NESCHEN HOTLAM 1650 TH AND COLDLAM 1650 LARGE FORMAT LAMINATORS

USER INSTRUCTIONS

Rev. 01-2020

English

CONTENTS

1. INTRODUCTION

Dear Customers,

We are very pleased that you have selected the Neschen laminator. We trust that this machine will increase your work productivity. Since it is a device which is equipped with rotating rollers and moving parts and is powered by electricity, work safety principles must be observed.

Before the Neschen laminator can be used, the user (the firm) must make sure that all the device operators, maintenance workers and their supervisors have acquainted themselves with these User Instructions. Ensured must be also the knowledge of generally binding regulations concerning occupational safety and prevention of injuries applicable in the user's country. Make sure these User Instructions are always available to workers who will be using the laminator. Incorrect operation and use can result in damages which are not covered by the product's warranty.

These User Instructions contain the laminator technical specifications and information concerning putting the laminator into service and operating it. They contain important information about work safety and maintenance, and must be regarded as part of the laminator. Production workers should be acquainted with the information contained in these User Instructions, and they should understand it. Of particular importance is information concerning safety measures. In order to ensure a satisfactory level of knowledge, it is desirable to provide initial training followed by regular worker refresher training.

If you don't understand any of the information contained in these User Instructions, please contact the laminator vendor. We suggest you make a copy of the User Instructions and keep the original in a safe place in case the copy gets lost or damaged. When working with the device, abide by the provided safety guidelines to avoid the danger of injuring yourself or other person around you, or damaging any tangible assets.

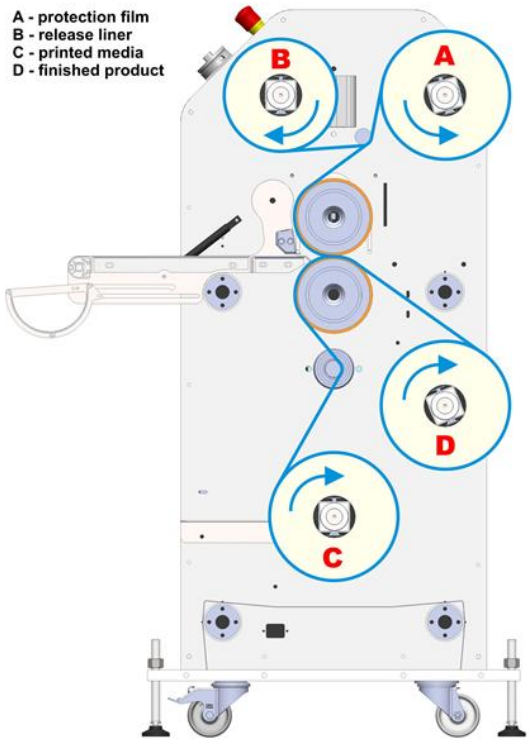
We wish to assure you that we paid a close attention when making the Neschen laminator and are convinced that, provided all the principles stated in these User Instructions are observed, you will be happy with your machine.

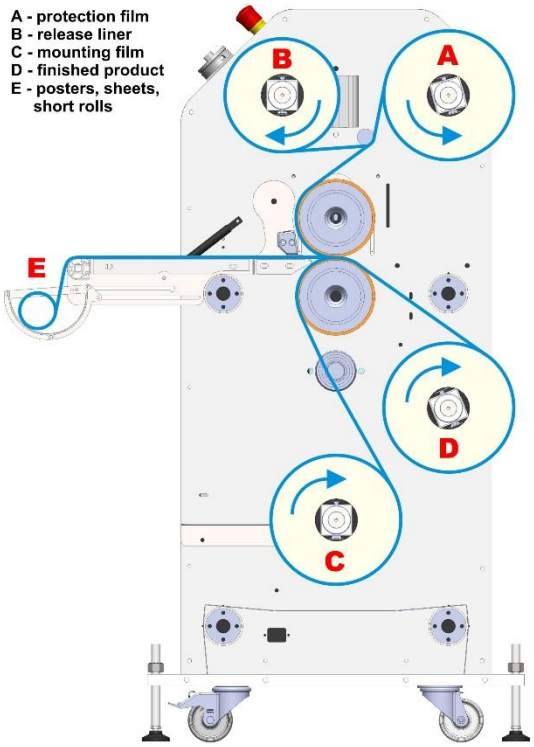
NESCHEN

2. APPLICATIONS

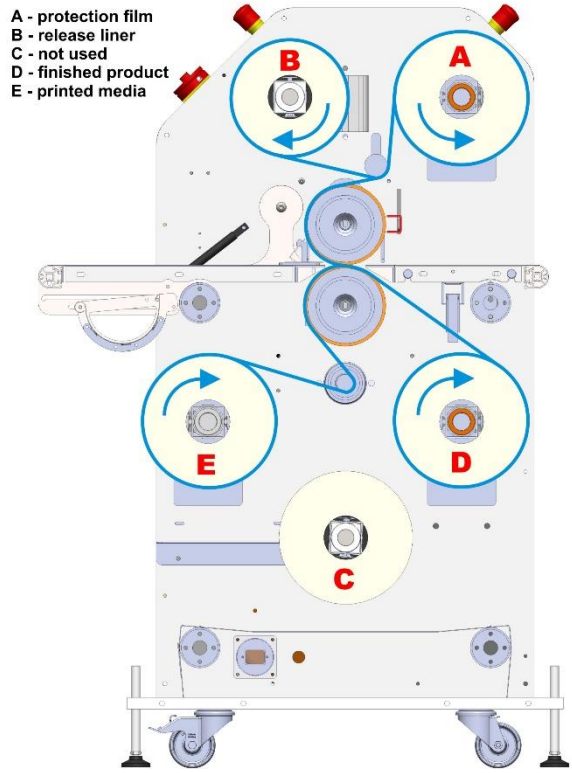
1. The Neschen large-format laminator is intended for applying laminating and backing foils using
   either pressure or heat to activate an adhesive layer to large-format prints, plates, boards and similar products whose width does not exceed 1650 mm.
2. Although the laminator is designated as a large-format device, it can be also used for laminating smaller formats, starting from A5.
3. Maximum length of laminated prints is not limited by the laminator's construction.
4. Larger formats (greater than A0 or equal to the device's maximum working width) may require
   the help of another person.
5. The Neschen laminator's simplicity and flexibility is based on its ability to work with cut material (sheets), cut from material in rolls. The user has a unique opportunity to choose a laminating technique. Either sheet lamination or from-roll lamination or roll-to-roll lamination.
6. Any changes made to this laminator without the manufacturer's permission will relieve the vendor from its liability for any damage or injury!
7. If the laminator's features allow the device to be used for other purposes not listed here, the user must consult such application with the vendor.
8. When working with the device, abide by the provided safety guidelines to avoid injuring yourself or other persons around you.
9. Those instructions which require special attention are in the User Instructions identified with the following safety symbol:

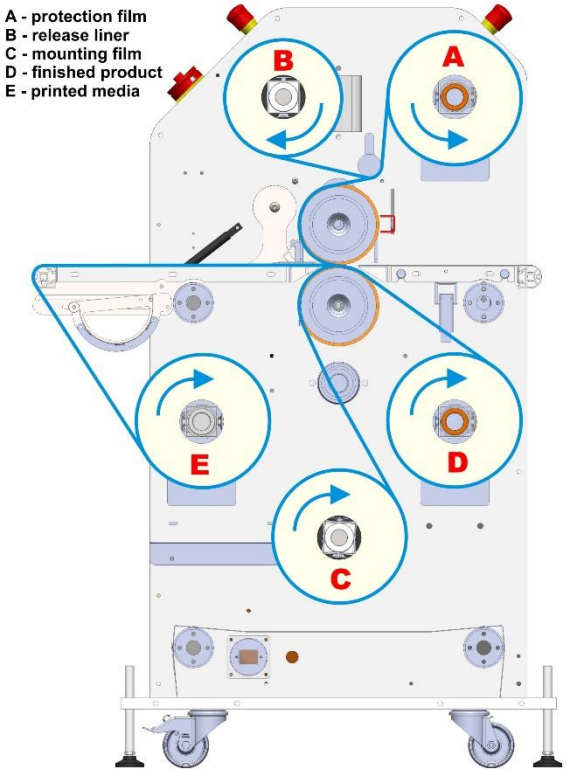
2.1. Web guide ColdLam 1650





2.2. Web guide HotLam 1650 TH



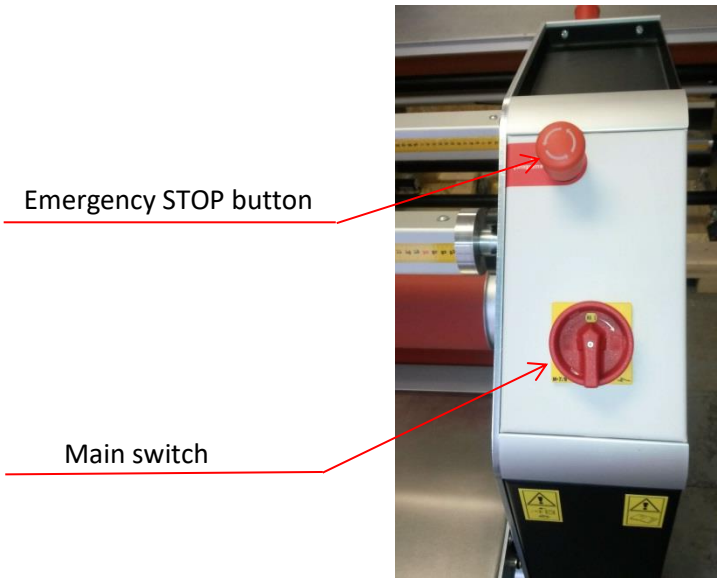


3. DESCRIPTION OF MAIN PARTS OF NESCHEN LAMINATOR

*ColdLam and HotLam laminators share the same design. Shown above is the HotLam model.

Controls of all ColdLam and HotLam are identical.

4. CONTROL PANELS - LEFT



Emergency STOP button - pressing it will switch the whole machine off. If there is no longer a reason for keeping the machine switched off, you can switch it on again. The Emergency STOP button is deactivated by turning (or pressing – depending on the system deployed) the button.

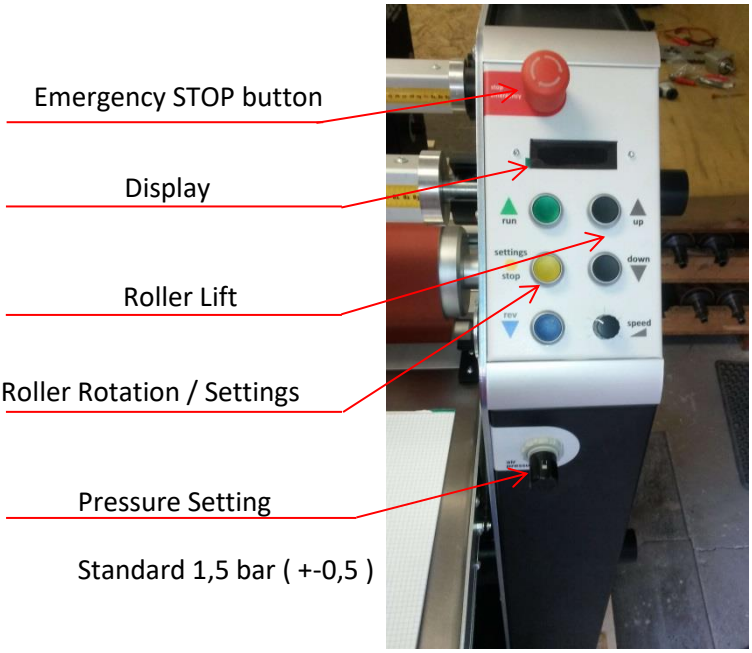
5. MAIN SWITCH – POSITIONS

OFF - the laminator is switched off.

ON - the laminator is switched on.

PRESSURE SETTING KNOB – setting the knob to the required position sets the main roller pressure. In the down position the pneumatic system pushes the main roller down by applying the force from 1000 up to 4500N. In the up position, the pneumatic system automatically reduces the main roller pressure to 500N.

6. CONTROL PANELS- RIGHT



Emergency STOP button – it has the identical function as the one on the left control panel.

The top roller can move up and down. The gap ranges from 0 to 40 mm**.**

Please note: the roller lift functions only if the rotation direction run or rev has not been selected (the direction button is not lit). The roller lift is controlled by the following buttons:

▼ **down** – the top roller moves down. The button must be held depressed. When released, the roller stops moving immediately. When the top roller touches the material or the bottom roller, it stops automatically, alerts with sound and lights and the machine will not allow further down movement – it will only allow up movement. If during down movement a light beam barrier is interrupted, a warning buzzer will sound but the roller continues to move down.

▲ **up** – the top roller moves up. The button must be held depressed. When released, the roller stops moving immediately. When the roller reaches the 40mm maximum, it stop automatically, and the machine will allow only down movement.

Roller rotation – the bottom roller is driven by an electromotor. Its revolutions can be continuously controlled within the range from 0 to 8 m/min on ColdLam and 12m/min on HotLam.

The rotation Turn knob – a speed control potentiometer by which the required speed is set in meters per minute.

▲ **run** – to select roller rotation for forward movement – the rotation direction is indicated by the button lighting up. The Neschen laminators have an advanced intelligent start-up function, whereby the laminator starts up gradually and smoothly until it reaches the exact speed set by the turn knob - the speed is independent on the load. **Please note:** If the roller rotation speed is set to 0, the laminator will not start up but wait for the operator to set a non-zero speed.

If the machine is equipped with a footswitch, stepping on the footswitch will make the machine move in the run direction at speed of 1m/min with warning buzzer sound and ignoring the light barriers.

△ **slow** – the back control panel works the same way as the footswitch. When pressed the machine move in the run direction at speed of 1m/min with warning buzzer sound and ignoring the light barriers.

▼ **rev** – selects the rollers to rotate in the reverse direction (otherwise it functions identically as ▲ run).

⬣ **stop / settings** – stops the rollers from rotating and cancels the rotation direction. If, while the machine is running, the light beam barrier is interrupted, a warning buzzer will sound and the machine will stop. **Please note:** If the operator wants to change the rotation direction while the machine is running, the operator must first press the ⬣ stop button and only then select the required rotation direction.

To enter the settings the operator has to press and hold the stop / settings button for three seconds.

The operator is now able to adjust the temperature by pressing the UP / DOWN button after pressing the stop button the operator will reach next menu point.

To reset the Odometer (daily counter) the operator has to press once the UP / DOWN button.

To run the Machine with a fixed distance the operator has to choose the distance in Countdown Menu in full meters. Machine will stop then afterwards automatically.

IMPORTANT: If the operator would like to run afterwards without automatic stop, he has to reset the Countdown to zero.

Standard Pressure for single side laminating (Print and Film) is 1,5 bar (+- 0,5 bar)

7. SILICONE PAPER AND LAMINATED PRINT

Shaft rotation – the silicone paper and laminated print (finished products) shafts are driven by electromotors. The machine synchronises their revolutions with the rotation speed of the main rollers. Print, laminate and double-sided page release liner shafts are braked. Resistance on all shafts can be changed by turning the heads of control bolts. The more the bolt is tightened, the more resistance the shaft puts up, and vice versa.

8. FUSES AND FOOTSWITCH CONNECTOR

The Neschen laminators have three fuses. Their parameters and how to replace them is described in section Maintenance and Repairs. The connector is used to connect a footswitch.

9. ROLL CARRIER

Laminating materials as well as printed materials are wound on paper tubes of an internal diameter three inches (76,2mm). The Neschen laminator shafts are designed for these tubes.

If the laminate being unrolled from the shaft is too slack or too tight, the braking force can be adjusted by turning the head of the bolt on the right hand side of the machine. By tightening the bolt the braking force is increased, and by loosening it the force is reduced.

If silicone paper fails to wind up, winds up too loosely or too tightly, the shaft resistance can be adjusted by turning the bolt on the right hand side. By tightening the bolt the resistance is increased, and by loosening it the resistance is reduced.

10. INSERTING A ROLL OF MATERIAL ONTO THE SHAFT

1. Remove the shaft from the laminator. Shafts are fastened in the laminator with locks on the right hand side. Turn the carrier until the lock is released. Positions for materials which are under the table have their shafts secured with a turn lock. Before removing the shaft, the lock must be released. Remove first the shaft on the side of the lock.

2. Insert the roll of material onto the shaft. When handling heavy roles, it is advisable to have another person.

3. Replace the shaft back onto the machine in a reverse procedure to the one described in point 1.

11. WORK SAFETY 

NESCHEN LAMINATOR SAFETY FEATURES:

- 1 Emergency STOP button
- Light beam barriers.

THE FOLLOWING IS PROHIBITED WHILE USING THE NESCHEN: 

- Using the laminator if it has any construction or mechanical defect;
- Working with the laminator while under the influence of alcohol, drugs or medication which may reduce your reaction ability and attention;
- Turning the laminator on if unauthorised persons are present within a dangerous distance from or within a dangerous space around the laminator;
- Removing waste from dangerous places while the laminator is running;
- Touching any moving parts of the laminator by body, objects or tools;
- Leaving the operator station while the laminator is running;
- Removing any safety devices from the laminator, disabling them or otherwise rendering them dysfunctional;
- Performing any maintenance or cleaning works and repairs while the laminator is running;
- Using the laminator in violation of the requirements on ensuring work safety – see Safety Guidelines.

12. SAFETY GUIDELINES 

Any rotating or moving parts of the laminator and parts under electrical power may cause severe or even fatal injuries. Installation, wiring, putting into service as well as maintenance and repairs may be performed by qualified and trained personnel only.

- The laminator may only be operated only by persons older than 18 years of age, mentally and physically fit, duly instructed (with their knowledge verified) and authorised to operate the laminator.
- More demanding repairs and any work on the laminator's electrical installation may be performed only by an appropriately qualified person or by the manufacturer.
- Laminator operators and maintenance workers must be well acquainted with these User Instructions
- Any adjustments, maintenance and cleaning of the laminator must be performed while the laminator is idle, the main switches turned off and the machine disconnected from power mains.
- Never start the laminator with covers off.
- Never touch any moving parts of the laminator.
- Keep all safety pictograms attached to the laminator legible.
- Work only under good lighting conditions or arrange for adequate artificial lights.
- Before starting to work with the laminator, always check and make sure that all safety devices of the laminator are installed and that they function faultlessly.
- Never work with the laminator when you feel tired.
- Let any damaged parts of the laminator be replaced by an authorised maintenance worker. Only original spare parts may be used for replacement.
- If the laminator starts to strongly vibrate, becomes increasingly noisy or shows any other unusual symptoms, turn the laminator off and report the problem to your supervisor.
- Fasten any loose parts of your clothing (e.g. a tie) or long hair so that they cannot get caught between the laminator's rollers.
- When working with laminator, make sure you are standing firmly on the ground.
- After switching the laminator on and starting the work rollers, be doubly cautious.
- If while working with the laminator you notice any damaged insulation, smell that something is burning, notice smoke or hear loud rumbling noise, the machine jerks after being started, some parts of the laminator's electrical equipment have overheated, sparks are coming out or you can feel tingle from electricity, turn the electrical equipment / the laminator off immediately and report the problem to your supervisor.

- If such danger or a danger to your fingers occurs, turn the laminator off by pressing one of the safety Emergency STOP buttons.
- Turning the laminator off by pressing the Emergency STOP button can be done by any person who has noticed that the laminator operator is in danger.
- After you have stopped working with the laminator, lift the top roller, switch the laminator off and disconnect it from power mains.

13. SAFETY PICTOGRAMS ATTACHED TO NESCHEN LAMINATOR

The user must maintain the pictograms legible and if they became damaged, arrange for them to be replaced.

Pictograms used and their meaning. Residual risks are covered by safety pictograms attached to the laminator, and by warnings in these User Instructions.

The operator must read the User Instructions

Before starting any repairs, adjustments, cleaning and maintenance of the laminator, disconnect the machine from power mains

Before starting up the laminator, be sure all the covers are correctly closed

Caution, do not touch any places on the laminator with moving parts

Risk of burns due to hot components

14. FIRE SAFETY 

Because the laminator is not factory-fitted with any fire extinguishing devices, the user must install in the building in which the laminator is situated, suitable fire extinguishers.

- It is forbidden to use on a laminator which is on fire and which is under power, water or foam fire extinguishers! Danger of injury by electric shock!
- Electrical equipment on fire must never be extinguished with water!
- Recommended types of fire extinguishers: powder, snow and halon.
- In the event of a fire, abide by fire instructions applicable to the particular workplace.

15. DISPOSING OF THE PRODUCT OR ITS PARTS

- When discarding the laminator after it has reached the end of its service life, abide by relevant environmental protection rules and use recycling options where available.
- Separate plastic parts and offer them for recycling.
- Separate metal parts and sort them out by type and offer as scrap metal.

16. MAINTENANCE

MAINTENANCE

1. Neschen laminators are of a robust and sturdy construction. They require minimum servicing. To guarantee problem-free use and long life, abide by the following principles:
2. Use isopropyl alcohol for cleaning roller surfaces. For cleaning other surfaces use a diluted detergent solution and a damp soft cloth. Never use solvents or abrasive products.
3. Before starting to clean or maintain the laminator, always disconnect it from power mains.
4. Protect the roller surfaces against damage by sharp objects (cutting blade, scissors, sharp plate edges, penetration of hard uneven objects, work tools, etc.), and against dust. If you protect the roller surfaces from damage, the laminator will give you many years of problem-free service.
5. Do not leave the rollers unnecessarily pushed against each other to prevent impressions from developing.
6. The included compressor must be drained once per month. The drain valve is at the bottom of the compressor

17. WARRANTY TERMS AND CONDITIONS

1. The manufacture provides for Neschen products a standard 12-month warranty starting from the date of sale.
2. For the exact details on the warranty conditions for your machine, please contact your vendor.
3. Any damage to the product caused by unsuitable by violating these User Instructions are not regarded as product defects
4. Furthermore, as product defects are not regarded any defects caused by mechanical damage, fall, impact, damage suffered during transportation, etc., caused by unauthorised interference with the product's electrical or mechanical parts, and by foreign objects which penetrated the product's interior
5. As a product defect is also not regarded normal wear and tear commensurate to the time and manner of using the machine.
6. Please submit any claims from the liability for products defects to the vendor from whom you purchased the product.

18. TECHNICAL SPECIFICATIONS

Neschen ColdLam 1650

Maximum Working Width	1650 mm
Maximum Speed	8 m/Min.
Nip pressure	1,6N/mm²
Maximum Substrate Thikness	40 mm
Roller Heating	Heat assisted top roller
Maximum Roller Temperature	70 °C
Width	2175 mm
Height	1320 mm
Depth	550 mm
Depth (incl. In-feed table)	750 mm
Table Height	870 mm on casting wheels, adjustable up to 950 mm
Machine Weight	400 kg
Shipping Weight	470 kg
Shipping Dimensions	Width 2300 mm
	Height 1750 mm
	Depth 950 mm
Electrical Requirements	1N/PE 208/230VAC/50-60 Hz;1700W 8A
Ambient Temperature	05-40 °C
Atmospheric Humidity	>80 %
Altitude	Max.2000 m

Neschen HotLam 1650 TH

Maximum Working Width	1650 mm
Maximum Speed	12 m/Min.
Nip pressure	3,1N/mm²
Maximum Substrate Thikness	40 mm
Roller Heating	Top heated main roller
Maximum Roller Temperature	160 °C
Width	2175 mm
Height	1320 mm
Depth	650 mm
Depth (incl. In-feed table)	880 mm
Table Height	870 mm on casting wheels, adjustable up to 950 mm
Machine Weight	490 kg
Shipping Weight	560 kg
Shipping Dimensions	Width 2300 mm
	Height 1750 mm
	Depth 950 mm
Electrical Requirements	1N/PE 208/230VAC/50-60 Hz;3400W 16A
Ambient Temperature	05-40 °C
Atmospheric Humidity	>80 %
Altitude	Max.2000 m