



IMH STRINGER LINE 1500<sup>™</sup> is a production line for double sided stringer pallets. It is designed to be used for small to large pallet producing companies commercially producing pallets. The line offers quick changeover between different pallet sizes and an efficient, fast and high quality production thanks to the reliable individual hydraulic nailing system.

### **WARNING:**

Failure to follow the warning and causion instructions in this document may result in:



Risk of personal injury or death.



Risk of significant property damage, damage of the Product and the products produced in the Product including partial or total loss.



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## **Definitions**

• Supplier: IMH Machinery Inc., a Delaware corporation with a registered office located at

251 Little Falls Drive, Wilmington DE 19808, hereinafter referred to as "IMH"™.

• Purchaser: The purchaser as defined in the order confirmation, hereinafter referred

to as the "Purchaser", buying the Product from IMH<sup>TM</sup>.

IMH<sup>TM</sup> and the Purchaser are collectively referred to as the "Parties".

• **Product(s):** The machines, equipment, spare parts and services as defined in the

order confirmation (sales contract), hereinafter referred to as

"Product(s)", provided by IMH<sup>TM</sup>.

• Operator(s): A person performing the following tasks related to the operation of the Product,

hereinafter referred to as "Operator(s)":

Operating the Product using the HMI (Human-Machine Interface).

 Feeding the Product with boards and nails as required (note: this is physically strenuous work).

Making mechanical adjustments and updating PLC parameters via the

HMI to modify recipes for different products.

 Performing mechanical maintenance (daily, weekly, monthly, and yearly) per the instructions in the **Documentation** and **User** Instructions (www.us.imhmachinery.com/downloads/) provided by IMH.

A dedicated staff member (e.g., a forklift driver) must supply Operators with the correct boards and nails. For safety reasons and to maintain IMH's warranty coverage, the Product must be operated only by Operators who have been trained and certified by IMH<sup>TM</sup>.

# Updated versions of the documents

This Safety Instruction along with User Instructions, General Terms, Limited Warranty and other important documents can be found on IMH:s web-site <a href="https://www.us.imhmachinery.com/downloads/">www.us.imhmachinery.com/downloads/</a>:

- (i) the Purchaser, Operators and other staff working with the Product can view online versions of these documents in the event that the Purchaser ever loses his/her copy or in the event that IMH modifies the documents and
- (ii) IMH retains the right to modify these documents as it deems appropriate and that the "Purchaser is charged with the knowledge of the modifications set forth in these documents".

### Installation of the Product

The installation of the Product at the Purchaser's site **must be performed exclusively by IMH or its authorized subcontractors.** 

Upon delivery, the Purchaser **must** adhere to IMH's instructions for **unloading and storing** the Product until installation is completed.



## Modification or Relocation of the Product

If the Purchaser intends to move or modify the Product **after installation**, **prior written approval** and **compliance with IMH's instructions** are required. **Failure to obtain IMH's approval will void the Product's warranty.** 

## Personal Protective Equipment (PPE) for Operators



Risk of personal injury or death.

Operators **must** wear the following PPE **at all times** while operating the Product:

Hair Protection:
 Breathing Protection:
 Long hair must be secured to prevent entanglement.
 A mask must be worn when handling boards with mold.

Eye Protection: Safety glasses must be worn to protect against:

Cutting injuries from sharp edges.

Puncture injuries from wooden materials.

Flying debris or materials ejected from the Product.

Gloves: Operators must wear gloves to protect against:

Cutting injuries from sharp edges.

Puncture injuries from wooden materials.

Protective Clothing: Work clothing with long sleeves and pants must be worn to

reduce injury risks.

Safety Shoes: Operators must wear safety shoes with:

Metal-lined toe protection.

Metal-lined soles.

# Starting and using the Product



## Risk of personal injury or death.

### Authorized Use:

The Product may be started and used **only** by IMH or its authorized subcontractors **until** the Purchaser has:

- Approved a capacity test at the installation site by signing the Capacity Acceptance Certificate.
- Signed the Takeover Certificate (see IMH's General Sales Terms and Conditions)

#### User Instructions:

Operators **must** follow the **User Instructions** provided by IMH (www.us.imhmachinery.com/downloads/).

### Hydraulic Safety:

- o The Operator must stand on the side opposite the hydraulic unit.
- The operator panel must not be moved near the hydraulic unit to minimize risks from potential failures (e.g., hose rupture, oil ejection).
- Hydraulic oil is hazardous and should not be ingested.

### Pneumatics Safety:

Operators should be aware that **pneumatic hoses may rupture** during operation. Operators **must** remain cautious.



# **Safety Procedures During Operation**



# Risk of personal injury or death.

### • Changeover Adjustments

 Before adjusting components (e.g., stringer channels, nailers, chain conveyors), the Operator must ensure no personnel or materials are in the movement path.

#### Running the Product:

As said above, the Operator's work is physically strenuous at a high speed feeding the
Product with boards and nails. The Operators must therefore pay attention and focus on what
they are doing and follow the User Instructions to eliminate the risk of hurting themselves.

#### Material Jams:

- o If material becomes jammed, depressurize the machine before attempting removal.
- Switch from automatic to manual mode to release pressure.



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#### • Slip and Fall Prevention:

- o Always **hold handrails** when using stairs or the platform.
- Regularly clean floors and platforms to remove debris, dust, and oil spills.

#### Restricted Areas:

- o **Do not** crawl under or step into the Product while in operation.
- Do not touch moving chains.
- Stay clear of moving parts, such as the Nailbox, which moves continuously during operation.
- Do not bring the operator panel into areas that are protected by safety fences or safety light curtains etc. The reason for this is to protect the operator from starting the Product when standing in such areas.

## **Maintenance Procedures**



# Risk of personal injury or death.

#### Lockout/Tagout (LOTO) Compliance

- Before performing maintenance, all power sources must be shut off and locked out per OSHA standards (29 CFR 1910.147):
  - The main circuit breaker must be locked in the "OFF" position.
  - The air compressor must be shut off, and the Product must be depressurized.



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#### Electrical Work:

 Electrical repairs must be performed by a licensed electrician following NFPA 70 (NEC) and OSHA 1910 Subpart S.

It is **the Purchaser's responsibility** to ensure compliance with applicable electrical safety regulations.



#### Preventative Inspections:

 Improperly connected hoses or electrical cables can result in malfunctioning and hazardous movements. After maintenance, all functions must be tested before restarting the Product



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### • Cleaning Procedures:

- Wood chips accumulating on electrical motors can cause overheating and fire hazards.
   Motors must be cleaned regularly based on the operating environment.
- o **Compressed air should be used** to remove sawdust and wood chips from the Product and the floor to reduce the risk of fire and the risk for Operators and other personnel to slip.



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### · Saw Blade Safety:

- Saw blades have sharp teeth which can cause injuries even when it is not in motion. Hence handle the saw blades carefully. The Product is equipped with safety gears so that it shall not be possible to touch saw blads in motion. However, it is very important that Operators or maintenance staff always look to make sure saw blades are standing still and that power is turned off before touching them. Before servicing saw blades, ensure:
  - The main circuit breaker is locked out.
  - The saw axle and spacing rings are clean.
  - The blades are free of cracks, deformations, or imbalances.
  - Rotation speed does not exceed manufacturer specifications.
  - The saw blades are fastened steady in place, correctly and with correct rotation direction.
  - Make sure that the axle is rotating without vibrations when switching on the motors for the saw blades.



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#### **Disclaimer**

It is not possible for IMH to warn the Purchaser about every possible danger related to use of the Product. The Purchaser must use his or her own common sense and good judgement when using the Product.