



**HOFFMANN
Machine
Company, Inc.**

Operating and Maintenance Manual
MOBIL 2500, 3000 and 3600
Pneumatic Edgebanding Press



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2 Warning and Safety Symbols used in this manual

Operator must read, understand and follow all safety rules, symbols and operating instructions at all times.

The following symbols are used in this operating manual:



Danger Symbol

This symbol warns of a serious danger. Ignoring the safety instructions will lead to serious bodily harm and/or death!



Warning Symbol

This symbol warns of a possible danger. Ignoring the safety instructions can lead to serious bodily harm and/or death!



Important Instructions

Instructions listed with this symbol must be strictly adhered to.



Safety Warning Symbol

This symbol warns of a possible danger. Ignoring the safety instructions can lead to serious bodily harm and/or damage to the equipment and/or material being processed.



This symbol does not include a warning. It is used to denote helpful hints and tips to improve the operation and performance of the equipment.

2.1 Warning and Safety Labels attached to Machine

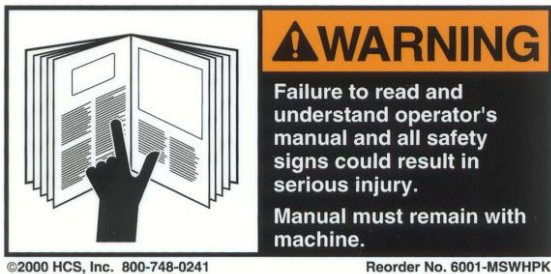
A number of important warning labels have been attached to this MOBIL edgebanding press for your information and protection.

For your own safety, please take a moment to locate and read all warning labels before operating this machine.

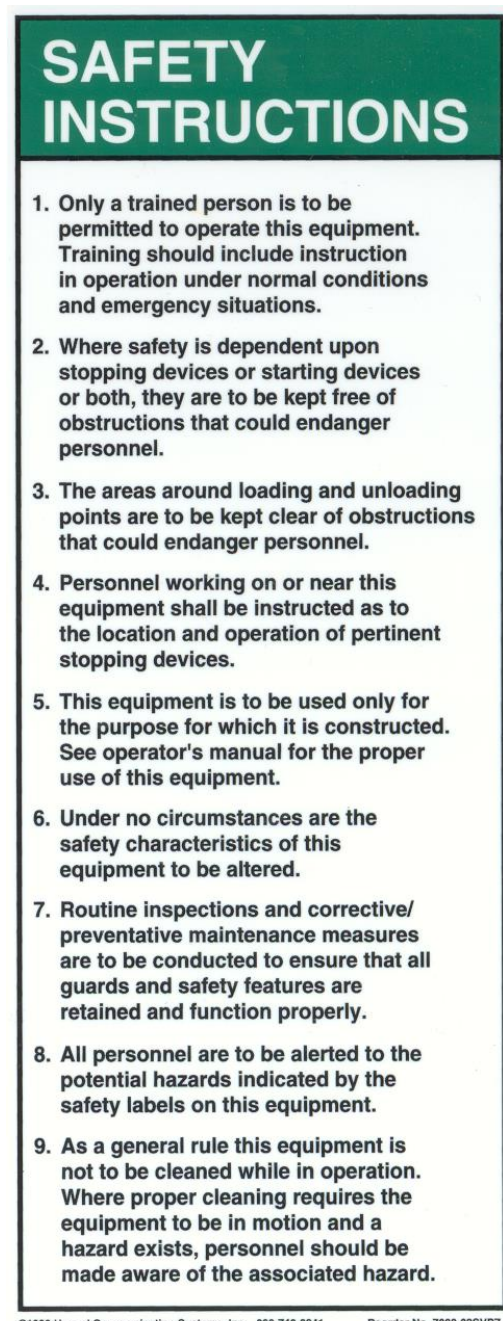
If a label has been removed, defaced or is illegible, please contact Hoffmann Machine Company, Inc. to request a free replacement.

NEVER REMOVE ANY SAFETY OR WARNING LABEL!

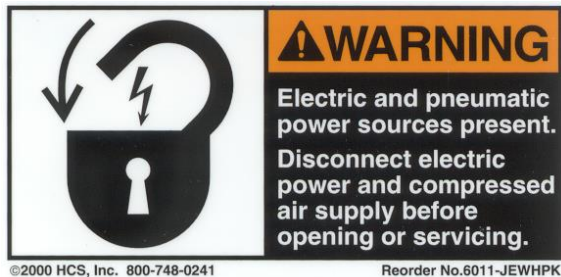
(Located on machine frame)



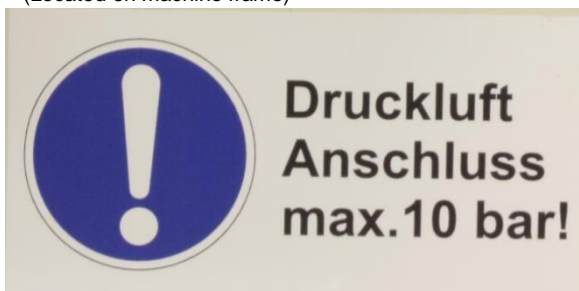
(Located on machine frame)



(Located on machine frame)



(Located on machine frame)



German Language Warning:

**Maximum Compressed Air Supply Pressure
10 bar = 140 psi!**

(Located on preheating element and on main heating element / adjustable front fence)



Located on all material clamping cylinders
four cylinders on MOBIL 2500, six cylinders on MOBIL 3000 and eight cylinders on MOBIL 3600



3. Intended Use and Operation

The MOBIL 2500, 3000 and 3600 series edgebanding press is designed solely for attaching solid wood edges as well as veneer and laminate edge strips to panels and sheet goods such as plywood, MDF, particleboard, MDO, etc.

The machine may not be used for any other processes or materials.

All work pieces must fall within the following dimensional parameters:

Dimension	MIN	MAX
Width	1/4" - 6.5mm	4" - 102mm
Thickness	veneer thickness	2" - 51mm
Length	n/a	98" – 2500mm MOBIL 2500 118" - 3000mm MOBIL 3000 142" – 3600mm MOBIL 3600



Using the MOBIL edgebanding press for any other operation or material can result in unforeseen dangers and is hereby forbidden!

The manufacturer is not liable for any damages resulting from unapproved use or operation of the equipment. The operator is solely responsible for any such risks and dangers.

The equipment may not be copied or dismantled for the purpose of duplication of all or part of the design or operation.

Technical changes to this equipment require the prior written consent of the manufacturer. Any changes, additions, removal of components, etc. not expressly permitted in writing by the manufacturer will immediately void the warranty. Any risks, dangers or damages resulting from unauthorized modifications are solely the responsibility of the user/operator.

3.1 Transportation and Installation

Only trained and qualified personnel may transport, set-up and install this equipment and any auxiliary components.

You are required to assure a safe, clean and suitable environment for this equipment and its operation.

3.2 Technical Changes and Maintenance

Technical changes or alterations of any kind are only permitted if the prior written authorization from Hoffmann Machine Company, Inc. has been secured.

Never remove or by-pass safety devices, temperature and/or limit switches, pneumatic operating and safety valves or any other original equipment.

The manufacturer is not liable for any injuries or damages caused by unauthorized changes, removal or add-ons to this equipment.

Only trained, qualified personnel may perform installation, set-up and maintenance procedures as well as replacement of parts or components of any kind.

3.3 Operator and Maintenance Personnel

Machine operator and maintenance personnel may only perform activities described in this manual. Persons working on or with this machine must be at least 18 years old, they must be thoroughly familiar with this operating manual and they must adhere to all local safety rules and regulations. All OSHA specified rules must be followed if applicable.

Persons working on or with this machine must wear suitable clothing designed to avoid entrapment in moving machine components.

No loose fitting clothes e.g. ties or shawls, or bracelets, wristwatches, necklaces, etc. may be worn when operating this machine.

Persons with long hair must tie their hair securely and wear an appropriate hair covering to avoid entanglement.



WARNING: Heating elements can cause burns on hands and fingers – always wear safety gloves!

3.4 Equipment Owner's Responsibilities

The owner of the equipment must make this operator manual available to all machine operators and maintenance personnel.

The equipment owner must assure that all operators and maintenance personnel are qualified to work on this equipment and that they have read and fully understand this operator manual, especially all sections pertaining to possible dangers and safety rules.

The owner must assure that all areas of responsibility, including set-up, operation, maintenance, etc. – are clearly defined and explained.

All responsibilities must be assigned to and understood by all involved persons to avoid the risk of injury and /or damage to material.

The owner is responsible for the adherence to all applicable safety rules and regulations.

The owner is responsible for the proper and safe condition of the machine; he is further responsible for the proper installation and set-up and he must provide a safe and secure work environment.

The owner must be familiar with and is responsible for the adherence to any and all local and national safety rules and regulations pertaining to this equipment.

The manufacturer is not liable for any injuries or damages as a result of non-compliance with, or adherence to, applicable safety rules and regulations.

If the operator and/or maintenance personnel do not understand English, the owner must provide a properly translated operator manual to assure the safety of all personnel.

3.5 Change of Ownership

In case of sale of this equipment all components, tools, manuals, safety instructions, accessories as well as any electronic or software updates you have originally received with the machine must be included.

This includes any and all operator manuals, maintenance instructions, equipment or components replacement parts, etc.

4 Machine Description

4.1 Machine Description

MOBIL series edgebanding press consists of:

- MOBIL series edgebanding press
- Four castors
- Removable preheating element installed
- Tilting frame option installed
- Operating manual



The MOBIL edgebanding press is designed solely for attaching solid wood edges as well as veneer and laminate edge strips to panels and sheet goods such as plywood, MDF, particleboard, MDO, etc.
The machine may not be used for any other processes or materials.

5 Technical Data and Specifications

<p><u>Electrical Power Supply</u></p> <p>Supply voltage</p> <p>Frequency</p> <p>Input Amperage</p> <p>Supply line breaker</p> <p>Heating element temperature range</p>	<p>230 V / 1 phase / ground 3.6KW total</p> <p>60 Hz</p> <p>8A preheater and 8A main heater</p> <p>20 A min.</p> <p>104°F – 464°F 40°C - 240°C</p>
<p><u>Pneumatics</u></p> <p>Compressed air supply</p> <p>Volume requirement</p> <p>Air</p> <p>Filter mesh size</p>	<p>6 bar – 90 psi (max. 10 bar)</p> <p>Up to 1.5 cubic feet per cycle</p> <p>lubricated</p> <p>5μ</p>
<p><u>Other Specifications</u></p> <p>Edgeband material</p> <p>Machine performance</p> <p>Weight</p> <p>Dim. Length x depth x height</p> <p><u>Noise emissions:</u> Sound Pressure Level (SPL):</p>	<p>Solid wood edgebanding, veneer strips, laminate strips Up to 60 cycles/hour (depending on operator performance, material flow, material quality, temperature setting, glue type, edge material, etc.)</p> <p>MOBIL 2500 410 Kg = 902 lbs. net MOBIL 3000 510 Kg = 1,122 lbs. net MOBIL 3600 620 KG = 1,364 lbs. net</p> <p>MOBIL 2500 106" x 48" x 34" MOBIL 3000 126" x 48" x 34" MOBIL 3600 150" x 48" x 34"</p> <p>Not applicable</p>
<p><u>Machine Environment</u></p> <p>Temperature range for operation</p> <p>Temperature for storage / transport</p> <p>Temperature change during operation</p> <p>Temperature change during storage / transport</p> <p>Relative humidity according to DIN 40040</p> <p>Air pressure during operation</p> <p>Air pressure during storage / transport</p>	<p>59.... + 104 F</p> <p>32.... + 140 F</p> <p>max. 20 F</p> <p>max. 40 F</p> <p>15... 80 % without condensation at 95 F</p> <p>860-1060 hPA (bar)</p> <p>860-1060 hPA (bar)</p>

6 Operator Environment

The work areas for the operator have been designed with ergonomic principles in mind.

The machine owner is responsible for ease of access, adequate lighting, fresh air supply, etc.

Specific work areas for this machine are:

- ⇒ In front of the machine to load and unload work pieces and to adjust settings.
- ⇒ At the back of the machine for maintenance procedures only.

The machine has been designed and shall be operated by only **one** operator at a time.

Rules for safe work areas:

- ⇒ The work area must be free from clutter and must be kept neat and unobstructed. Local and national safety rules, including but not limited to all applicable OSHA Rules must be adhered to.
- ⇒ Access space of no less than 24" shall be available on all sides of the machine for set-up and maintenance procedures.
- ⇒ All electrical and compressed air supply lines must be securely fastened in accordance with all local and national safety codes. Secure all wires, hoses and lines and do not allow lines to lie on the floor as they may present a trip hazard to the operator. Supply lines, wires and hoses must be inspected periodically and replaced if any damage is observed.
- ⇒ The environmental conditions must meet the guide lines given under section 5 "Technical Data and Specifications".

7 Potentially Dangerous Areas

Especially dangerous areas of the machine are:

- Areas around the material clamping cylinders.
- Areas around the preheating and heating elements.

During operating, set-up and maintenance procedures, the following dangers exist in the above areas:



Danger of pinching of hands and fingers between material clamp cylinders and workpiece (panel).

Also danger of pinching of hands and finger between material clamp cylinders and material rear support discs (without workpiece in place)



Danger of burning of hands and fingers by touching hot main heating element and/or by touching hot preheating element.

8 Potential Sources of Danger

8.1 Unapproved Use

Unapproved procedures are:



- Processing work pieces made of material other than solid wood or wood related material such as MDF, particle board, plywood, etc.
- Operating of the machine by more than one operator at the same time.

Unapproved use and/or misuse of the machine can result in the following:

- ⇒ Minor to severe injuries to the machine operator and/or bystanders.
- ⇒ Damage to the machine and/or work pieces.

8.2 Mechanical Dangers

- ⇒ During operation of this machine, pneumatic cylinders are activated with high air pressure.
Never reach into the machine during operation!!



Never make adjustments to panels and/or edge material during the pressing cycle. Severe pinching injury up to and including possible amputation of fingers can occur!

These safety rules also apply to other person in the vicinity of the machine during operation.

8.3 Defective Equipment

If the machine does not function properly and if the fault cannot be rectified immediately, the equipment must be shut down by the person responsible for the operation.

Signs of defective are:

- ⇒ The machine shows signs of mechanical damage.
- ⇒ Electrical wires or cables are damaged.
- ⇒ Pneumatic air lines are damaged.
- ⇒ The machine was stored or has not been in use for an extended period of time in an unsuitable environment, for example in high relative humidity or too high or too low temperature.

8.4 Electrical Dangers

- ⇒ Dangerous electrical currents are present in different locations (heating elements) of the machine when the main power lines are plugged in. Do not remove any covers or components unless the written guidelines instruct you to do so and you can do so without the use of a key or a tool.
- ⇒ Never use damaged or worn cables, wires, supply lines or electrical components or parts on this machine.
- ⇒ Only trained and authorized Service Technicians shall be allowed to replace parts on this machine.
- ⇒ Switch off and lock the main power supply before starting any maintenance procedures. Always follow proper Lock-Out / Tag-Out Protocol and all applicable OSHA Rules and Regulations.

8.5 Cleaning Agents and Chemicals



- ⇒ Review and observe all safety rules provided by the chemicals manufacturer while working with cleaning agents and other chemicals. Read and understand the Material Safety Data Sheets (MSDS) provided by the manufacturer and follow all safety precautions described therein.
- ⇒ Always wear proper protective gear, including safety glasses and gloves, when using cleaning agents, degreaser, etc.
- ⇒ Do not eat, drink or smoke when using chemicals.
- ⇒ Dispose of used cleaning agents and other chemicals in accordance with all State and local laws.

8.6 Remaining Risks



If the operator does not pay attention, it is possible to squeeze ones' fingers when loading and clamping a work piece. The air pressure and clamping forces are high enough to cause severe injury to hands and fingers!!

9 Noise Emissions

The machine does not generate noise levels high enough to cause noise concerns.

10 General Safety Rules in accordance with DIN 1870-9



DANGER: The following safety rules must be followed at all times!

Read and understand this operator manual thoroughly and store it in a safe place for future reference.

Heed all safety warnings and all applicable rules and regulations, including but not limited to all applicable OSHA rules, when operating or performing maintenance or set-up procedures on this equipment.

1. HOFFMANN Service Technicians will instruct machine operators in the proper use of this equipment if the purchaser chooses the optional installation and set-up service at an additional charge.
2. The MOBIL series edgebanding press may only be operated by trained personnel who have read and understood the operator manual. The manual shall be kept in a safe location, easily accessible for future reference.
3. Only trained and authorized persons may be allowed to operate the MOBIL series edgebanding press. Untrained or unauthorized persons are to be kept away from the machine area. The operator(s) must disconnect the electrical and pneumatic power supplies when the machine is not under their control.
4. All applicable Safety Rules, including all applicable OSHA rules, are to be adhered to.
5. Only trained and qualified persons may perform work on the electrical components of the machine.
6. Before connecting the MOBIL series edgebanding press to the electrical power supply, all electrical specifications must be confirmed with the machine's data sheet.
7. Never disable, remove or bypass any safety features, guards or devices!
8. MOBIL series edgebanding press may only be energized if no danger for persons or materials is present.
9. All safety features, guards and safety devices must be checked for proper function at least every three months (always follow recommended maintenance schedule).
10. Upon discovery of any damage to any part or component of the MOBIL series edgebanding press, the machine must be shut off and locked to prevent further operation until all damager and/or faults are repaired.
11. The operator must inform his or her supervisor immediately upon notice of any damage or fault on the machine.

12. If the MOBIL series edgebanding press has been moved, or has been out of service for an extended period of time, all safety features, guards and safety devices must be checked and repaired or replaced if necessary before the machine is put back into operation.
13. Operator must always wear tight fitting clothes without loose straps, ties, etc. to avoid the danger of entanglement. Long hair must be tied together and covered with a hair net.
14. Always wear eye protection when operating this equipment!
15. Ensure adequate light conditions on and around the machine, with an ambient temperature of around 70 degrees Fahrenheit.
16. Keep the floor around the machine free from debris; saw dust or wood chips, etc.
17. Do not expose this machine to moisture or water and do not expose this machine to flammable liquids or gases.
18. Route and place all electrical and pneumatic supply lines to avoid the possibility of creating a trip hazard. All supply lines shall be adequately protected from accidental mechanical damage.
19. Disconnect the machine from all electrical and pneumatic power sources when performing any maintenance, repair or set-up procedures. Follow all applicable OSHA Lock-Out – Tag-Out Procedures.

10.1 Guidelines for safe work practices in accordance with DIN1870-9:2000 sub-section B:

It is important for all machine operators to be:

- a) Adequately trained in all set-up and operational procedures of the machine
- b) Informed about the condition of the environment around the machine, e.g.
 - i) Floor shall be level, clean and free from debris, cut-off and other trash.
 - ii) There shall be adequate common as well as task lighting in place.
 - iii) The raw material and the finished material shall be placed close to the machine in a position to allow for proper work flow.

The operator shall always wear suitable personal protective gear, e.g.

- o Eye protection
- o Gloves to avoid burns on heating elements
- iv) The machine should be switched-off when not in use.
- v) Any faults, error messages or damage to the machine must be reported to a supervisor immediately.
- vi) The operator shall be trained in the proper procedures to remove cut-off, waste, dust and debris from the machine to reduce the risk of fire.
- vii) The operator shall assure that all safety features, guards and safety devices are checked and repaired or replaced if necessary before the machine is put into operation.

11 Safety Devices

A number of safety devices have been designed and installed on the MOBIL series edgebanding press to provide the best possible protection for the operator.



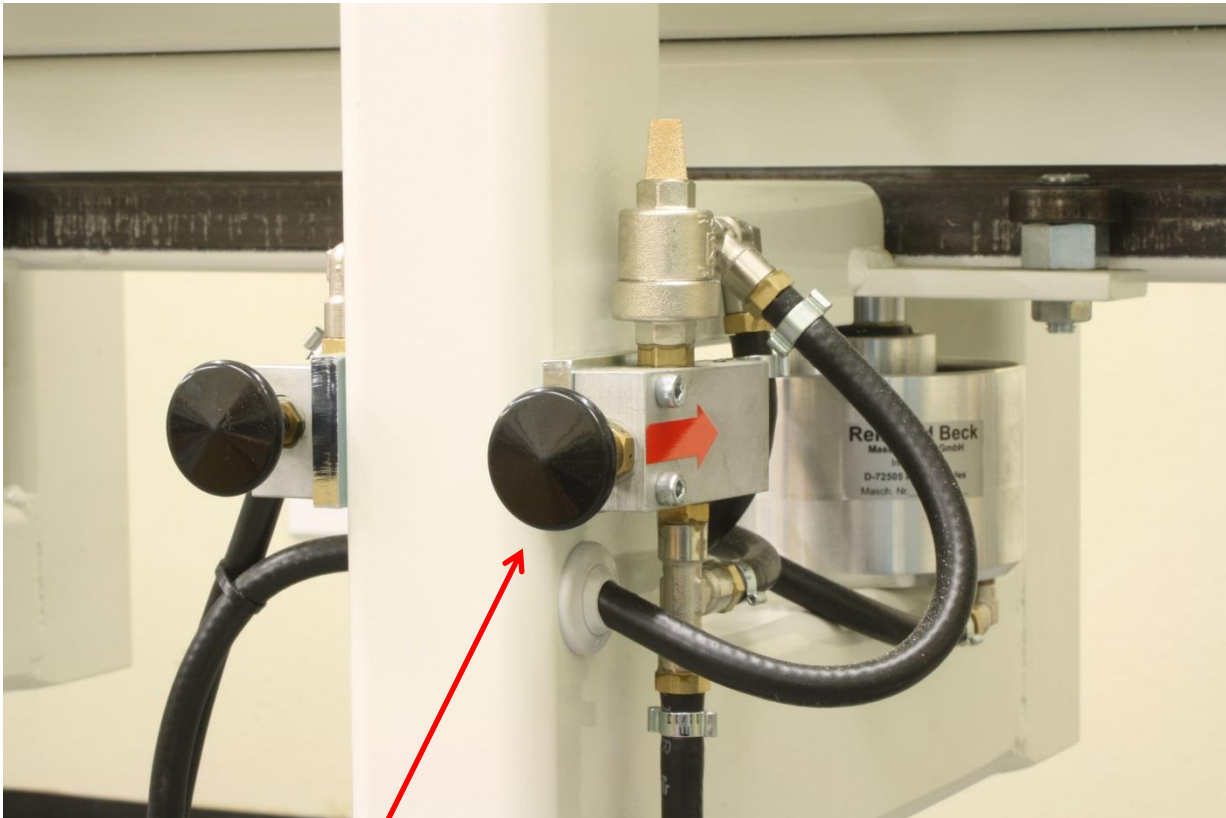
Warning: Strictly follow all safety rules!

1. The machine is equipped with pneumatic safety valves with time-delay operation to reduce the risk of pinching and injuring operators' fingers.
2. Danger of personal injury exists if the safety valves are not place or are malfunctioning during operation.
3. Safety devices shall not be removed, damaged or by-passed.
4. Any unauthorized modifications, including but limited to by-passing of safety switches or sensor, immediately void the warranty on the equipment.
5. All safety features, guards and safety devices must be checked every time for proper operation before the machine is started and operated.
6. If any damage or malfunction on any safety feature, guard and safety device is found, it must be repaired or replaced before the MOBIL series edgebanding press is put into operation

11.1 Safety Devices

The machine is equipped with pneumatic safety valves with time-delay operation. These devices are for the protection of the operator and other persons near the machine.

NEVER REMOVE OR DISABLE ANY SAFETY DEVICE!!



Design:

The manually actuated valve for the horizontal material clamps (located on the right side of the valve cluster) is equipped with a mechanical time-delay feature.

To activate the material clamps, the operator must pull the valve button and hold it for approx. 3 seconds until air pressure in the valve is built up and the valve switches to "self-holding" mode.

If the valve button is released before the valve switches to "self-holding" mode, the valve releases the air pressure and the material clamp cylinders retract to their home positions.

Safety Benefit:

Holding the valve button for approx. 3 seconds gives the operator time to release the valve and to remove an inadvertently placed hand or fingers from the path of the clamp cylinders as soon as the cylinder pad touches the body part.

The time-delay feature requires the operator to keep control over the movement of the clamping cylinders until full pressure is build up in the system.

11.2 Thermostat Settings

The thermostats in the heating elements (pre-heating element and main heating element) feature a temperature control knob with printed temperature scale in degree Celsius. The thermostats are equipped with a built-in overheat sensor.

Temperature Conversion Chart

Degrees Celsius shown on scale	Degrees Fahrenheit
40°C	104°F
70°C	158°F
100°C	212°F
170°C	338°F
200°C	392°F



Warning – Fire Danger!!

Never leave the heating elements switched on when the machine is unattended.

Malfunction of the temperature sensors could cause dangerously high temperatures to develop in the heating elements, which could start a fire!

Machine must only be used by a trained operator.

Machine must be disconnected from electrical and pneumatic power supplies when work is interrupted and at the end of shift or work day.

Do not leave the electrical power cords plugged in overnight!

11.3 What to do in an Emergency?

If unintended high temperatures are observed, or if the temperature controller does not work properly, immediately disconnect all electrical supply lines and remove all material from the machine. Let machine cool down while under observation and contact qualified technician or factory to rectify problems.

If air leaks in cylinders, supply lines, valves or fittings are observed, immediately disconnect all pneumatic supply lines and contact qualified technician or factory to rectify problems.

Do not use machine until all faults are properly rectified!

11.4 Safety Device Check List

All safety devices must be checked for proper function.
upon installation and sign-off and according to the maintenance schedule in this operator manual.

All safety valves must be checked and tested daily.



Never damage, remove or by-pass any safety device, interlock switch, sensor or guard.

To check safety valves, pull material clamp valve button and release as soon as cylinders start to extend.
Upon release of valve button, air should be released and cylinders must retract to their home position immediately.

15 Warranty and Liability

The "Hoffmann Machine Company, Inc. Terms and Conditions of Sale" are the basis for all dealings between the manufacturer and the customer. These Terms have been made available to the customer during the proposal and order processing stage.

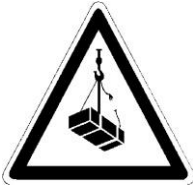
In addition to the complete Terms and Conditions of Sale, any of the following conditions immediately voids the warranty and releases the manufacturer from any and all liability.

- ⇒ Unapproved use of the machine.
- ⇒ Improper installation, start-up, maintenance or operation of the machine.
- ⇒ Operation of machine with defective, missing or bypassed safety devices of any kind.
- ⇒ Non adherence to any rule or regulation in this operator manual.
- ⇒ Unauthorized changes to the machine or any of its components.
- ⇒ Insufficient supervision and maintenance of parts subject to normal wear and tear.
- ⇒ Damage due to unforeseen circumstances, acts of God, etc.
- ⇒ Improper or unauthorized repairs.

16 Transportation and Installation



This machine may only be transported, set-up and installed by qualified service technicians having received written authorization from Hoffmann Machine Company, Inc. to perform such work.



Danger of Injury!
MOBIL 2500 or 3000 series edgebanding press can tilt or fall over during transportation!



Only use properly equipped and sufficiently sized equipment to lift and transport the MOBIL 2500 or 3000 series edgebanding press. Refer to the machine weight under section „Technical Data“

When transporting the MOBIL 2500 or 3000 series edgebanding press

- Wear approved safety shoes with steel toes!
- Wear safety gloves!
- Consider the weight of the machine and use appropriate equipment!
- Lift MOBIL 2500 or 3000 series edgebanding press only as high as necessary!

16.1 Transportation

The MOBIL 2500 or 3000 series edgebanding press may be lifted and moved with a pallet jack or fork lift having a lifting capacity of at least 2,000 lbs.

Only lift the machine at the marked lift points and secure it against tipping or tilting during transport if necessary.



Electrical wires and compressed air supply lines as well as mechanical components on the underside of the machine shall not be damaged during lifting or transportation!!

16.2 Removal of Shipping Bracing and Crating

The machine is shipped secured to shipping timbers and covered with shrink-wrap. All manuals, toolkits and machine components are included.

The machine may be secured to a shipping pallet with angle brackets and bolts.

Remove machine covers on both sides and remove all angle brackets and bolts securing the machine base to the shipping timbers and/or pallets.

Remove shipping straps and brackets securing the electrical enclosure.

Check immediately upon receipt:

- ⇒ Does the shipment correspond to the packing list?
- ⇒ Does the shipment correspond to the purchase order and order confirmation?
- ⇒ Is the shipment complete and without any damage?



Immediately report any shipping damage in writing to the carrier and to the manufacturer.

17 Installation and Set-Up



MOBIL series edgbanding press must be installed plumb and level in all directions.

The load capacity of the floor must be at least 2 t/m². All machine castors must have full contact with the floor.

Make all electrical and pneumatic connections per the enclosed circuit diagrams and according to all local and state laws.

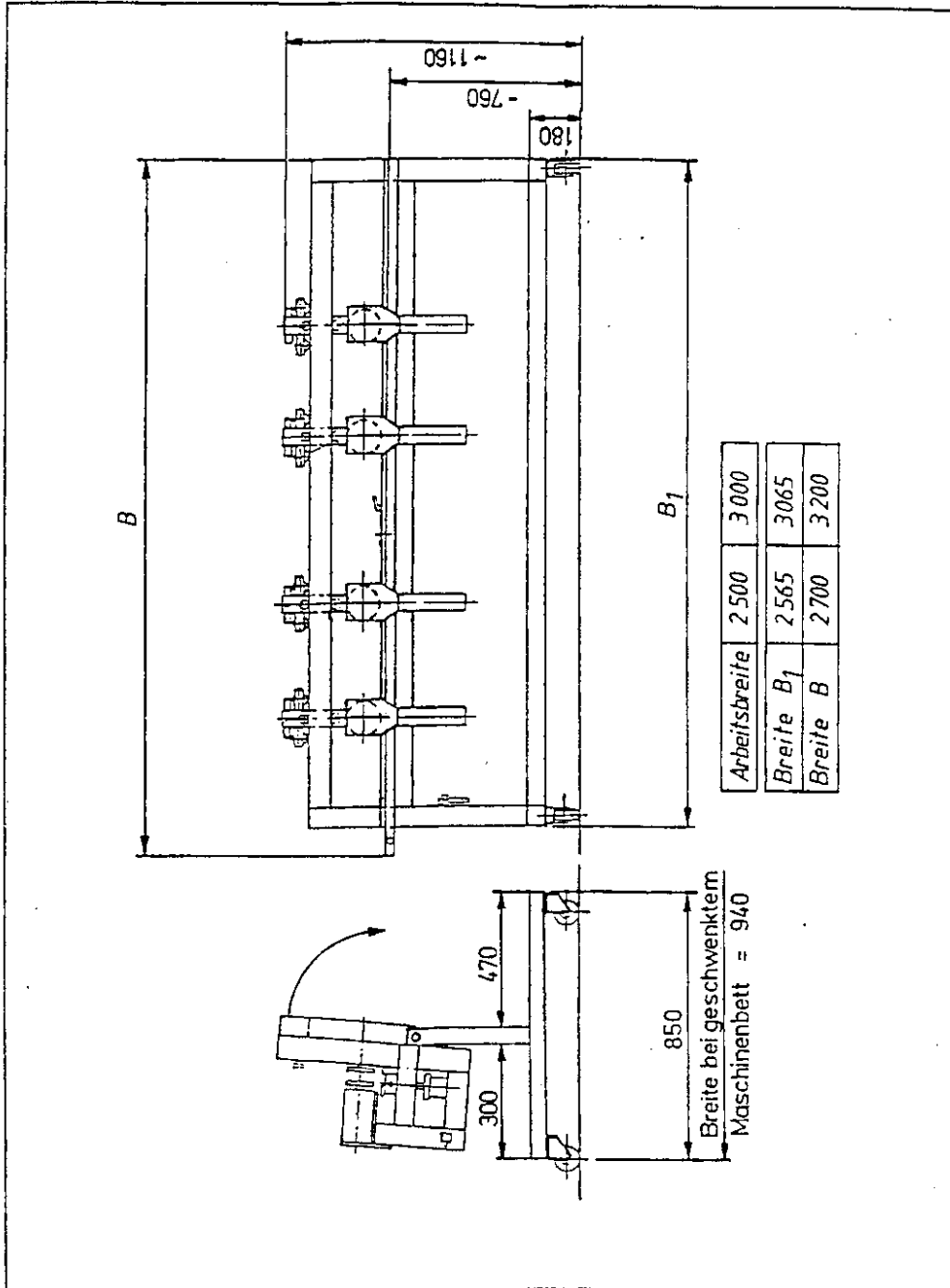
See section „Electrical and compressed air connections“



Attach sufficiently dimensioned lifting ropes or bands on four corners near the castors and lift machine off pallet with a crane or large forklift.

Secure lifting ropes or bands against sliding.

17.1 Machine Installation Diagram



18 Electrical and Compressed Air Connections

MOBIL series edgebanding press is delivered pre-wired and ready for on-site connections



Danger:
Follow these safety instructions!

Trip Hazard!
Lose wires and cables must be secured and covered with an appropriate cable cover to reduce the risk of tripping and falling.

The machine is equipped with separate electrical and pneumatic circuits, which must be connected and disconnected separately.



The proper resistance of the safety loop and the correct sizing of the supply breakers/fuses must be checked and verified on site.

1. Verify proper supply voltage and wire gauges before connecting MOBIL series edgebanding press to electrical supply lines.
2. Only trained technicians are authorized to perform work on this equipment.
3. Main power may not be connected until all electrical assemblies have been installed and tested.
4. Always disconnect and lock main power supply prior to working on any electrical circuit. Use proper „Lock-Out / Tag-Out “procedures.
5. Separate circuit sections if possible and bleed off any residual compressed air before working on pneumatic circuits.

18.1 Connecting Electrical Power Supply



Electrocution danger!
Only trained technicians shall work on electrical circuits!

Verify proper supply voltage – see circuit diagrams and electrical enclosure labels.

Attach appropriately rated connectors (plugs) to the heating elements power supply cables.

Follow local electrical codes when making all electrical connections.



18.2 Compressed Air Connections



Compressed air in proper Quality and Quantity is to be supplied by plant owner – see technical data section.

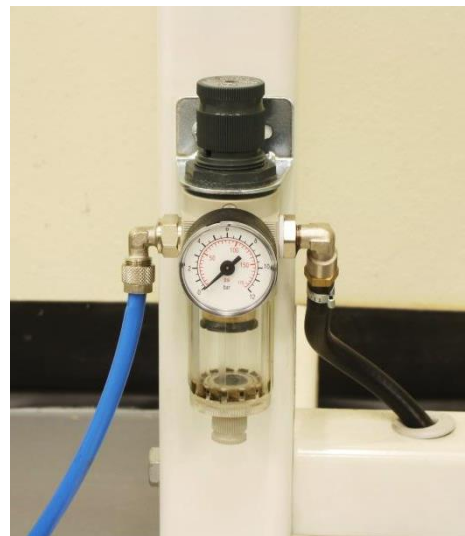
The air regulator assembly is installed on the machine base frame.



MOBIL series edgebanding press requires approx. 1.5 cubic feet per cycle.

Supply pressure must be **90 psi +/- 7 psi**

Maximum supply pressure 100 psi.



- ⇒ Connect compressed air supply line with a quick-connect fitting to supply side (left) of air regulator.
- ⇒ Verify air pressure is set to 90 psi – 6 bar (check gauge)
- ⇒ For service and maintenance work, always disconnect air supply line and follow proper lock-out and tag-out procedures.

18.3 Connection Check



Check all electrical and pneumatic connections again prior to initial startup.

Verify that all wires are connected to the correct electrical terminals and that no stray wire strands are present.

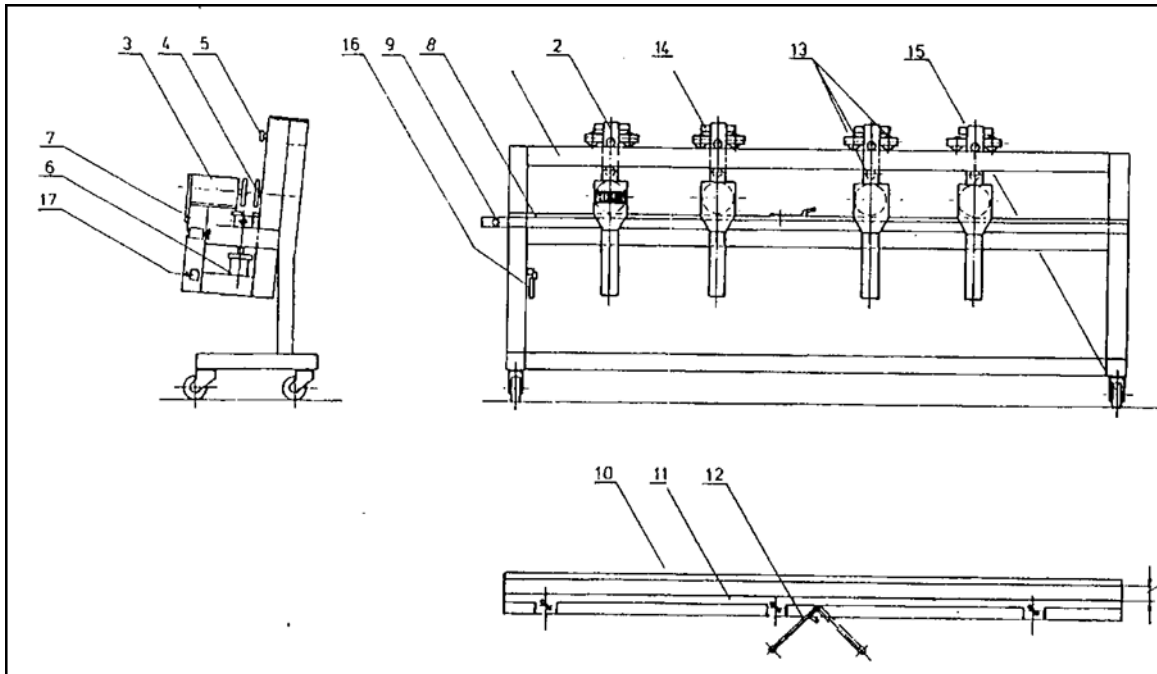
Check all air pressure lines and hoses for tightness and leak-proof fittings.

Correct any problems prior to initial start-up!

WARNING!

Shutting off machine or disconnecting electrical power supply will not disconnect compressed air supply. Pneumatic circuit remains under pressure even when electrical power supply lines are unplugged.

19 Machine Main Components



- # 1 machine base frame
- # 2 transport lock for clamping station
- # 3 material clamping cylinder (4x on MOBIL 2500, 6x on MOBIL 3000, 8x on MOBIL 3600)
- # 4 lower material support disc
- # 5 upper material support disc
- # 6 vertical pressure cylinders
- # 7 mounting bracket for material clamping cylinder
- # 8 main heating element
- # 9 thermostat for main heating element
- # 10 fixed rear fence
- # 11 adjustable front fence
- # 12 hand lever for front fence
- # 13 ball bearing
- # 14 return spring for clamping station
- # 15 machine castors (two fixed, two swivel)
- # 16 pneumatic regulator
- # 17 pneumatic control valves

Note:

Preheating rack, preheat edgeband clamp, preheating element and frame swivel-option not shown but are part of MOBIL machines sold in North America.

20 Initial Start-Up and Operation



DANGER!

It is expressly forbidden to move, hold or adjust the workpiece (panel) or edgeband (wood strip) during the pressing operation!

Danger of serious injury including crushing of hand or fingers is present if hand is placed between the clamp cylinder(s) and the workpiece during the pressing operation!

This warning pertains to the operator and any other persons close to the machine.

The manufacturer cannot be held liable for any injury or damage caused by ignoring this warning!



Warning – Fire Danger!!

Never leave the heating elements switched on when the machine is unattended.

Malfunction of the temperature sensors could cause dangerously high temperatures to develop in the heating elements, which could start a fire!

Machine must only be used by a trained operator.

Machine must be disconnected from electrical and pneumatic power supplies when work is interrupted and at the end of shift or work day.

Do not leave the electrical power cords plugged in overnight!

20.1 Machine Operation:

- ⇒ Adjust thermostats on preheating and main heating elements to desired temperatures.
- ⇒ Confirm clamping pressure at air regulator is set to 90psi – adjust pressure lower if damage to panel surface is observed. Important on delicate surfaces or laminates or when using lower density panel cores.
- ⇒ Move clamping stations to equal positions along the workpiece – do not lock in place (hand wheel on rear of clamping station is intended only for locking when machine is moved.)
- ⇒ Place edgeband strip with “glue side down” onto heating element in preheater and lower clamp to hold strip in place (see picture 1). Preheating time depends on temperature setting and type and thickness of edgeband material, trials with samples are recommended. Generally the edgeband strip should be very warm to the touch, but not too hot to hold. If discoloration of wood is observed, heat setting is too high.
- ⇒ Place heated edgeband strip onto main heating element, with the heated side now facing up. When using mitered edgeband, adjust miter stop to align edge of panel with inside corner of edgeband (see picture 2).
- ⇒ Move hand lever to secure edgeband strip on main heating element with sliding front fence (see picture 3)
- ⇒ Apply white or yellow PVA glue to panel edge and place panel onto edgeband strip. Slide panel tight against miter stop when using mitered corners or align with end of strip for square corners.
- ⇒ With hands and fingers out of the way of the clamping pads, pull the right hand valve plunger (clamping) and hold plunger for 3-5 seconds until the horizontal clamping cylinders (see picture 4) are extended and full pressure has been reached. The plunger will switch to “self-holding” mode at that point (see picture 5)
- ⇒ Pull left hand valve plunger (pressing) to activate vertical pancake cylinders (see picture 6) press panel onto edgeband strip.
- ⇒ Keep panel both valves activated until desired clamping time has elapsed, then release left hand valve (pressing) first, then release right hand valve (clamping).
- ⇒ Remove panel from machine, clean up any glue residue and prepare machine for next panel.



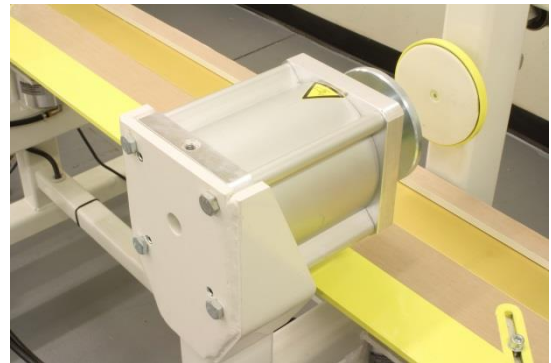
(1) preheater clamp



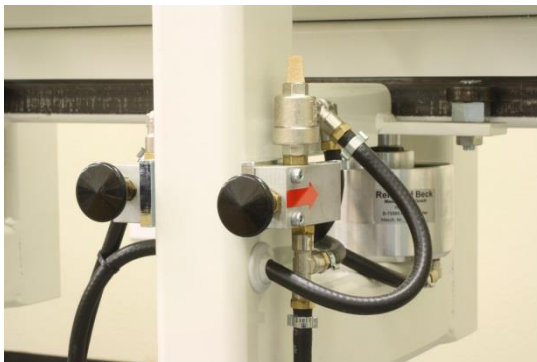
(2) miter stop



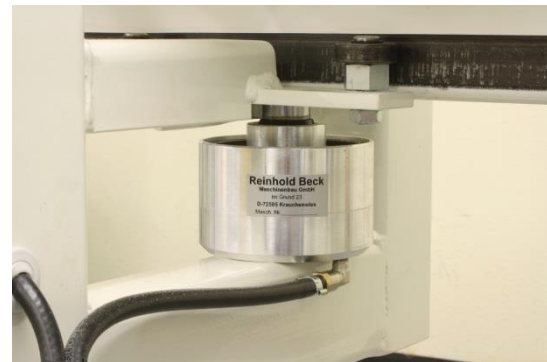
(3) front fence and hand lever



(4) horizontal clamping cylinder



(5) pressing (left) and clamping (right) valve



(6) vertical "pancake" pressing cylinder

20.2 Pressing Times and Settings

This is a list of average pressing time for various types of edgeband material – actual times may vary depending on product and adhesive properties and should be determined for each facility individually by means of trial samples.

Solid wood veneer edges	approx. 20 seconds
Plastic edgebanding	approx. 20 sec. – 2 minutes
Pre-coated plastic edgebanding	approx. 5-10 seconds
Solid wood edges	approx. 1-2 minutes

These times should be considered starting points for in-shop trials only – always produce samples for testing and review prior to running actual production parts!

Due to many parameters involved (wood species, moisture content, glue type, glue age, ambient temperature, etc.) Hoffmann does not make any specific recommendations as to adhesive, temperature setting and pressing times. It is the machine owners and operators responsibility to consult with their adhesive suppliers' technical department for best results. HOFFMANN is not liable nor responsible for any damage caused by use of this machine.

20.3 Alignment Adjustments

The alignment between the solid wood edge and the panel surface can be adjusted, depending on the desired result and materials used.

a) Overlapped Edges – to be trimmed flush after gluing

For overlapped edges, use edgeband stock approx. 1/8" – 1/4" wider than the panel thickness, to achieve an equal overlap of 1/16" – 1/8" per side.

- Adjust the material support discs in the main frame by loosening the lock-nuts on the back of the steel frame member. The larger, lower discs should be set 1/16" – 1/8" past the rear fence.
- With a panel clamped in place, adjust the upper support disc accordingly.
- Retighten the lock-nuts to prevent accidental movement later.
- Attach an edge strip to a test panel to verify proper settings.

b) Flush Edges – for prefinished profiles

For prefinished or profiled edges it is desirable to attach them flush with the panel surface.

- Adjust the material support discs in the main frame by loosening the lock-nuts on the back of the steel frame member. The larger, lower discs should be set in-line with the rear fence.
- With a panel clamped in place, adjust the upper support disc accordingly.
- Retighten the lock-nuts to prevent accidental movement later.
- Attach an edge strip to a test panel to verify proper settings.



Lower support disc with lock nut



Upper support disc with lock nut

20.4 Flush Trimming of Overlapped Edges with BH-556 Lipping Planer

The Hoffmann BH-556 Lipping Planer is the ideal tool to trim overlapped edges flush with the panel surface.

With a 2 1/4" wide cutting head and two solid carbide knives, the machine can trim up to 1/8" material in one pass.

A self-locking, ratchet-type fine adjustment allows the user to lower the cutting head in 0.004" (1/10mm) steps for precise results.



(BH-556 Lipping Planer in operation – dust collection hose removed for clarity)



Fine Adjustment Knob



Underside with self-closing steel guard

21 Tilting Frame Operation

The machine is equipped with a tilting-frame option to process larger panels in a horizontal plane.

Follow these steps to tilt the machine carriage:

- ⇒ Place the long steel handle (supplied with machine) in the center of the main box beam and secure it by tightening the hex bolt. **IMPORTANT!**
- ⇒ Loosen black handles on both sides of the main frame and swivel the carriage down into horizontal position.
- ⇒ Tighten black handles on both sides
- ⇒ Remove steel handle.

To return to vertical operation, follow these steps:

- ⇒ Place the long steel handle (supplied with machine) in the center of the main box beam and secure it by tightening the hex bolt. **IMPORTANT!**
- ⇒ Loosen black handles on both sides of the main frame and swivel the carriage up into vertical position.
- ⇒ Tighten black handles on both sides
- ⇒ Remove steel handle.

22 Maintenance



Machine operator and maintenance personnel may only perform activities described in this manual.

Persons working on or with this machine must be at least 18 years old, they must be thoroughly familiar with this operating manual and they must adhere to all local safety rules and regulations. All OSHA specified rules must be followed if applicable.

Persons working on or with this machine must wear suitable clothing designed to avoid entrapment in rotating machine components.

No loose fitting clothes e.g. ties or shawls, or bracelets, wristwatches, necklaces, etc. may be worn when operating this machine.

Persons with long hair should tie their hair securely and wear an appropriate hair covering to avoid entanglement.

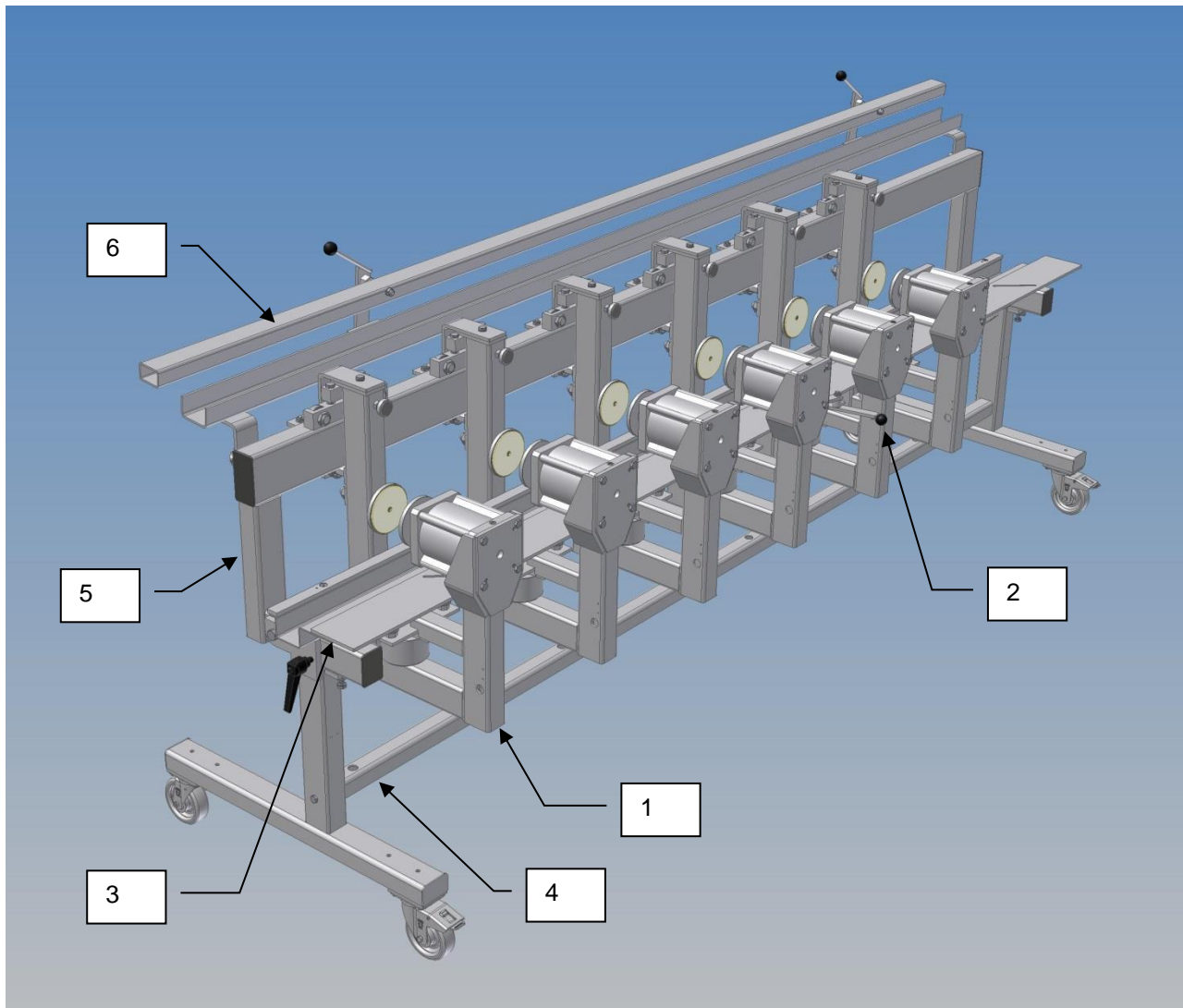
The machine should be thoroughly cleaned and all glue residue removed at the end of a shift and whenever operation is interrupted for more than a few minutes.

We recommend coating all areas which could be covered by glue with a glue release agent prior to use. Using a release agent helps during clean-up and reduces down time of the machine.

22.1 Daily Maintenance:

- ⇒ Bearing contact surface on machine frame (black, unpainted steel areas) should be cleaned of debris daily and coated with mineral oil or light grease weekly to prevent rust.
- ⇒ Heating elements, pressure plates and panel support discs must be kept clean of glue residue at all times to assure proper glue bonding. If necessary, these areas are to be cleaned multiple times during the workday.
- ⇒ The anodized aluminum surface of the heating element must be kept free of glue residue at all times. A light coating of glue release agent is helpful for later clean-up but test should be performed to assure the release agent does not interfere with later finishing process of the edgebanding material.
- ⇒ Release agents are available from veneer press and edgebanding machine suppliers.

23 Parts Diagram and Parts List



Numbers on drawing designate parts groups

Pos	Reference Number	Description		
1	28 100 030 00	Clamping Station		
1.1	28 100 030 01	Einstellbolzen		
1.2	28 100 030 02	Lagerbolzen hinten		
1.3	28 100 030 03	Führungsschlitten		
1.4	28 100 030 04	Lagerbolzen oben		
1.5	28 100 031 00	Schiebeteil		
1.6	28 100 034 00	Lagereinheit kpl		
1.6.1	28 100 030 01	Einstellbolzen		
1.6.2	28 100 035 00	Bügel		
1.6.3	DIN 125 - A 10.5	Scheibe		

Pos	Reference Number	Description		
1.6.4	DIN 471 - 15 x 1	Sicherungsring		
1.6.5	DIN 625 T1-6202-2RS	Rillenkugellager		
1.6.6	DIN 933 - M10 x 20	Sechskantschraube		
1.6.7	DIN 934 - M10	Sechskantmutter		
1.6.8	GN 6336-4-TE-40-M8-25	Sterngriffschraube Form TE		
1.7	28 100 040 00	Gegenlagerteller kpl		
1.7.1	28 100 041 00	Gegenlagerteller		
1.7.2	28 100 043 00	Druckplatte		
1.7.3	DIN 7991 - M6 x 10	Senkschraube		
1.8	28 100 046 00	Gegenlager klein		
1.8.1	28 100 046 01	Scheibe		
1.8.2	28 100 046 02	Belag		
1.8.3	DIN 913 M12-60	Gewindestift		
1.8.4	DIN 934 - M12	Sechskantmutter		
1.9	28 100 048 00	Druckscheibe kpl		
1.9.1	28 100 043 00	Druckplatte		
1.9.2	28 100 048 01	Druckscheibe		
1.9.3	DIN 7991 - M6 x 10	Senkschraube		
1.10	DIN 125 - A 21	Scheibe		
1.11	DIN 125 - A 8.4	Scheibe		
1.12	DIN 439 - M20	Sechskantmutter		
1.13	DIN 471 - 15 x 1	Sicherungsring		
1.14	DIN 625 T1-6202-2RS	Rillenkugellager		
1.15	DIN 625 T1-6204-2RS	Rillenkugellager		
1.16	DIN 913 - M8 x 10	Gewindestift		
1.17	DIN 933 - M10 x 30	Sechskantschraube		
1.18	DIN 933 - M12 x 75	Sechskantschraube		
1.19	DIN 933 - M8 x 90	Sechskantschraube		
1.20	DIN 934 - M10	Sechskantmutter		
1.21	DIN 934 - M20	Sechskantmutter		
1.22	D100x14	Pneumatikzylinder D100 x 14 Hub		einfachwirkend
1.23	D125x90	Pneumatikzylinder D125 x 90 Hub		einfachwirkend
2	28 100 080 00	Hand lever for adj. front fence		
2.1	28 100 080 01	Passschraube M10		
2.2	28 100 080 02	Distanzbuchse		
2.3	28 100 080 03	Kniehebel		
2.4	28 100 080 04	Passschraube M8		
2.5	28 100 081 00	Handhebel		
2.6	DIN 319-KU-32-M8-C	Kugelknopf		
2.7	DIN 985 - M10	Sechskantmutter		
3	28 130 001 01	Adjustable front fence		
4	28 130 010 00	Machine base frame		
4.1	28 100 011 00	Ständer links		
4.2	28 100 015 00	Ständer rechts		
4.3	28 130 017 00	Verbindungsschiene		
4.4	DIN 931-1 - M16 x 120	Sechskantschraube		
4.5	DIN 933 - M10 x 80	Sechskantschraube		
4.6	DIN 933 - M12 x 40	Sechskantschraube		
4.7	DIN 933 - M8 x 16	Sechskantschraube		

Pos	Reference Number	Description		
4.8	DIN 934 - M12	Sechskantmutter		
4.9	DIN 934 - M16	Sechskantmutter		
4.10	GN 503-100-M14-30-SW	Klemmhebel verstellbar		
4.11	LCW-PUSKS-125-K	Lenkrolle		Traglast 225 kg
4.12	LCW-PUSKS-125-KDS-N	Lenkrolle mit Bremse		Traglast 225 kg
5	28 130 020 00	Titling frame		
5.1	28 130 020 01	Gegenlager Anleimer		
5.2	28 130 021 00	Schwenkrahmen		
5.3	DIN 7991 - M8 x 20	Senkschraube		
5.4	DIN 933 - M10 x 40	Sechskantschraube		
5.5	DIN 934 - M10	Sechskantmutter		
5.6	DIN 934 - M8	Sechskantmutter		
5.7	ISO 8745 - 4 x 14	Kerbstift		
5.8	Rohrdeckel 120x60x5	Rohrdeckel 120x60x5		
5.9	Rohrdeckel 80x60x5	Rohrdeckel 80x60x5		
6	28 130 070 00	Preheating Station		
6.1	28 100 070 02	Steckbolzen		
6.2	28 100 075 00	Hebel Vorwärmekanal		
6.3	28 130 070 01	Druckschiene		
6.4	28 130 071 00	Vorwärmekanal		
6.5	DIN 125 - A 10.5	Scheibe		
6.6	DIN 319-KU-32-M8-C	Kugelknopf		
6.7	DIN 913 - M8 x 16	Gewindestift		
6.8	DIN 933 - M10 x 20	Sechskantschraube		
6.9	DIN 985 - M10	Sechskantmutter		
6.10	GN 6336-4-TE-50-M10-25	Sterngriffschraube Form TE		
	HE 0803010033 1/8"	Handventil		
	HE 0803010032 1/8"	Sicherheitsventil		

25 Terms and Conditions of Sale and Warranty

1. Application and Scope:

The terms and conditions contained herein apply to proposals made, and to purchase orders received, by HOFFMANN MACHINE COMPANY, INC. (hereinafter called "Seller"), and sets forth the entire agreement between the parties hereto, and supersedes all communication, representations or agreements, whether oral or written, between the parties hereto with respect to the subject matter herein, and no agreement or understanding varying or extending the terms or conditions hereof will be binding unless expressly agreed to in writing by Seller. No conditions stated by Buyer in its purchase order or orders shall be binding upon Seller if in conflict with, inconsistent with, or in addition to, the terms and conditions contained herein, unless expressly accepted in writing by Seller. Seller's failure to object to any provision contained in any communication or purchase order from Buyer shall not be deemed a waiver of the terms and conditions herein. All orders or contracts are subject to approval and acceptance by Seller at its main office in North Carolina. These Terms and Conditions are within the sole discretion of Seller and are subject to change with or without prior notice.

2. Quotations and F.O.B. Point:

Prices are quoted and all sales are made F.O.B. Sellers facility and, unless otherwise indicated in the proposal, prices quoted are effective for a maximum thirty (30) days after the date of any proposal.

3. Terms of Payment:

All invoices are due and payable as set forth on the front of the invoice. Each delivery shall be considered a separate and independent transaction and payment thereof shall be made on terms set forth on invoice covering same. If delivery is delayed by Buyer, payment shall become due when Seller is prepared to make delivery. If, in the sole judgment of the Seller, the financial condition of Buyer at any time does not justify continuation of manufacture or of delivery as originally specified, Seller may vary terms of payment by requiring full or partial payment in advance, or otherwise, or may ship to Buyer's order against sight draft with bill of lading attached.

If payment is not received on or before payment due date and as set forth in terms on proposal and/or invoice, or if payment is delayed, or if payment amount is reduced, seller reserves the right to reduce or revoke equipment warranty, at seller's sole discretion. Eventual payment of outstanding amount does not automatically reinstate warranty. Warranty can only be reinstated by seller and reinstatement must be confirmed by seller in writing to be valid.

4. Taxes:

Unless the quotation expressly provides otherwise, the amount of any present or future Federal, State or local sales, excise or other tax applicable to the products purchased hereunder, or to the manufacture or sale thereof (including, without limitation, state or local privilege or excise taxes based on gross revenue), and any taxes or amounts in lieu thereof paid or payable by Seller in respect of the foregoing (excluding, however, taxes based on net income), shall be added to the purchase prices and shall be paid by Buyer. In lieu thereof, Buyer may provide Seller with an appropriate tax exemption certificate acceptable to the taxing authorities.

5. Warranty:

The products covered herein are warranted, for a period of twelve (12) months from date of shipment, against defects in material and workmanship under normal use and service by Buyer. The liability of Seller under its warranty is limited to adjustment, in accordance with the Warranty Adjustment Terms set forth below, for products which are found to be defective by Seller in the form in which they were originally shipped. In no event will Seller be liable for collateral, consequential or other damages of any kind.

Parts replaced under Warranty are covered for a period of six (6) months from the date of shipment, unless otherwise specified on invoice, subject to the warranty adjustment terms set forth below.

SELLER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

6. Warranty Adjustment Terms:

(a) Adjustments will be limited to claims which are presented promptly after the product is found to be defective, and within the aforesaid warranty period.

(b) All products claimed to be defective will be subject to inspection and test by Seller. Normally, Seller will request return of products for inspection and test, however, Seller reserves the right to make inspection and test on Buyer's premises. Returns are to be made only as and if authorized in writing by Seller.

(c) Buyer will pay all packaging, inspection, labor and transportation costs involved. Credit for the transportation costs only will be issued by Seller provided adjustment subsequently is allowed.

(d) No adjustments will be allowed for products which have been subjected to abuse, improper installation or application, alteration, accident or negligence in use, storage, transportation or handling; nor for products on which original identification markings have been removed, defaced or altered.

(e) Final determination as to whether any adjustment is allowable, and as to the extent thereof, rests with Seller. Full adjustment, if allowed, normally will be made by replacement in kind on an exchange basis. Pro rate adjustment, if allowed, normally will be made by the issuance of credit. In all cases, however, Seller reserves the right to make adjustment by repair, replacement or credit.

(f) Replacement for products found subject to adjustment, whether new or repaired, will be shipped F.O.B. city of destination with transportation charges prepaid by Seller.

7. Installation:

Buyer shall install machinery purchased from Seller at Buyer's cost and expense, unless otherwise expressly stipulated in writing.

8. Packaging and Shipment:

All products shipped hereunder will be packaged in accordance with standard commercial practice for domestic shipment. Seller's liability as to delivery ceases upon making delivery of products purchased hereunder to carrier at Seller's facility, in good condition, the carrier acting as Buyer's agent. All claims for damages must be filed with the carrier or Buyer's insurer as appropriate. Seller will select the method of shipment unless Buyer does so in writing at least ten (10) days in advance of the scheduled delivery date. Equipment held for Buyer because of Buyer's delay in acceptance, shall be at Buyer's risk and expense. Seller does not assume liability for shipping in the least expensive manner.

9. Deliveries:

It is the desire of Seller to meet requested delivery schedules, however, Seller shall not incur any liability, consequential, collateral or otherwise, due to any delay or failure to deliver for any reason, other than arbitrary refusal by Seller to perform. Any delivery indication furnished by Seller only represents the best estimate of the time required to make shipment.

10. Assignment:

Buyer shall not assign this purchase order or any interest herein or any rights thereunder, without the prior written consent of Seller

11. Termination:

Seller may terminate the purchase order or any part thereof herein referred to or any other purchase order or orders then outstanding by written, telegraphic or electronic mail notice to Buyer if Buyer becomes insolvent or is subject to proceedings under any law relating to bankruptcy, insolvency or relief of debtors. Upon such termination Seller shall be entitled to receive reimbursement for reasonable termination charges.

12. Cancellations or Returns:

Buyer shall not cancel any order nor return any equipment without first obtaining the written consent of Seller. In any event, in case of refusal or inability of Buyer to accept a delivery, the Buyer shall nevertheless be liable for freight, express, storage, handling, restocking and any other expense resulting. In no event are orders for machines or parts built to customers' specification subject to cancellation and Buyer shall be liable for work done and materials used.



13. Specifications:

- (a) Phone order specifications are filled at Buyer's risk unless confirmed in writing prior to commencement of manufacture.
- (b) If equipment is found not to meet original specifications, Seller shall have a reasonable time to make adjustments.

14. Law Governing:

Buyer's purchase order shall be governed by and construed according to the laws of the State of North Carolina. The courts of the State of North Carolina shall have jurisdiction over any controversy that may arise out of the dealings between Buyer and Seller.

15. Force Majeure:

Seller shall not be liable under this agreement by reason of its delay in the performance of or failure to perform any of its obligations hereunder if such delay or failure is caused by acts of God or the public enemy, riots, incendiaries, interference by civil or military authority, compliance with government laws, rules and regulations or any fault beyond its control.

16. Acceptance:

Payment for or a deposit made for the products shall constitute a contract embodying all of terms and conditions stated herein.

17. Ownership:

All products remain the sole property of the Seller until all charges, including all transportation, crating and installation costs, are paid in full.

18. Severability:

The provisions of these Terms and Conditions are intended to be severable. If, for any reason, any of the above provisions should be found unenforceable or invalid in whole or in part, in any jurisdiction, such provision be ineffective only to the extent the determination of invalidity or unenforceability in that jurisdiction. Any such determination shall not affect the enforceability or validity of the remaining provisions.

We reserve the right to make technical and/or design changes at any time without prior notice.