

MASCHINEN WASCHINE

DE ORIGINAL BETRIEBSANLEITUNG MOBILES KANTENANLEIMGERÄT

**EN USER MANUAL** 

**EDGE BANDING MACHINE** 



## KAM 50M

# MOBILES KANTENANLEIMGERÄT EDGE BANDING MACHINE



Betriebsanleitung und Sicherheitshinweise vor Erstinbetriebnahme lesen und beachten!



Read the operation manual carefully before first use.

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## 3 SICHERHEITSZEICHEN / SAFETY SIGNS

**DE** SICHERHEITSZEICHEN
BEDEUTUNG DER SYMBOLE

**EN** SAFETY SIGNS
DEFINITION OF SYMBOLS



**DE WARNUNG!** Beachten Sie die Sicherheitssymbole! Die Nichtbeachtung der Vorschriften und Hinweise zum Einsatz der Maschine kann zu schweren Personenschäden und tödliche Gefahren mit sich bringen.

**EN ATTENTION!** Ignoring the safety signs and warnings applied on the machine as well as ignoring the security and operating instructions can cause serious injuries and even lead to death.



**DE ANLEITUNG LESEN!** Lesen Sie die Betriebs- und Wartungsanleitung Ihrer Maschine aufmerksam durch und machen Sie sich mit den Bedienelementen der Maschine gut vertraut um die Maschine ordnungsgemäß zu bedienen und so Schäden an Mensch und Maschine vorzubeugen.

**EN READ THE MANUAL!** Read the user and maintenance manual carefully and get familiar with the controls in order to use the machine correctly and to avoid injuries and machine defects.



**DE CE-KONFORM** - Dieses Produkt entspricht den EG-Richtlinien.

**EN EC-CONFORM** - This product complies with the EC-directives.



**DE Allgemeiner Hinweis** 

**EN** General note



DE Schutzausrüstung!



**EN Protective clothing!** 







DE Verbrennungsgefahr!

**EN** Burn hazard!





**DE** Leicht entflammbar!

**EN** Highly flammable!



**DE Nur geschultes Personal!** 

**EN** Only trained staff!



**DE** Bedienung mit Schmuck verboten!

**EN** Operation with jewelry forbidden!



**DE** Bedienung mit Krawatte verboten!

**EN** Operation with tie forbidden!



**DE** Bedienung mit offenem Haar verboten!

**EN** Operation with long hair forbidden!



DE Maschine vor Wartung und Pausen ausschalten!

**EN** Stop before any break and engine maintenance!



DE Vor Wartungsarbeiten Netzstecker ziehen!

**EN** Pull power supply before engine maintenance!



### 10 PREFACE

### **Dear Customer!**

This manual contains information and important instructions for the installation and correct use of the edge banding machine KAM 50M.

Following the usual commercial name of the device (see cover) is substituted in this manual with the name "machine".

This manual is part of the product and shall not be stored separately from the product. Save it for later reference and if you let other people use the product, add this instruction manual to the product.

#### Please read and obey the security instructions!



Before first use read this manual carefully. It eases the correct use of the product and prevents misunderstanding and damages of product and the user's health.

Due to constant advancements in product design, construction pictures and content may diverse slightly. However, if you discover any errors, inform us please. Technical specifications are subject to changes!

Please check the product contents immediately after receipt for any eventual transport damage or missing parts.

Claims from transport damage or missing parts must be placed immediately after initial product receipt and unpacking before putting the product into operation.

Please understand that later claims cannot be accepted anymore.

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### CUSTOMER SERVICE CONTACT

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### 11 TECHNIC

#### 11.1 Technical Details

Power	W	2000 (100%)
Temperature range	°C	50 - 610
Banding temperature range	°C	330 - 540
Voltage	V	220
Max. banding width at 1mm edge thickness	mm	50
Max. banding width at 2mm edge thickness	mm	30
Weight	kg	3
Vibration	m/s²	2,5
Sound pressure	dB (A)	65,6

#### 12 SAFETY

#### 12.1 Intended Use

The machine must only be used for its intended purpose! Any other use is deemed to be a case of misuse.

To use the machine properly you must also observe and follow all safety regulations, the assembly instructions, operating and maintenance instructions lay down in this manual.

All people who use and service the machine have to be acquainted with this manual and must be informed about the machine's potential hazards.

It is also imperative to observe the accident prevention regulations in force in your area.

The same applies for the general rules of occupational health and safety.

The machine is used for:

For banding of hot melt adhesive-coated edges of veneer, plastic and similar materials on straight and round workpieces.

Any manipulation of the machine or its parts is a misuse, in this case HOLZMANN-Machines and its sales partners cannot be made liable for ANY direct or indirect damage.

Even when the machine is used as prescribed it is still impossible to eliminate certain residual risk factors.

### 12.2 Security instructions

Missing or non-readable security stickers have to be replaced immediately!

To avoid malfunction, machine defects and injuries, read the following security instructions!

The locally applicable laws and regulations may specify the minimum age of the operator and limit the use of this machine!













- Therefore beware of burns if in contact with adhesive or parts away from the insulated handle.
- Fire hazard if handled carelessly with the machine especially when flammable materials (eg wood shavings etc ...) in the work area are
- The use of the machine in such an area is strictly prohibited!
- The operation of the machine in a potentially explosive area (due to gases etc ...) is prohibited!



- Respectively trained people only shall operate the machine.
- Do not allow other people, particularly children, to touch the machine or the cable. Keep them away from your work area.







Wear suitable work clothes! Do not wear loose clothing or jewelry as they might get caught in moving parts and cause severe accidents! Wear a hair net if you have long hair.





Use personal safety equipment: ear protectors, safety goggles and safety gloves when working with the machine.



- Adhesive granules may include circumstances chemical substances that have a negative impact on personal health.
- Work with the machine to perform only in well-ventilated areas and with matching safety mask!



- Never leave the machine running unattended.
- Before leaving the working area switch the machine off, let the machine cool down and put down that fire can not occur.



Switch the machine off and disconnect it from the power supply be-fore any maintenance works or cleaning is carried out.



## NOTICE

#### **Emergency procedure**

A first aid kit in accordance with DIN 13164 should always be readily available for a possible accident. Initiate the violation in accordance with the necessary first aid measures. When requesting support, provide the following details:



1. Place of accident	2. Type of accident
3. Number of injured people	4. Injury type(s)



#### 12.3 Prohibited use

- The operation of the machine outside the stated technical limits described in this manual is forbidden.
- Operation of the machine function without emergency stop button or impeller box with open doors is prohibited.
- The use of the machine not according with the required dimensions is forbidden.
- The use of the machine not being suitable for the use of the machine and not being certified is forbidden.
- Any manipulation of the machine and parts is forbidden.
- The use of the machine for any purposes other than described in this user-manual is forbidden.
- The unattended operation on the machine during the working process is forbidden!
- It is not allowed to leave the immediate work area during the work is being performed.

For a different or additional use and resulting property damage or injury takes HOLZMANN-MASCHINEN no responsibility or warranty.

## 12.4 Remaining risk factors



## WARNING

It is important to ensure that each machine has remaining risks. In the execution of all work (even the simplest) greatest attention is required. A safe working depends on you!

Even if the machine is used as required it is still impossible to eliminate certain residual risk factors totally. The following hazards may arise in connection with the machine's construction and design:

Despite of correct and proper use and maintenance there remain some residual risk factors:

- Risk of burns to the hands / fingers through the heating of machine components away from the insulated handle or by contact with hot melt adhesive.
- Risk of burns from hot vapours.
- Risk of injury to the eye by flying parts, even with goggles.
- Health hazard due to inhalation of hot melt adhesive vapours.
- FIRE HAZARD! Handle carefully before, during and after the operation allow further cool down the machine before storing it.

These risk factors can be minimized through obeying all security and operation instructions, proper machine maintenance, proficient and appropriate operation by persons with technical knowledge and experience.



### 13 ASSEMBLY

The KAM 50M is a mobile edge banding machine for banding of hot melt adhesive-coated edges of veneer, plastic and similar materials on straight and round workpieces.

The finishing of the adhered edge is done with the double edge trimmer and the end trimmer. Note the maximum banding width is depending of the edge thickness

## 13.1 Delivery content

Check the delivery content:

- Edge banding machine KAM 50M
- Double edge trimmer
- End trimmer
- User manual

## 13.2 Workplace

- Well ventilated
- No any flammable materials
- Grounded power supply 220V/50Hz



## **ATTENTION**

When working with non-grounded machines:
Severe injury or even death may arise though electrocution!

**Therefore**: The machine must be operated at a grounded power socket

The connection of the machine to the electric power supply and the following checks have to be carried out by a respectively trained electrician only.

- 1. The electronic connection of the machine is designated for operation with a grounded power socket!
- 2. The connector plug may not be manipulated.
- 3. he mains supply must be secured with 16A:
- 4. If the connector plug doesn't fit or if it is defect, only qualified electricians may modify or re-new it!
- 5. The grounding wire should be held in green-yellow.
- 6. A damaged cable has to be exchanged immediately!
- 7. Check, whether the feeding voltage and the Hz comply to the required values of the machine. A deviation of feeding voltage of  $\pm 5\%$  is allowed (e.g.: a machine with working voltage of 380V can work within a voltage bandwidth of 370 till 400V.
- 8. Make sure that a possible extension cord is in good condition and suitable for the transmission of power. An undersized cord reduces the transmission of power and heats up.
- 9. A damaged cable must be replaced immediately





## **NOTICE**

Operation is only allowed with safety switch against stray current (RCD max. stray current of 30mA)





## **NOTICE**

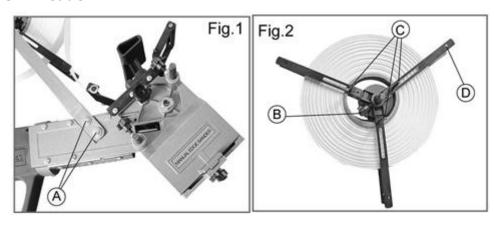
Use only permitted extension cable with cross-section the one in the following table declared.



Voltage	Extension	Cross-section
220 V-240 V 50 Hz	<27 m	1,5 mm <sup>2</sup>
	<44 m	2,5 mm <sup>2</sup>
	<70 m	4,0 mm <sup>2</sup>
	<105 m	6,0 mm <sup>2</sup>

## 13.3 Assembly

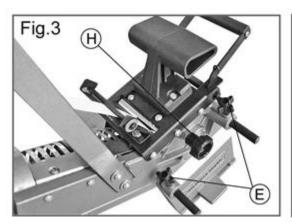
#### 13.3.1 Loader

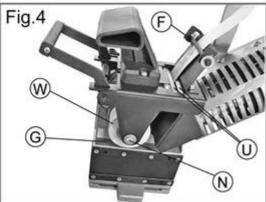


- Fit the loader in its housing by means of the 2 screws A
- Loose knob **B** and remove the cover of the loader
- Adjust the 3 rods C to the internal diameter of the band roll
- Place the pre-glued band roll in the support, return the cover to the loader **D** and rescue it by means of knob **B**



#### 13.3.2 Passing through of band





- Loose knobs **E** and separate the 2 bodies so as to allow the strip to pass
- Pass the band under the non-return rod  ${\bf F}$  and through knives  ${\bf U}$  until it is under gluing roller  ${\bf W}$
- Close th moving body G by means of knob H to the width of the band without clamping it so that it is guided and secure it in this position with knobs E

### 14 OPERATION

Device to be operated in a perfect state only. Inspect the device visually every time it is to be used. Check in particular the safety equipment, electrical controls, electric cables and screwed connection for damage and if tightened properly. Replace any damaged parts before operating the device.

### 14.1 Operation instructions



## WARNING







## !!!!ATTENTION!!!!

TO PREVENT THE DEVICE FROM DAMAGE, TURN IT DOWN TO MINIMUM TEMPERATURE AND LET IT COOL DOWN PLUGGED IN FOR 5 MINUTES.



## 14.2 Operation

#### 14.2.1 Clamp adjustments

Carry out the djustments in the order given bellow:

- 1. Fixed side:
  - With an overlap: If you wish a 1.5mm overlap on this side, place clamp I at the end
    of the slotted level (position furthest away from the fixed body) and lock it in this
    position with knob J
  - Flush with the board: If you wish to glue the edge on this side, flush with the board, place clamp **I** at the end of the fixed body and lock it in this position with knob **J**

#### 2. Moving side:

Loosen knob K, open clamp G. Place the panel between the 2 clamps, bring clamp G up, until clamping the panel with knob K. then remove the panel. Close the moving clamp G 2mm more, taking scaled plae L as reference and lock the clamp G in this position with knob K. In this way the pressure of the leaf springs is adjusted and the machine is ready to work.

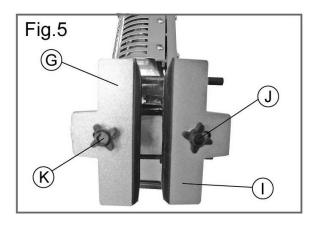
#### 14.2.2 Overlap distributioin

The overlap or the difference in widths between the panel that we are going to edge and the width of the band we are using is distributed as follow:

- 1. Fixed side:
  - The overlap in this side will be 1.5mm. Or there will be no overlap depending on the way we have adjusted the clamp **I** (see chapter befor)

#### 2. Moving side:

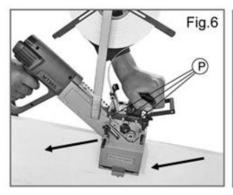
- All the overlap will remain in this side of panel if the fixed side clamp I has been adjusted "flush with the board"
- If the fixed side clamp **I** has been adjusted with an overlap if 1.5mm all the overlap excepting 1.5mm will remain on this side of the panel

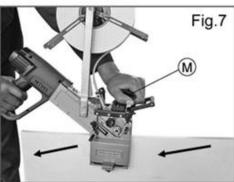


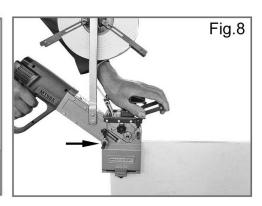


### 14.2.3 Edge banding

- Check the switch is in position 0
- Plug in the power supply
- Place the tool at the beginning of the panel, making sure that the pre-glued band exceeds the panel end by at least 10mm (fig.6)
- Press the switch to position I or II to start up the heater and wait for a few seconds until the rated temperature is reached and the band glue starts to melt
- Press the pre-glued band against the panel by pushing on knob M and displace the machine along the panel
- Operate the cutting lever when the clamps reach the end of the panel and continue edging until the panel end (fig.8)



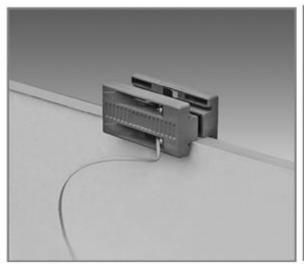




Switch-position I: Quantity of gas flow 360l/min; heating power 50°C

Switch-position **II**: Quantity of gas flow 360l/min; heating power 50°C-610°C (by hand wheel) Switch-position **III**: Quantity of gas flow 360l/min; heating power 50°C-610°C (by hand wheel)

### 14.2.4 Postprocessing the glued edge





- With the double edge trimmer can the glueded edge after a cool down phase cut (see the picture left)
- With the end trimmer can the glueded edge cut untill a width of 50mm (see the picture right)



## 15 MAINTENANCE



### **ATTENTION**

Don't clean or do maintenance on the machine while it is still connected to the power supply:



Therefore: Switch the machine off and disconnect it from the power supply be-fore any maintenance works or cleaning is carried out

The machine does not require extensive maintenance. If malfunctions and defects occur, let it be serviced by trained persons only.

Before first operation as well as later on every 100 operation hours you should lubricate all connecting parts (if required, remove beforehand with a brush all swarfs and dust).

Check regularly the condition of the security stickers. Replace them if required.

Check regularly the condition of the machine.

The good condition and perfect adjustment of the guiding rollers is essential for a smooth band guidance and a clean cut.

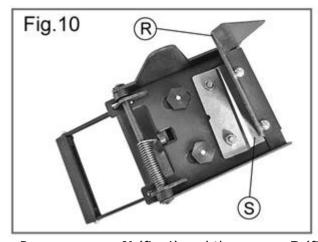
Store the machine in a closed, dry location.

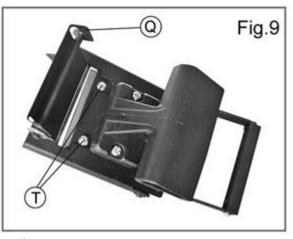
## NOTICE

Clean your machine regularly after every usage – it prolongs the machines lifespan and is a pre-requisite for a safe working environment.

Repair jobs shall be performed by respectively trained professionals only!

## 15.1 Changing knives





- Remove screw N (fig.4) and the screws P (fig.6)
- Separate the knife holding body from the machine (fig.9)
- Remove the band guide **Q**, deflektor **R** and rear knife **S** (fig.10)



## 15.2 Cleaning

After each workshift the machine has to be cleaned. Remove chips etc. with a suitable tool. Do not remove them by hand (cutting injury!). Remove dust as well.

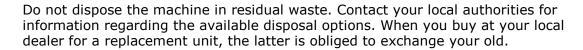


## NOTICE

The usage of certain solutions containing ingredients damaging metal surfaces as well as the use of scrubbing agents will damage the machine surface!

Clean the machine surface with a wet cloth soaked in a mild solution

## 15.3 Disposal





## 16 TROUBLE SHOOTING

BEFORE YOU START WORKING FOR THE ELIMINATION OF DEFECTS, DISCONNECT THE MACHINE FROM THE POWER SUPPLY.

Trouble	Possible cause	Solution
Machine does not start	Switch defective	Repair/change switch
	Power supply is off	Repair power supply
	Fuse is defective	Change fuse
Machine does not heat	Temperature controller defective	Repair/change controller
Edge band has insufficient adhesive or is uneven	Check adjustment	<ul><li>Adapt temperature</li><li>Exert higher/less pressure</li><li>Attention to uniform and slow drawing speed</li></ul>

MANY POTENTIAL SOURCES OF ERROR CAN BE CLEARED BY THE EXPERTLY CONNECTION TO THE ELECTRICITY GRID.



## NOTICE

Should you in necessary repairs not able to properly to perform or you have not the prescribed training for it always attract a workshop to fix the problem.



## 17 ERSATZTEILE / SPARE PARTS

## 17.1 Ersatzteilbestellung / spare parts order

Mit Holzmann-Ersatzteilen verwenden Sie Ersatzteile, die ideal aufeinander abgestimmt sind. Die optimale Passgenauigkeit der Teile verkürzen die Einbauzeiten und erhöhen die Lebensdauer.

## **HINWEIS**

Der Einbau von anderen als Originalersatzteilen führt zum Verlust der Garantie!

Daher gilt: Beim Tausch von Komponenten/Teilen nur Originalersatzteile verwenden

Beim Bestellen von Ersatzteilen verwenden Sie bitte das Serviceformular, das Sie am Ende dieser Anleitung finden. Geben Sie stets Maschinetype, Ersatzteilnummer sowie Bezeichnung an. Um Missverständnissen vorzubeugen, empfehlen wir mit der Ersatzteilbestellung eine Kopie der Ersatzteilzeichnung beizulegen, auf der die benötigten Ersatzteile eindeutig markiert sind.

Bestelladresse sehen Sie unter Kundendienstadressen im Vorwort dieser Dokumentation.

With original Holzmann spare parts you use parts that are attuned to each other shorten the installation time and elongate your products lifespan.

## **IMPORTANT**

The installation of other than original spare parts voids the warranty!

So you always have to use original spare parts

When you place a spare parts order please use the service formular you can find in the last chapter of this manual. Always take a note of the machine type, spare parts number and partname. We recommend to copy the spare parts diagram and mark the spare part you need.

You find the order address in the preface of this operation manual.



## 18 KONFORMITÄTSERKLÄRUNG/CERTIFICATE OF CONFORMITY



#### Inverkehrbringer / Distributor

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Tel.: +43/7289/71562-0; Fax.: +43/7289/71562-4
www.holzmann-maschinen.at

#### Bezeichnung / name

#### Mobiles Kantenanleimgerät / edge banding machine

Typ / model

**KAM 50M** 

EG-Richtlinien / EC-directives

■ 2006/42/EG

Angewandte Normen / applicable Standards

Hiermit erklären wir, dass die oben genannten Maschinen aufgrund ihrer Bauart in der von uns in Verkehr gebrachten Version den grundlegenden Sicherheits- und Gesundheitsanforderungen der angeführten EG-Richtlinien entsprechen. Diese Erklärung verliert ihre Gültigkeit, wenn Veränderungen an der Maschine vorgenommen werden, die nicht mit uns abgestimmt wurden.

Hereby we declare that the above mentioned machines meet the essential safety and health requirements of the above stated EC directives. Any manipulation or change of the machine not being explicitly authorized by us in advance renders this document null and void.

Christian Eckerstorfer

Techn. Dokumentation / techn. documentation HOLZMANN-MASCHINEN

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Klaus Schörgenhuber Geschäftsführer / Director

Haslach, 31.01.2014

Ort / Datum place/date