

# Chip separator - PRO



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Read the operating instructions carefully before putting the machine into operation!

**These operating instructions are valid for:**

<b>Model</b>	<b>Article number</b>
Chip separator Pro Large	RA-MRP-1
Chip separator Pro Extra Large	RA-MRP-2

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## 1 EC Declaration of Conformity

We hereby declare that the various technical versions of the machine:

Designation: \_\_\_\_\_  
Type: Chip separator PRO  
Serial number: \_\_\_\_\_

comply with the provisions of the Machinery Directive 2006/42 / EC and the other related standards.

The machine mentioned meets the requirements of the EMC Directive 2004/108 / EC and the Low Voltage Directive 2006/95 / EC.

The accompanying safety regulations and operating instructions apply to these machines.

The machines must not be modified. If changes are made to the machine that have not been agreed with us, this declaration becomes invalid.

The following named place

- has carried out the type examination. The product has received the EC type examination under the number \_\_\_\_\_.
- has carried out the EC type-examination procedure specified in Annex IX of 2006/42 / EC.

*\_\_\_\_\_  
Notified checkplace for type examination according to Annex IX*


The following is the name and address of the person authorized to compile the technical documentation.

CEO Karl Binderberger  
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## 2 Safety instructions


### 2.1 Explanation of symbols

Please pay attention to the meaning of the following symbolic explanations and instructions description. They are divided into levels of risk and classified in accordance with ISO 3864- 2

<b>DANGER</b>	
	<p><i>Indicates an immediate threat of danger. If the information is not followed, death or serious bodily injury (invalidity) is the result.</i></p>

<b>WARNING</b>	
	<p><i>Indicates a potentially dangerous situation. If the information is not followed, death or serious bodily injury (disability) are the result</i></p>

<b>CAUTION</b>	
	<p><i>Indicates a potentially dangerous situation. If the information is not followed, material damage as well as minor or moderate physical injuries are the result.</i></p>

<b>NOTICE</b>	
	<p><i>Indicates general instructions, useful operator instructions and working recommendations that have no influence on the safety and health of personnel.</i></p>

2.2 Pictograms and their meaning:

	<p>Read the operating instructions carefully before commissioning!</p> <p>Earmuffs and safety goggles must be worn during operation!</p> <p>Wear safety shoes (with steel toecap) during operation!</p> <p>Gloves must be worn during operation.</p> <p>The machine may only be operated by one person</p> <p>Warning of hot media</p> <p>Warning against rotating parts</p> <p>Warning against drawing in</p> <p>Warning against danger of crushing</p>
	<p>Switch off the machine before maintenance work and secure it against being switched on again.</p> <p>Machine may only be serviced by one person</p> <p>Let the machine cool down before maintenance work</p>

## 2.3 General safety instructions

The machine may only be operated by people who are trained, instructed and authorised for its use. These people must know the operating instructions and act in accordance with them. The respective competences of the operating personnel are clearly defined.

Operating personnel undergoing training may only initially work with the machine under the supervision of an experienced person. The completed and successful instruction is to be confirmed in writing.

## 2.4 Intended use

The Chip separator is designed exclusively for sorting out chips and splinters or pulpwood.

All other forms of usage do not comply with the intended use. The manufacturer is not responsible for any personal injury or material damage that originates from non-compliant usage, but rather the operator of the machine is!

The reading of this manual as well as the observance of all instructions contained within it, particularly the safety instructions, also comply with the intended use. Also included is the fact that all inspection and servicing work is to be conducted in the prescribed time intervals.

## 2.5 Operator requirements

No special knowledge of mechanical or electrical engineering is required to operate the machine. However, the operator must be at least **18 years** old. The operator must be trained and instructed accordingly by the operator of the machine before starting work for the first time (see General safety regulations). Protective shoes and close-fitting clothing must be worn when operating the machine.

If the operator carries out maintenance and servicing work, he must have the necessary specialist knowledge.



## 2.6 Modifications to the machine

For safety reasons, no unauthorised modifications may be made to the machine; this applies in particular to welding work on load-bearing parts.

Only use original spare parts / original wear parts / original accessories - these parts are specially designed for the machine. In the case of externally sourced parts, there is no guarantee that they are designed and manufactured to withstand stress and safety.

Parts and special equipment not supplied by us are also not approved by us for use on the machine.

## 2.7 Misuse and residual risks

Despite correct application of all safety instructions for the machine, residual risks can still occur. These usually result from misuse of the machine.

- Touching rotating or moving components
- Injury from falling wooden or machine parts.
- Fire hazard due to inadequate ventilation of the engine
- Hearing damage from working without hearing protection
- Human error:
  - Mental overload
  - Entering a danger zone
  - Distractions
  - Neglected control activities

### 3 Overview

#### 3.1 How it works

The Chip separator is electrically driven. By rotating the cleaning rollers, the finished pieces of wood are conveyed towards the ejection chute. During the conveying process, pieces of wood that are too small and chip wood can fall through the rollers and be collected separately.



### 3.2 Part description


Number	Description
1	Cleaning rollers
2	Skid plate
3	Feet
4	Cover

### 3.3 Technical Data

	Chip separator L	Chip separator XL
Weight [kg]	2500	2700
Connected load [V]/[A]	400/16	
E-Motor power [kW]	2,4	
E-Motor speed [rpm]	70	
Working height [mm]	2000-3000 mm	
Dimensions L x W [mm]	2500 x 2040	4950 x 2040

## 4 Transport of the machine

### 4.1 Safety instructions during transport

<b>WARNING</b>	
	<p style="text-align: center;"><b><u>Risk of injury during transport!</u></b></p> <ul style="list-style-type: none"><li>• Make sure that there are no persons in the danger zone and that a sufficient safety distance is maintained!</li><li>• The machine may only be lifted at the designated holding points!</li></ul>

### 4.2 Transport journeys


This machine was designed for stationary operation and should only be transported if absolutely necessary.


If the Chip separator needs to be transported, first carry out all the steps from the chapter Decommissioning and retract the support feet.

Load the Chip separator onto a trailer suitable for transport and secure the load to the eyelets provided.

## 5 Set up of the machine

### 5.1 Safety instructions for set up

<h1 style="margin: 0;">WARNING</h1>	
	<p><b><u>Risk of injury if the machine is not set up correctly!</u></b></p> <ul style="list-style-type: none"><li>• Always check the machine for damage before setting it up!</li><li>• Set up the machine on a level and firm surface!</li><li>• Ensure that no persons are endangered by the installation!</li><li>• Lay the cables in such a way that there are no tripping hazards!</li><li>• The machine may only be operated when in perfect condition!</li><li>• Ensure that no persons are in the danger zone!</li></ul>

<h1 style="margin: 0;">NOTICE</h1>	
	<p><b><u>Carry out the following activities before starting work:</u></b></p> <ul style="list-style-type: none"><li>• Assembly and connection must be carried out according to the instructions.</li><li>• Check all bolts and screw connections for tightness before starting work.</li><li>• If the outside temperature is below 0° Celsius, allow the machine to idle for approx. 10 minutes without material.</li></ul>

## 5.2 Set up

Due to its size and weight, the Chip separator can be set up and moved in height almost exclusively using a forklift.

This is also necessary for the initial set-up. The heavy unit must be lifted and the support legs pushed out. Make sure that the safety devices of the supports have been properly attached.

**WARNING! Never stand under suspended loads, they may fall down.**

## 5.3 Electrical supply line

The fuse and dimensioning of the electrical supply line must be selected by a qualified electrician in accordance with national standards and depending on the length of the line!


Connect the 5-pole CEE 400V/16A supply cable to the plug.


The machine (E version) must be operated on a mains supply that is protected by a 30mA residual current circuit breaker.

**All work on the electrical equipment of the machine may only be carried out by trained electricians.**

## 6 Operation

### 6.1 Safety instructions during operation

<h1>DANGER</h1>	
	<p><b><u>Risk of injury from being caught or pulled in on moving machine parts!</u></b></p> <ul style="list-style-type: none"><li>• Keep a sufficient safety distance from moving machine parts! (min.5 metres)</li></ul>

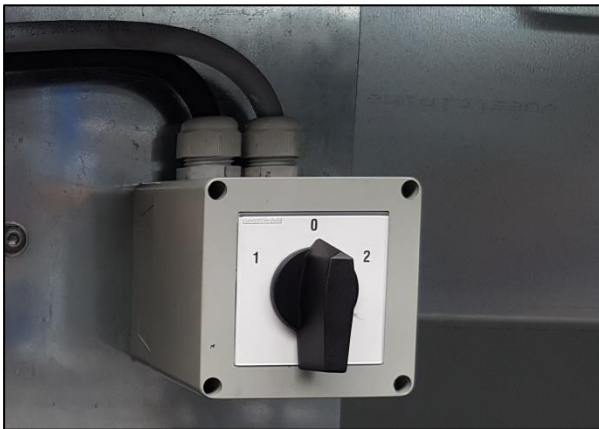
<h1>WARNING</h1>	
	<p><b><u>Risk of injury during operation</u></b></p> <ul style="list-style-type: none"><li>• Make sure that only the operator is at the control panel.</li><li>• Make sure that no other persons are in the danger zone and that a sufficient safety distance is maintained! (min. 5 metres)</li><li>• Familiarise yourself with the operating elements of the Chip separator!</li><li>• Ensure that the machine is in a safe position!</li><li>• All parts that do not belong to the machine must be removed from their environment. (risk of tripping)</li><li>• Protective gloves, safety shoes with steel toecaps and a forestry helmet must be worn.</li></ul>

## 6.2 Switching on the machine

1. Connect the 5-pin CEE 16A plug to the power supply.
2. Switch on the main switch
3. Press the "green" switch on the front of the control box.
4. The machine is now ready for use

## 6.3 Functions on the rotary switch

Rotary switch position	
0	Motor off
1	Motor counter clockwise
2	Motor clockwise



## 6.4 Daily inspection


Visually inspect the unit. Look for faults and defects that could have an influence on safety. Any faults and defects must be rectified.


Make sure that you only use faultless power cables with the Chip separator



## 7 Shut down

### 7.1 Safety instructions during decommissioning

<b>DANGER</b>	
	<p><b><u>Risk of injury from being caught or pulled in on moving machine parts!</u></b></p> <ul style="list-style-type: none"><li>• After parking, wait until all moving machine parts have come to a standstill!</li><li>• Keep a sufficient safety distance from moving machine parts!</li></ul>

<b>WARNING</b>	
	<p><b><u>Risk of injury when switching on the machine by unauthorised persons!</u></b></p> <ul style="list-style-type: none"><li>• Secure the machine after operation against unauthorised switching on!</li><li>• When leaving the workplace of the machine for a longer period of time, disconnect the power source.</li></ul>

## 7.2 Switch off


1. Wait until the last wood is out of the Chip separator.
2. Turn the rotary switch to the "0" position.
3. Press the "red" switch on the front of the control box.
4. Switch off the main switch.
5. Disconnect the supply 5-pin CEE 16A plug.


## 7.3 Storing


- Clean the machine
- All lubrication points must be lubricated.
- Apply a thin layer of lubricant to areas that can be lubricated.
- Store the machine in a cool, dry place.

## 8 Maintenance

### 8.1 Safety instructions during maintenance

<b>DANGER</b>	
	<p><b><u>Serious risk of injury by switching on the drive during maintenance work!</u></b></p> <ul style="list-style-type: none"><li>• Switch off the machine!</li><li>• Secure against being switched on again!</li><li>• Disconnect from power source</li></ul>

<b>CAUTION</b>	
	<p><b><u>Risk of injury! Scalding by hot machine components and media!</u></b></p> <ul style="list-style-type: none"><li>• Allow the machine to cool down to ambient temperature before carrying out any maintenance work.</li><li>• Keep easily flammable material away from hot surfaces.</li></ul>

<b>CAUTION</b>	
	<p><b><u>Risk of chemical burns from contact with lubricants!</u></b></p> <ul style="list-style-type: none"><li>• Avoid contact with skin and eyes.</li><li>• Do not swallow or inhale.</li><li>• Use suitable protective equipment (gloves, goggles).</li></ul>

## 8.2 Notes when working on electric equipment

All work on the electrical equipment of the machine may only be carried out by trained electricians.

- Check electrical equipment regularly.
- Reattach loose connections.
- Replace damaged lines or cables immediately.
- Never clean electrical equipment with water or similar liquids.

## 8.3 Lubricating

The lubrication points of the Chip separator are located by the bearing blocks on the cleaning rollers. To do this, open the covers on the left and right sides of the machine.

### **Warning!**

If, for example, the lubrication channel of a bearing housing becomes clogged and the grease therefore cannot penetrate, stop operation and clean the lubrication channel.

## 8.4 Chain tension

The chain tension can be adjusted using the plastic rollers.

To do this, open the cover on the right-hand side of the machine. The plastic rollers can be screwed loosely and then adjusted in height. When the chain tension is OK, the screws can be tightened again and the cover closed.

## 8.5 Cleaning

After each operation and before each maintenance, the machine must be cleaned of dirt!

After each cleaning with water, the Chip separator must be lubricated!

## 8.6 Maintenance schedule

Regular maintenance is the best guarantee for effective and economical operation of your Chip separator.

Check your chain tension and lubricate the bearing blocks at intervals of 50 operating hours.

## 8.7 Duties before the end of work

After completing the maintenance work and before starting the machine, observe the following points:

- Check that all previously loosened bolted connections are tight.
- Check that all previously removed guards, covers, .... are properly reinstalled.
- Make sure that all tools, materials and other equipment used have been removed from the work area.
- Clean the work area and remove any spills of liquids and similar substances.
- Ensure that all safety devices of the machine are working properly again.
- Check the operation of the safety devices. Do not release the machine for use if the safety devices are not functioning properly.
- Carry out a test run with a function check of the repaired components.
- Secure the machine against unauthorised switching on if you have not completed the work.
- Do not handle naked flames or smoke.

## **9 Guaranty and Warranty**

### **Warranty conditions 950601:**

Binderberger Maschinenbau GmbH provides a warranty for the period of two years on parts that do not fulfil their function as a result of material or manufacturing defects.

Goods purchased from us, such as motors, chains and gear wheels, are covered by our suppliers' one-year warranty.

The warranty takes effect from the date of delivery.

The warranty does not cover faults due to normal wear and tear, carelessness, incorrect use and incorrect assembly. Hydraulic hoses and couplings are excluded from the warranty.

Costs incurred under the warranty procedure for disassembly, assembly and shipping will not be reimbursed. The warranty is valid under the condition that the warranty claim is reported directly to the Binderberger company. The fault is to be rectified after mutual agreement between the customer, the authorised dealer and the Binderberger company.

If the manufacturer deems it appropriate, the device or components of the device must be returned to the manufacturer for warranty measures. The type of the device, the manufacturing number, the date of delivery, the name of the owner and the address must be stated.

The guarantee is invalid if the machine deviates from the original design, e.g., due to modifications, adjustments, additional constructions or replacement of parts not supplied by us. Otherwise, the NL92 delivery conditions apply.

## **10 Conduct with accidents**

As a matter of routine, ensure you have up-to-date information about available first aid options.

After the initial care of injured people, immediately inform your supervisor of any personal injuries, damage to the machine or material damages.

In the event of the specific use of emergency vehicles, state the severity of the injury and damage.

In a disaster situation, immediately leave the machine (fire).

### **Note**

In the course of further technical development, Binderberger Maschinenbau GmbH is constantly working on improving its products. We therefore reserve the right to make changes to the illustrations and descriptions in this operating manual / spare parts list; a claim for changes to machines already delivered cannot be derived from this. Technical data, dimensions and weights are not binding.

Errors excepted.

Dealer's stamp:

Name plate: