.3-1: Fasten



Danger!

Tighten the fastening screws on the bending machine so that they are secure and can not be torn or tilted during operation.

Over-tightening mounting screws, especially in combination with uneven ground, may break the base of the machine.

3.5.2

Before first use



DANGER!

Before using the round bending machine for the first time, lubricate the bearings!

We assume no liability for damages due to improper commissioning.



Before putting the bending machine into operation, carefully read the operating instructions. This allows you to safely start up the machine. Follow the safety instructions in the operating instructions.

3.5.3

First use



WARNING!

The first time the bender is put into operation by inexperienced personnel, you endanger people and equipment.

We assume no liability for damages due to improper commissioning.

☞ "Qualification of staff" on page 7

4 Service


4.1 Safety

Only operate the machine under the following conditions:

- The technical condition of the machine is flawless.
- The machine is used as intended.
- The operating instructions are observed.
- All safety devices are present and active.

Eliminate faults or have them rectified immediately. In the event of malfunctions, immediately shut down the machine and secure it against unintentional or unauthorized switching on.

Report any change immediately to the responsible body.

 "For your own safety during operation" on page 10

4.2 Operating and display elements

4.2.1 Round bending machine



Fig.4-1: RBM 610-8

4.3 Working with the plate rolling machine



CAUTION!

Bending may only be performed by qualified personnel experienced on these machines. All steps of bending, pre-bending and conical bending must be carried out extremely carefully. It should be noted that a small radius is made by repeating the bending process several times; Once too much bent, this step can not be undone.

4.3.1 Pre-bending

Pre-bending is the operation whereby the ends of the material are bent to the same radius as the final radius. As a result, the best results are achieved at full radii z. B. in production of pipes) or for operations in which no flat ends are desired.

Before editing:

- The workpiece must be able to be fed in evenly from the upper and lower feed rollers.
- Note that the material must be level.
- Free the material surfaces from dirt and oil.
- The material ends must be free of chips, chisels and burnt residues.
- Note that burned material is harder at the points of separation than in the remaining area.
- It is recommended to make a stencil of cardboard or cardboard from the desired radius as a reference for the bending process.
- Adjust the distance between the feed roller with the handwheel to adjust the lower roller so that the workpiece is drawn in continuously with evenly distributed force.
- Make sure that the rear roller is parallel to the feed rollers, if necessary, readjust them using the handwheels.



WARNING!

Only bend workpieces whose material is known to you and check whether it is suitable for cold forming.

Do not bend brittle materials that can break or splinter parts.

For processing

- Be sure to always work in the middle of the rollers.
- Follow the steps shown below for round bending + "sheet metal position for round bending" on page 18.
- Rotate the crank to selectively retract or move the workpiece through the feed rollers.

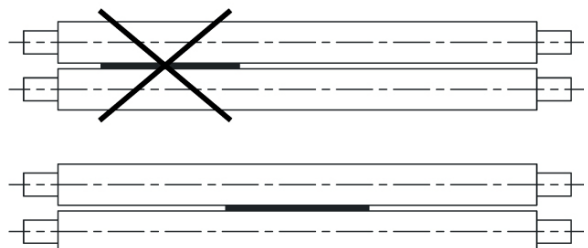


Fig.4-2: Processing

4.3.2 Sheet metal position during round bending

Upper and lower rollers in a straight position

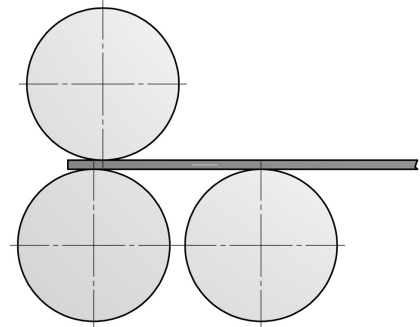


Fig.4-3: About turn

At the end of pre-bending, bring the back roller up.

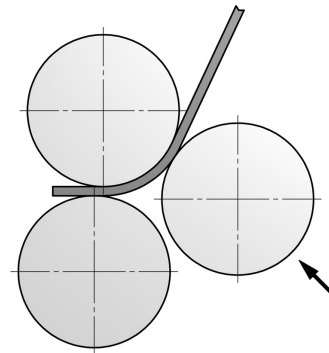


Fig.4-4: Round bending

Turn sheet metal and position for the second pre-bending.

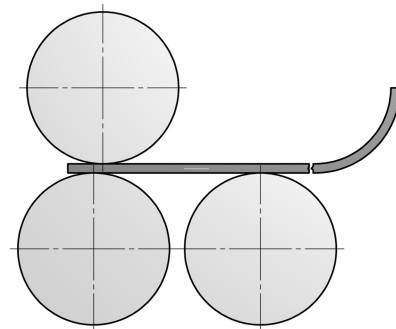


Fig.4-5: Round bending

At the end of pre-bending, bring the back roller up.

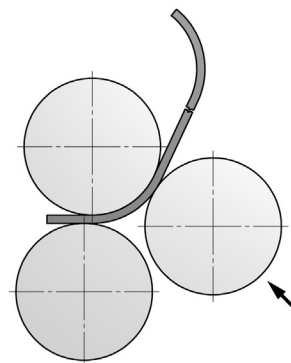


Fig.4-6: Round bending

Roll to the desired diameter.

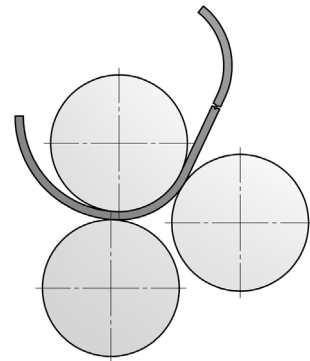


Fig.4-7: Round bending

Last pass.

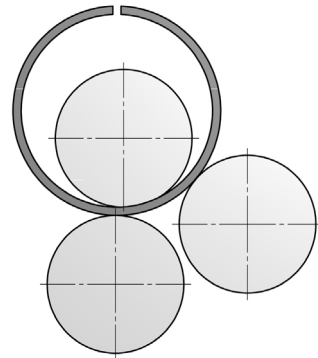


Fig.4-8: Round bending



INFORMATION

The material hardens after each pass. When processing stainless steel, several passes must be made because this material is work hardening material.



WARNING!

Before working, it is important to free the rollers from oil and grease residues.

4.3.3 Conical Bending



CAUTION!

Conical bending reduces the maximum permissible material thickness by 30% - 50%.

Before editing



INFORMATION

Conic bending is more difficult than normal bending. The machine power must be reduced to 0% to 50% in order to determine the conical bending capacity. Also, the machine must be prepared for this type of bending as follows:

- Important in conical bending is that you first cut the sheet to the required size before machining.
- The workpiece must be able to be fed in evenly from the upper and lower feed rollers.
- Note that the material must be level.
- Free the material surfaces from dirt and oil.
- The material ends must be free of chips, chisels and burnt residues.
- Note that burned material is harder at the points of separation than in the remaining area.
- Use the handwheels to adjust the distance between the pickup roller so that the workpiece retracts evenly and continuously.
- Adjust the rear roller in its angular position by turning the assigned handwheels so that the diameter of the workpiece cone makes the roller closer to the tightening rollers. As a result, a narrower radius is created at the bend.

For processing

- Slide the sheet between the two rollers.
- Place the narrower side of the sheet metal part on the side where the smaller radius is set.
- Turn the crank to create the conical bend.
- Depending on the degree of bending required, repeat the workpiece feed several times.

4.4 Swivel device

In order to remove a closed, bent workpiece (e.g., cylindrical tube) from the machine, it is necessary to pivot the top roller out of the machine.

Release the top roller lock to remove the workpiece from the machine.

In the swung out state, the workpiece can then be pulled down.

5 Maintenance

This chapter contains important information

- Inspection,
- Maintenance,
- Repair.

The diagram shows you which works fall under these terms.

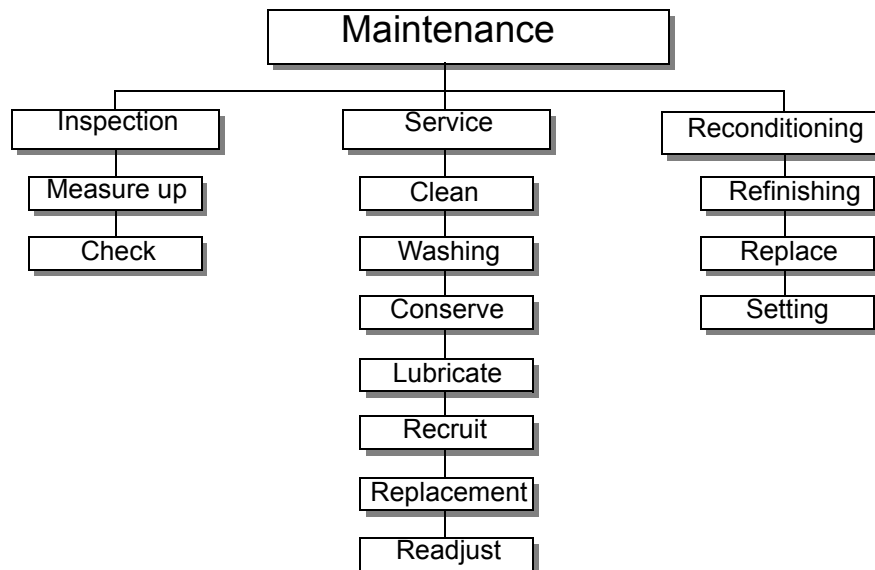


Fig.5-1: Maintenance



CAUTION!

Regular, properly performed maintenance is an essential requirement for

- **the operational safety,**
- **trouble-free operation,**
- **a long life of the machine and**
- **the quality of the products you produce.**

The equipment and devices of other manufacturers must be in perfect condition.



ENVIRONMENT PROTECTION

Be careful when working on the bending head

- **Can be used, the capacity of which is sufficient for the amount of liquid to be collected.**
- **Liquids and oils do not fall into the soil.**

Immediately tie spilled fluids and oils with suitable oil absorbents and dispose of them in accordance with the applicable environmental protection regulations.

Catching leaks

Do not return fluids that are generated during repair or leaks outside the system to the reservoir but collect them in a collection container for disposal.

Dispose

Never pour oils or other environmentally hazardous substances into water inlets, rivers or canals.

Waste oils must be delivered to a collection point. Ask your supervisor if you do not know the collection point.

5.1 Safety



WARNING!

The consequences of improperly performed maintenance and repair work can be:

- Severe injuries of the machine operator,
- Damage to the machine.

Only qualified personnel may service and repair the machine.

5.1.1 Preparation




WARNING!

Only carry out maintenance work on the machine when it is disconnected from the electrical supply.

Attach a warning sign that protects against unauthorized switching on.

5.1.2 Recommissioning

Perform a security check before recommissioning.

 "Security check" on page 9



WARNING!

Before starting the machine, make sure that by doing so

- no danger to persons arises,
- the machine is not damaged.

5.2 Cleaning



At regular intervals, blow out all roller gaps with dry compressed air. Wear protective goggles.

For wiping off lubricants please use an absorbent, non linting cloth.

All painted parts should be cleaned with a soft, damp cloth. Never use solvents to clean plastic parts. A surface release and consequential damage may occur.


5.3 Inspection and Maintenance



INFORMATION

It is recommended to have the machine thoroughly cleaned and inspected by an approved service company at least once a year.

The type and degree of wear depends to a great extent on the individual conditions of use and operation. All specified intervals therefore only apply to the respectively approved conditions.

Interval	Where?	What?	How?
Shift start after each maintenance or repair	Plate rolling machine RBM 610-8		Check for external damage. + "Security check" on page 9
to Lubricating plan	Plate rolling machine RBM 610-8	Lubrication + "Lubrication Schedule" on page 24	 <p>Fig.5-2: Lubricating plan</p>
half year	Electric	Check	Check electrical equipment / components of the bender. + "Qualification of staff" on page 7

5.4 Lubricating plan

Pos.	Lubrication point	Interval	Lubricant
1	Closing device	Daily	acid-free lubricating oil, e.g. Machine oil, engine oil
2	Storage rolls	Daily	acid-free lubricating oil, e.g. Machine oil, engine oil
	Gears	Monthly	commercial grease

5.5 Repair

Request a service engineer from Stürmer Maschinen GmbH for all repairs or send us the machine.

If your qualified specialist carries out the repairs, it must observe these operating instructions.

The company Stürmer Maschinen GmbH assumes no liability and warranty for damage and malfunctions as a result of non-compliance with these operating instructions.

Use for the repairs

- only flawless and suitable tool,
- only original spare parts or serial parts expressly approved by the company Stürmer Maschinen GmbH.

6 Spare Parts

6.1 Spare Parts Drawing

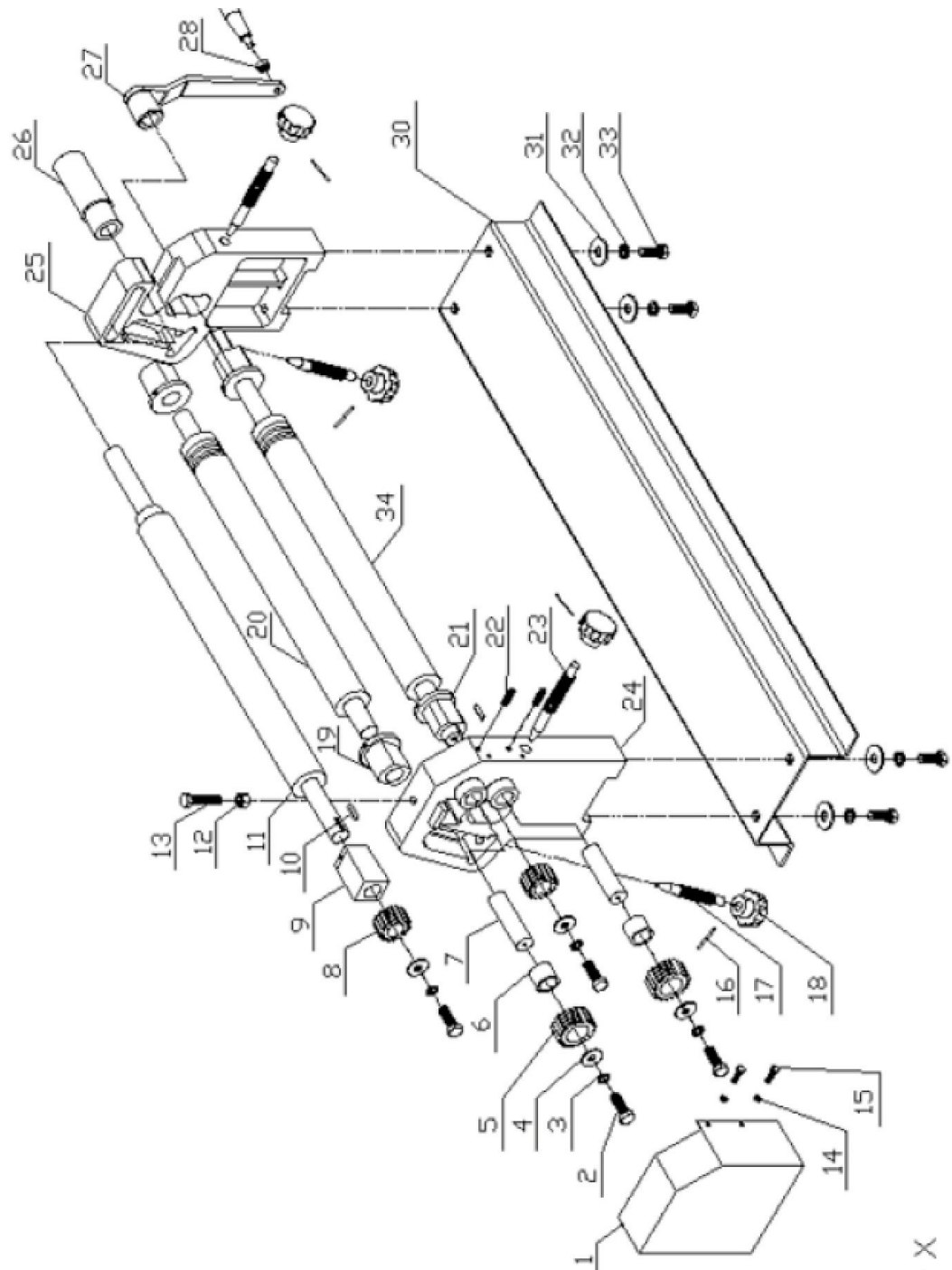


Fig. 6-1: Spare Parts

6.1.1 Spare Parts list

Pos.	Designation	Quantity	Article no.
1	Gear Cover	1	03780618101
2	Hex head bolt M10x6	4	03780618102
3	Spring washer 10mm	4	03780618103
4	Flat washer 10 mm	4	03780618104
5	Gear wheel	2	03780618105
6	Bearing	2	03780618106
7	Gear shaft	2	03780618107
8	Gear wheel	2	03780618108
9	Pivot block	1	03780618109
10	Key 6x25mm	1	03780618110
11	Top roll	1	03780618111
12	Nut M12	1	03780618112
13	Hex bolt M12x50	1	03780618113
14	Spring washer	2	03780618114
15	Socket head screw M6x10	2	03780618115
16	Spring pin	4	03780618116
17	Rear roll adjusting knob	2	03780618117
18	Knob	4	03780618118
19	Roll guide block	2	03780618119
20	Rear roll	1	03780618120
21	Roll guide block	2	03780618121
22	Screw M8x30	2	03780618122
23	Bottom roll adjustung knob	2	03780618123
24	Left frame	1	03780618124
25	Right frame	1	03780618125
26	Pivot sleeve	1	03780618126
27	Crank arm	1	03780618127
28	Nut M10	1	03780618128
29	Crank handles	1	03780618129
30	Base	1	03780618130
31	Lock washer 12mm	4	03780618131
32	Flat washer 12mm	4	03780618132
33	Hex head bolt M12x30	4	03780618133
34	Bottom roll	1	03780618134

7 Annex

7.1 Copyright

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The contents of these instructions are copyright. They may be used in conjunction with the operation of the electric chain hoist. Any application beyond those described is not permitted without the written approval of Stürmer GmbH.

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

7.2 Disposal note / Recycling options:

Please dispose of your device in an environmentally friendly manner by disposing of waste not in the environment but in a professional manner.

Please do not simply discard the packaging and later dispose of the disused device, but dispose of them according to the guidelines established by your local authority or by the responsible disposal company.

7.2.1 Decommission



ATTENTION

Disused equipment must be taken out of service immediately in order to prevent subsequent misuse and endangering the environment or people

- **Unplug the power plug.**
- **Cut the connection cable.**
- **Remove all environmentally hazardous operating fluids from the old device.**
- **If available, remove batteries and rechargeable batteries.**
- **If necessary, dismantle the machine into manageable and usable assemblies and components.**
- **Guide the machine components and operating materials to the appropriate disposal routes.**

7.2.2 Disposal of new equipment packaging

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

The packaging wood can be sent for disposal or recycling.

Packaging components made of cardboard can be crushed for waste paper collection.

The foils are made of polyethylene (PE) or the upholstery parts made of polystyrene (PS). These substances can be reused after processing if they are passed on to a recycling center or to the disposal company responsible for them.

Only pass on the packaging material in such a way that it can be directly recycled.

7.2.3 Disposal of the old device



INFORMATION

In your own interests and in the interests of the environment, please ensure that all components of the machine are disposed of in the proper and approved way.

Please note that electrical appliances contain a variety of recyclable materials as well as environmentally harmful components. Make sure that these components are disposed of separately and properly. In case of doubt, please contact your municipal waste disposal. If necessary, the help of a specialized waste disposal company can be used for the treatment.

7.2.4 Disposal of electrical and electronic components

Please ensure that the electrical components are properly disposed of in accordance with legal regulations.

The device contains electrical and electronic components and must not be disposed of as household waste. According to European Directive 2012/19/ EU on waste electrical and electronic equipment and its transposition into national law, used electric tools and electrical machines must be collected separately and recycled in an environmentally sound manner.

As a machine operator, you should obtain information about the authorized collection or disposal system that is valid for you.

Please ensure that the batteries and / or rechargeable batteries are properly disposed of in accordance with legal regulations. Please throw only discharged batteries into the collection boxes at retailers or municipal waste disposal companies.

7.2.5 Disposal of Lubricants and Coolants



DANGER

Please pay attention to an environmentally friendly disposal of the used coolants and lubricants. Observe the disposal instructions of your municipal disposal companies.



INFORMATION

Used coolant emulsions and oils should not be mixed with each other as only non-mixed waste oils can be used without pretreatment.

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

7.3 Disposal via municipal collection points



Disposal of used, electrical and electronic equipment

(Applicable in the countries of the European Union and other European countries with a separate collection system for these devices).

The symbol on the product or its packaging indicates that this product should not be treated as normal household waste but must be returned to a collection point for the recycling of electrical and electronic equipment. By helping to properly dispose of this product, you are protecting the environment and the health of others. Environment and health are endangered by improper disposal. Material recycling helps to reduce the consumption of raw materials. For more information about recycling this product, contact your local community, municipal waste management, or the shop where you purchased the product.

7.4 RoHS , 2011/65/EU



The symbol on the product or its packaging indicates that this product complies with European Directive 2011/65 / EU.

7.5 Product monitoring

We are obliged to observe our products even after delivery.

Please tell us everything that interests us:

- Changed setting data
- Experiences with the bending machine, which are important for other users
- Recurring disorders

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8 Notes

