

# Cross conveyor



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



# These operating instructions are valid for:

Model	Article number
KQF 3.0 – 3	QF-M33-1
KQF 3.0 – 4	QF-M34-1
KQF 3.0 – 5	QF-M35-1
KQF 3.0 – 6	QF-M36-1
KQF 4.5 – 3	QF-M43-1
KQF 4.5 – 4	QF-M44-1
KQF 4.5 – 5	QF-M45-1
KQF 4.5 – 6	QF-M46-1

Version:

2.0

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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 Binderberger Maschinenbau GmbH Fillmannsbach 9 AT-5144 St. Georgen am Fillmannsbach



# 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



DANGER Indicates an immediate threat of danger.

If the information is not followed, death or serious bodily injury (invalidity) is the result.

# WARNING



Indicates a potentially dangerous situation. If the information is not followed, death or serious bodily injury (disability) are the result

# CAUTION



Indicates a potentially dangerous situation. If the information is not followed, material damage as well as minor or moderate physical injuries are the result.

# NOTICE



Indicates general instructions, useful operator instructions and working recommendations that have no influence on the safety and health of personnel.



# 2.2 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.

## 2.3 Intended use

The cross conveyor is to be used exclusively for conveying logs.

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.

## 2.4 Operator requirements

No special knowledge of mechanical or electrical engineering is required to operate the machine. However, the operator must be at least **<u>18 years</u>** 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.



# 2.5 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.

#### 2.6 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 <u>Overview</u>

## 3.1 How it works

The Binderberger cross conveyor is specially designed to facilitate the log loading of the fire wood processor.

It is possible to line up several logs and transport them to the machine by means of a chain hoist.

The conveyor width can be increased by adding more infeed elements.

The cross conveyor is driven by the hydraulics of the firewood processor.







# 4 Set up of the machine

# 4.1 Safety instructions for set up

WARNING		
	<ul> <li>Risk of injury if the machine is not set up correctly!</li> <li>Always check the machine for transport damage before setting it up!</li> <li>Set up the machine on a level and firm surface!</li> <li>Use all connecting elements!</li> <li>Ensure that no persons are endangered by the installation!</li> <li>Lay hoses in such a way that there are no tripping hazards!</li> <li>Incorrectly placed or improperly fastened machine parts can fall over.</li> <li>The machine may only be operated when in perfect condition!</li> <li>Do not attach or detach pressurised hoses!</li> <li>Ensure that hydraulic hoses with protective hoses are used.</li> </ul>	





## 4.2 Set up

To assemble the cross conveyor, it is necessary to connect the conveyor elements with a connecting element. As explained in the picture, it is a simple plug-in connection which is secured with bolts.



Make sure that the fasteners are in the correct position. This is the only way to ensure an optimum force distribution in the event of a transverse load.





#### 4.3 Connecting the hydraulic hoses

Before commissioning, the cross conveyor must be connected to the hydraulics of the firewood processor. These are 2 hoses. which are connected to the control unit in the operating area of the processor.

For more information on the exact position of the connections on the firewood processor, see the relevant operating instructions.

#### 4.4 Height adjustment

Before starting work, the cross conveyor should stand straight and at an optimum height to the firewood processor. It is equipped with heightadjustable feet for this purpose. To change the height, just pull out the moulded tube and secure it in the desired position with the bolt.





# 5 **Operation**

5.1 Safety instructions during operation

DANGER
Risk of injury from being caught or pulled in on moving <u>machine parts!</u>
<ul> <li>Keep a sufficient safety distance from moving machine parts!</li> </ul>
<ul> <li>Do not stand under the cross conveyor, it may collapse!</li> </ul>
<ul> <li>No persons are allowed to be in the conveying direction of the machine. Logs can start to roll!</li> </ul>

WARNING		
	Risk of injury when operating!	
	<ul> <li>Make sure that there are no other persons in the danger zone and that a sufficient safety distance is maintained!</li> <li>Familiarise yourself with the operating elements of the cross conveyor!</li> <li>Ensure that the machine is in a safe position!</li> <li>Make sure that there are no persons in the conveying direction.</li> </ul>	



CAUTION
Risk of injury when operating
<ul> <li>Wear protective gloves and safety shoes with steel toecaps.</li> <li>Remove all parts that do not belong to the machine from its surroundings. (risk of tripping)</li> </ul>

# 5.2 Important notes during operation

NOTICE
<ul> <li>Make sure that your workplace is sufficiently illuminated.</li> <li>Before switching on the machine, inform yourself about the correct behaviour in the event of a malfunction.</li> <li>If the operator leaves the machine unattended, it must be switched off and secured against unauthorised restarting.</li> <li>When loading the machine, strictly observe the safety distance when working under power lines. No part of the machine may come closer than the specified safety distances:         <ul> <li>For low-voltage lines: min. 2 metres</li> <li>For high-voltage lines: min. 6 metres</li> </ul> </li> </ul>



#### 5.3 Working with the cross conveyor

A control lever is provided for operation. Use this lever to move the chain back and forth. Load the cross conveyor with wood. To bring a log to the firewood processor, move it forward using the chain.

If the log is slightly slanted, you should straighten it first. With a little skill, this can be done very well with the separating plates.

## 5.3.1 Separating plates

To avoid accidentally feeding several logs into the firewood processor at the same time, a system is installed to separate and straighten the logs.

Move the log forward until it passes over the "separating plates". Then move the log back again and let the now single log rest against the plates until it has been straightened. Now the log lies straight on the cross conveyor and can be fed to the firewood processor.





# 6 Maintenance

## 6.1 Safety instructions during maintenance

	DANGER		
	Serious risk of injury from switching on the drive during maintenance work!         • Switch off the machine!         • Secure against being switched on again!         • Disconnect from power source		
CAUTION			
	<ul> <li><u>Caution Lubricants!</u></li> <li>Use suitable collection containers.</li> <li>Remove spilled oil immediately.</li> <li>Avoid contact with skin and eyes.</li> <li>Do not swallow or inhale.</li> <li>Use suitable protective equipment (gloves, goggles).</li> <li>Take care that no oil gets into the environment.</li> <li>Spilled oil pollutes water bodies and groundwater.</li> </ul>		

CAUTION		
	Risk of injury! Scalding by hot machine components and media!	
	<ul> <li>Allow the machine to cool down to ambient temperature before carrying out any maintenance work.</li> <li>Keep highly flammable material away from hot surfaces.</li> </ul>	



## 6.2 Cleaning

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

After each cleaning with water, the cross conveyor must be lubricated!

## 6.3 Notes when working on hydraulic equipment

All work on the machine's hydraulic equipment may only be carried out by trained specialists.

- Depressurise all hydraulic systems / system parts before starting work.
- Before starting work, ensure that suitable collection containers are available for all substances hazardous to groundwater (oils, coolants, etc.).

Switch off the firewood processor and disconnect the two hydraulic hoses from it. Put up a warning sign against switching on / plugging in again.



## 6.4 Tensioning the conveyor chain

If the chain is loose, the idler pulley can be moved.

To tension the conveyor chain, loosen the 4 nuts (1) on the plate.

Now, with the help of the tensioning nut (2), the entire deflection unit can be moved backwards and the chain



can be tensioned. The chain must be pre-tensioned so that it can be lifted off in the middle by approx. 5 cm. Afterwards, the 4 screws must be tightened again.

### 6.5 Tensioning the oil engine chain

To tension the oil motor chain, a tensioning screw is attached to the underside of the oil motor.

If the screws on the oil motor are loosened and the tensioning screw is tightened, the tension on the chain increases.

#### To check:

It should be possible to push the chain in 5 to 10 mm in the middle. This is how the optimum tension is achieved.

Once the optimum tension has been set, the screws on the oil motor must be tightened again.





## 6.6 Changing the hydraulic hoses

All hydraulic hoses must be replaced after 5 years at the latest.

Damage to the hoses can cause serious injuries!

#### 6.7 Maintenance scheme

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

It is recommended to grease each chain at intervals of max. 50 operating hours.

#### 6.8 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

- there are no leaks in the hydraulics
- no hoses are defective
- no cracks or damage have occurred in the moulded pipes welding joints.



# 7 <u>Guaranty and Warranty</u>

#### 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.



# 8 <u>Conduct with accidents</u>

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).



# <u>Notes</u>




#### 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:



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