

K1 DS TC Belt

Laminator workflow

Applications Notes

Material Entrance

Lamination

Cutting Group

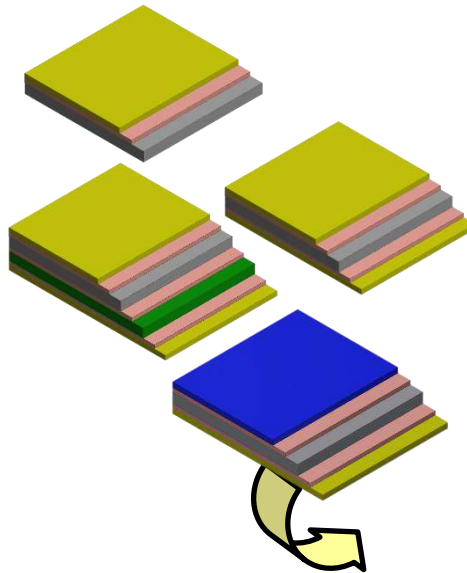
Exit material

• **Entrance**

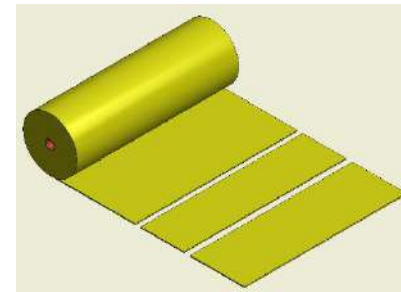
- table
- Conveyor

• **Unwinder**

• **Single/Double Layer**

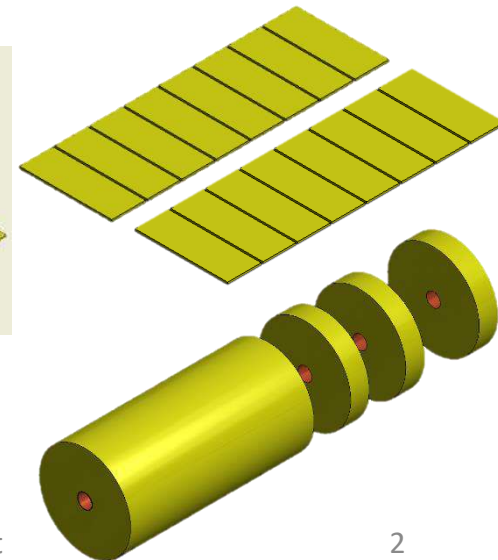


• **Trasversal cut**

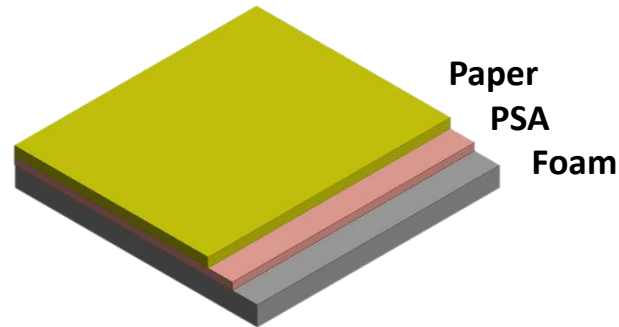


• **Exit**

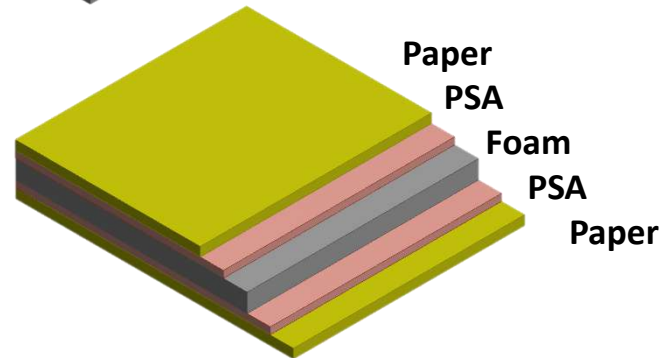
- table
- **Rewinder**



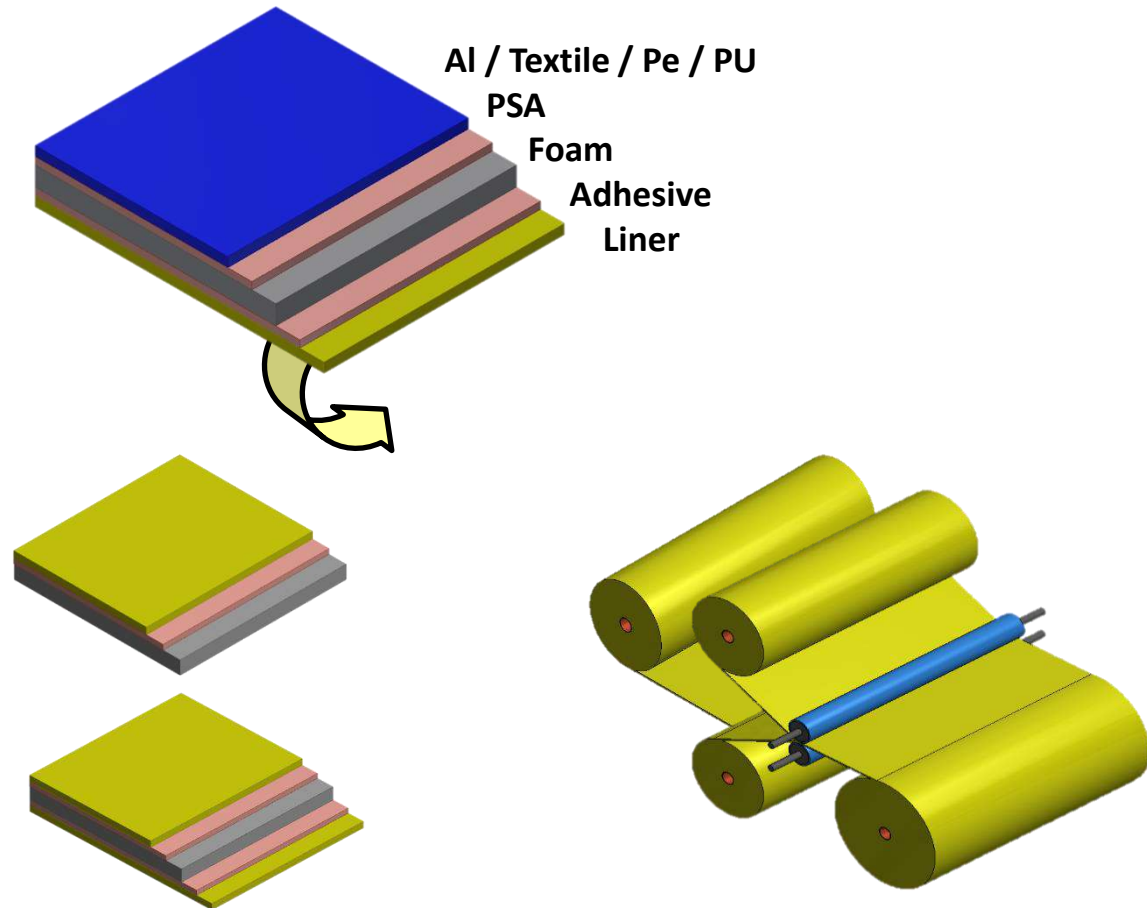
Single-layer material



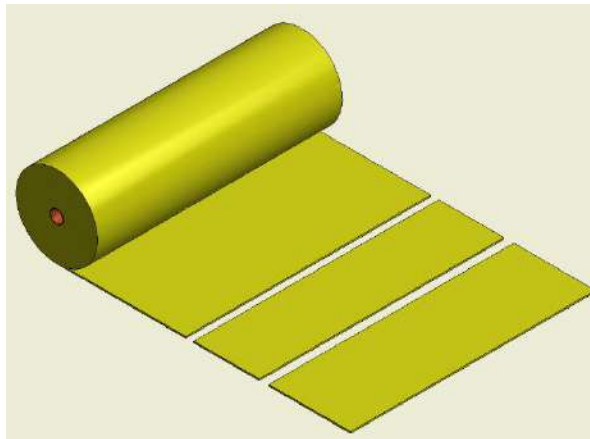
Double-layer material



Single-Double layer material



Transversal Cut
(TC)





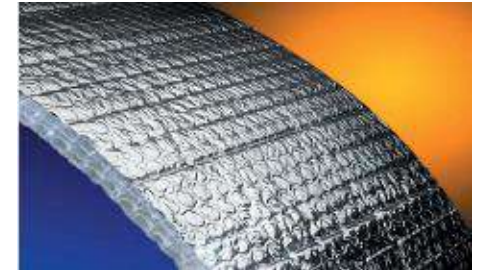
AUTOMOTIVE

Acoustic and Thermal insulated panels

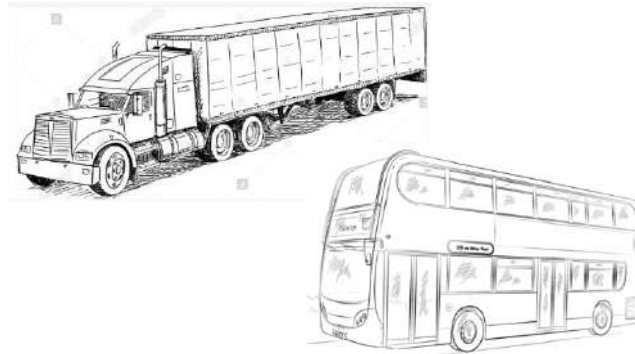
Interiors

Gasket and Technical Parts

**Design particularly suitable to laminate
EPDM thin/fleecy sheets**



**TRUCK/BUS
FLOORING/ROOFING**
Carpeting for flooring and
roofing sheets,
in automotive, truck,
building, aerospace.



INSULATION
Acoustic and Thermal,
for automotive,
aerospace, buildings

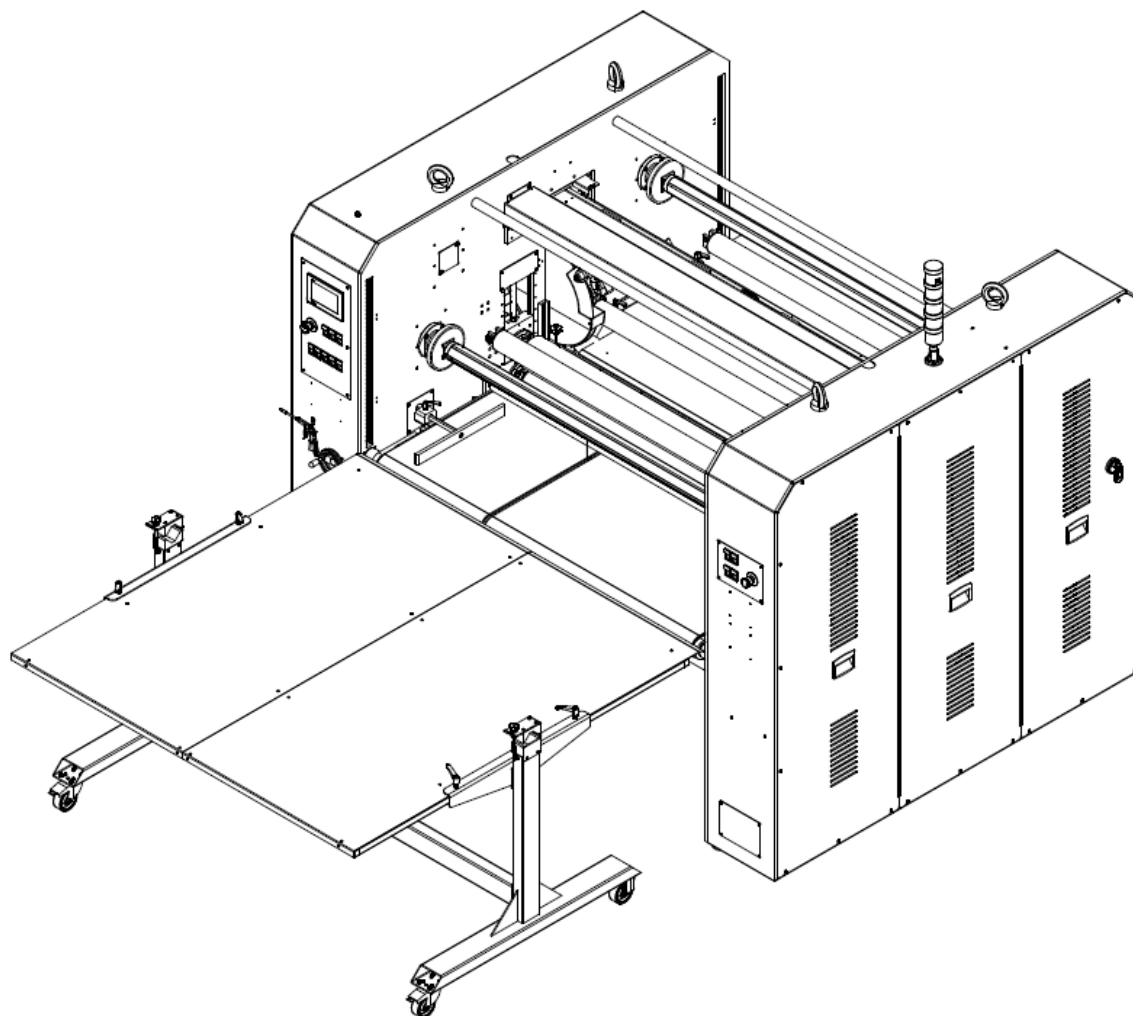
AREOSPACE

Acoustic and Thermal insulated panels

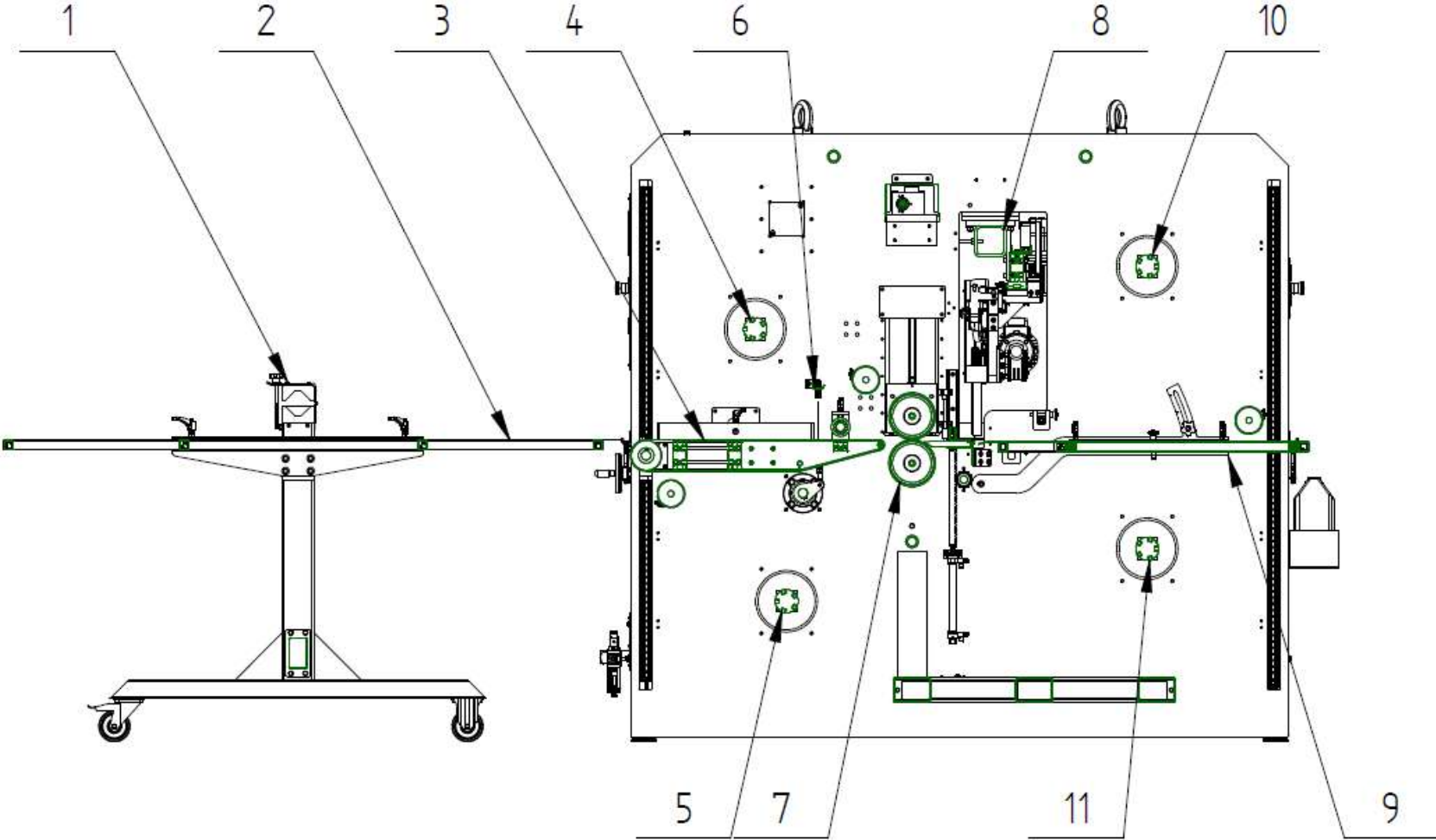
Interiors and Technical parts



Preliminary Layout



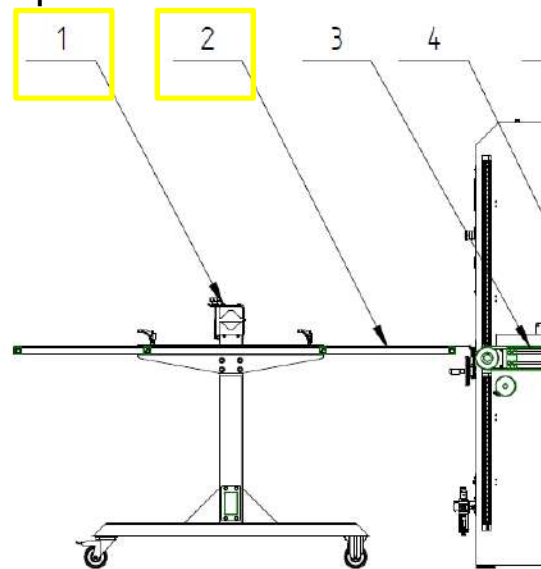
Preliminary Layout



Laminator Configuration

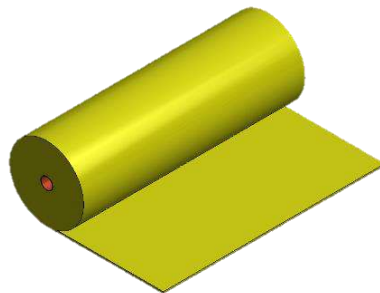
External Unwinder

Layout position # 1 & 2



Material

Width	1600 mm
ID	76 mm
OD	1200 mm
Weight	100 Kgs



Unwinder features

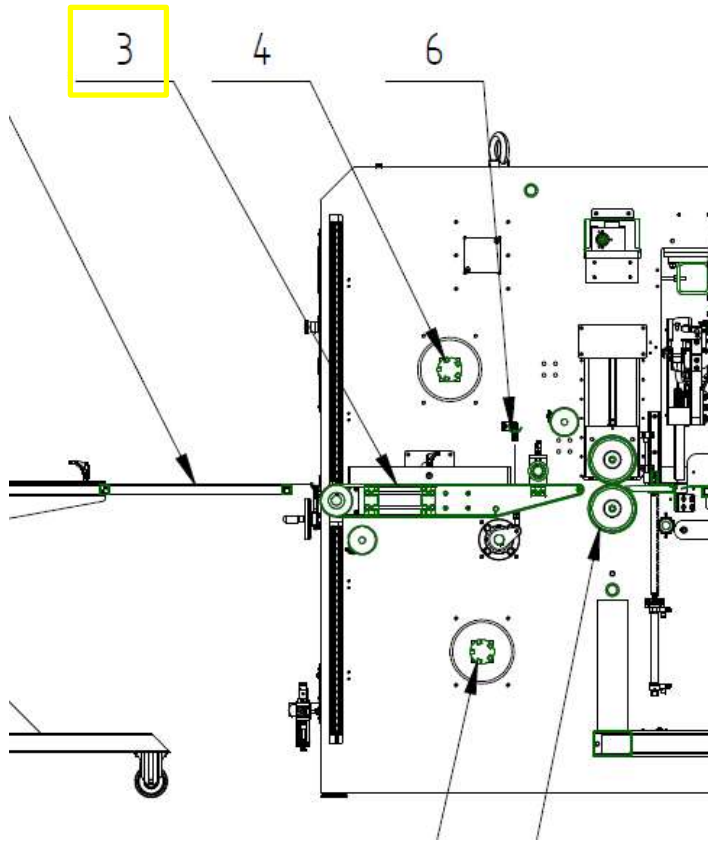
Roll holder shaft	Steel Shaft, 70 mm
Roll check	Mechanical brake
Safety supports	Two safety support
Options	# 2 Removable supporting table



Laminator Configuration

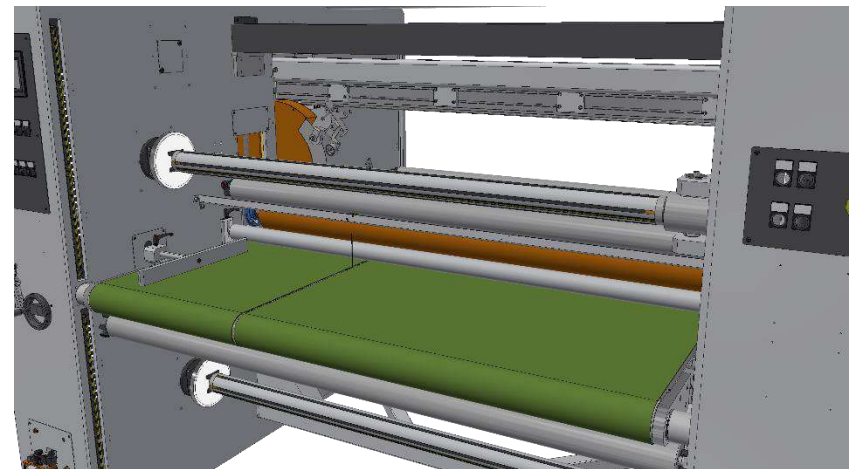
Entrance Conveyor Belt

Layout position #3



Coveyor features

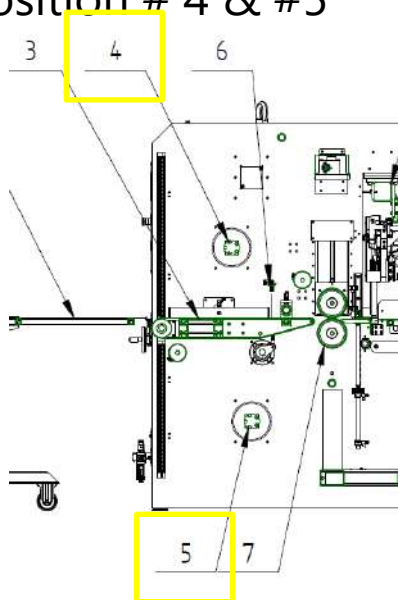
Checked by	Brushless Motor
Speed Managment	Checked by PLC
Material Check	Adjustable inclination to check the «curling effect»
Suitable to feed the material relaxed before laminating	



Laminator Configuration

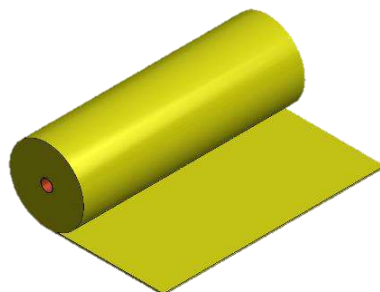
Adhesive/Foil Unwinder

Layout position # 4 & #5



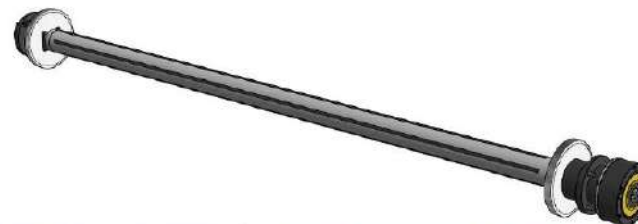
Material

Width	1600 mm
ID	76 mm
OD	400 mm
Weight	100 Kgs



Unwinder features

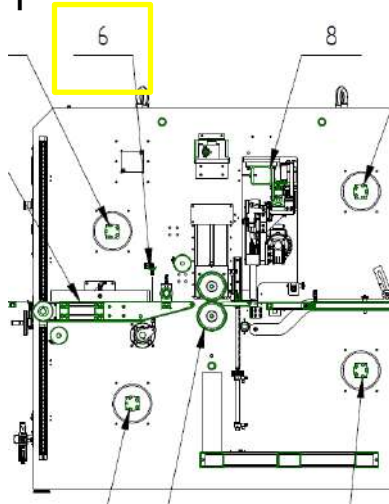
Checked by	EMG Brake
Roll holder shaft	Air expanding shaft, 76 mm
Roll check	Brake by Touch Screen
Safety supports	Two safety supports



Laminator Configuration

FTC - Sheet Presence Contactless Sensor

Layout position # 6



FTC – Sheet Presence Sensor features

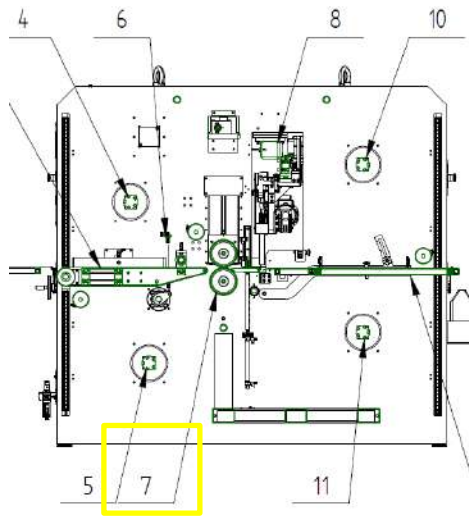
The sensor detect the first edge of the sheet allowing the Laminator to cut in between the two sheets (first and second)
Even if the top surface it's already laminated with Adhesive



Laminator Configuration

Lamination Calender

Layout position # 7



Upper nip roller features

Checked by	Free roller
Rollers features	Silicone covered
Heating system	Resistance/Canlde
Working Temp	Adjustable up to 90°C (195°F)
Gap control	Manual by handwheel
Gap Display	Mechanical display
Max Opening	100 mm

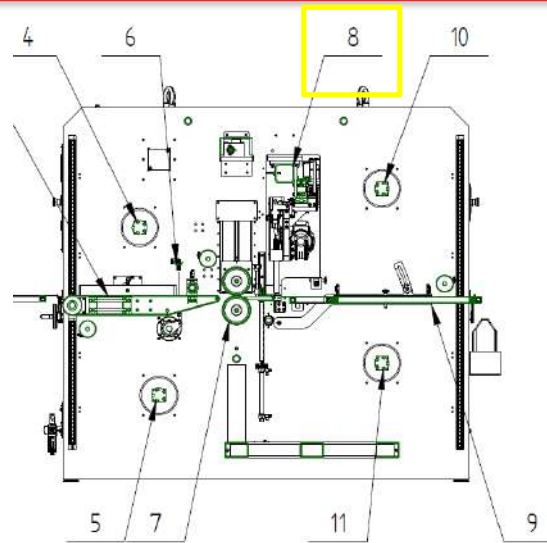
Lower nip roller features

Checked by	Brushless motor, adjustable speed
Rollers features	Silicone covered
Heating system	Resistance/Canlde
Working Temp	Adjustable up to 90°C (195°F)
Max Work speed	Adjustable up to 25 mts/min

Laminator Configuration

Cross Cutting Unit

Layout position # 8



Cutting system features

Knife	Ø 360mm Powered Circular Knife
Cutting system	Powered blade on steel counterblade
Sliding	Automatic sliding in both directions
Option Devices	Lubrication, Sharpening and Presser
Blade Cleaning	Cleaning felt wiper
Start cutting	Automatic, at set length
Options	Brushless motion for lateral positioning

Laminator Configuration

Exit Table for sheets

Layout position #9

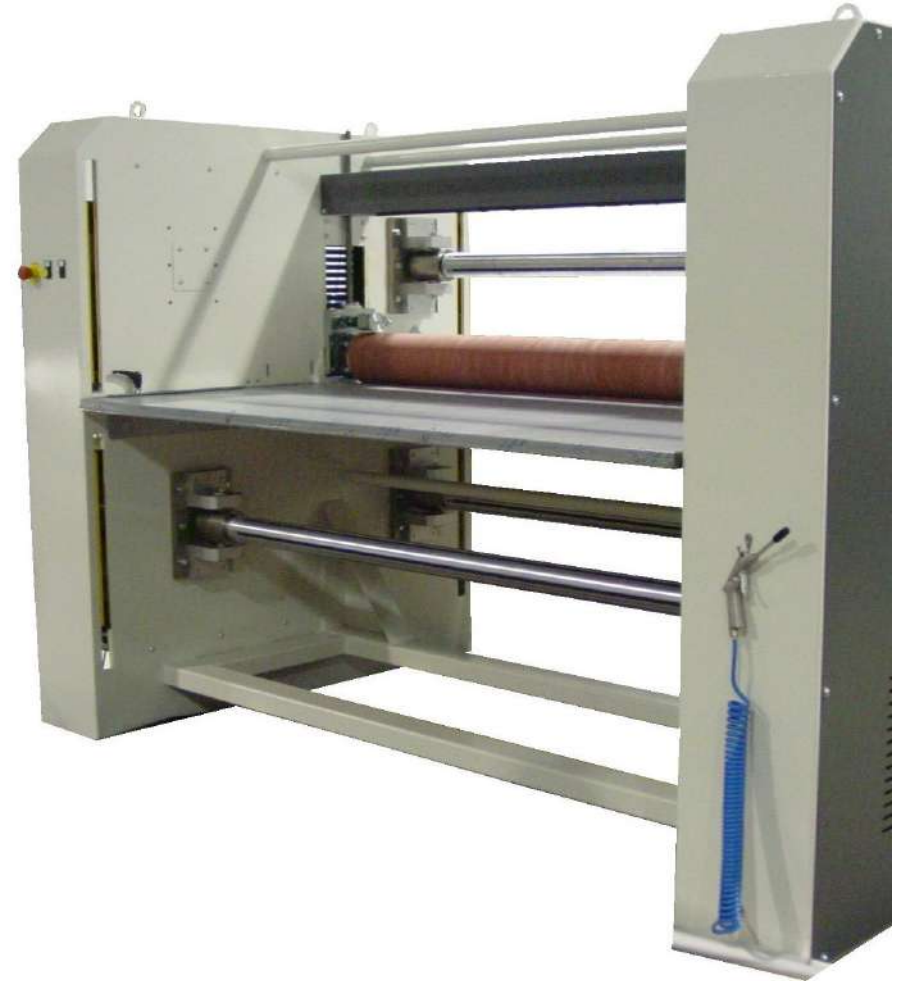
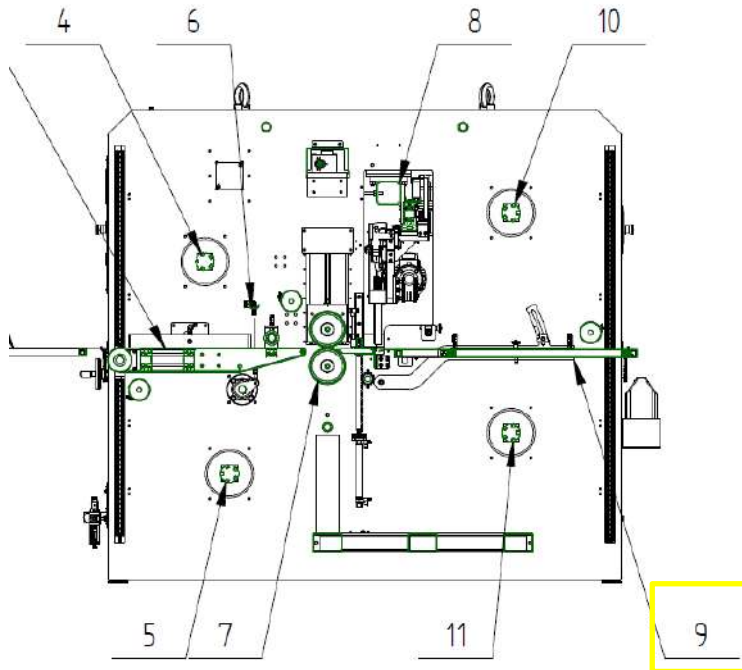


Table features

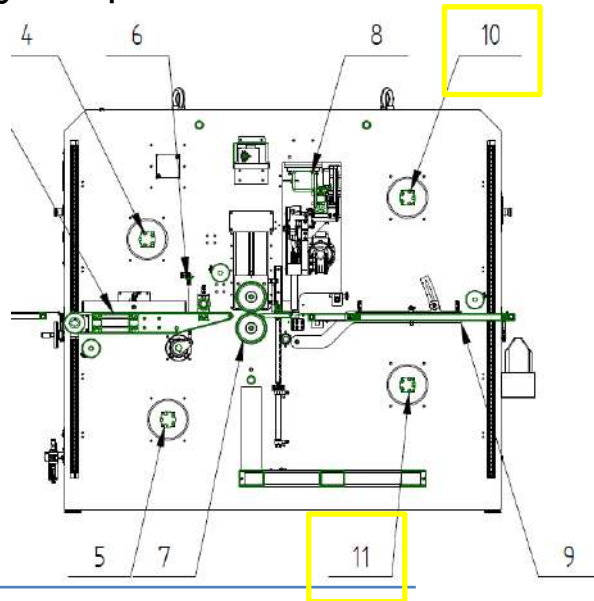
Removable and fixable through C-guides

Adjustable inclination

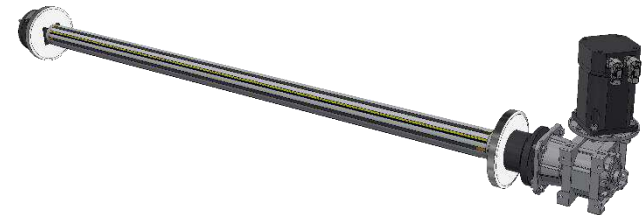
Laminator Configuration

Final Rewinder

Layout position # 10 & 11

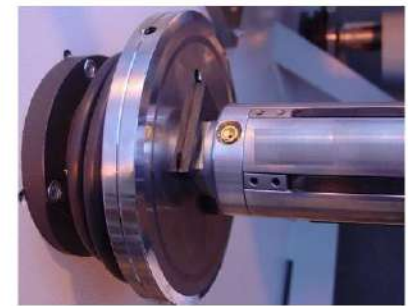
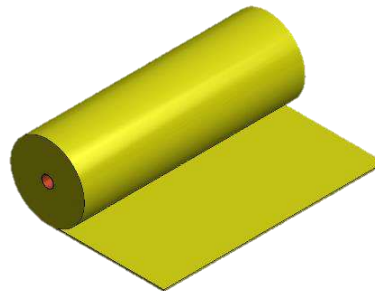


Rewinder features	
Checked by	Brushless Motor
Roll holder shaft	Air expanding shaft, 76 mm
Tension Control	Torque electronic control
Options	Sensor for proportional winding
Safety supports	Two Fast Locking Safety Supports



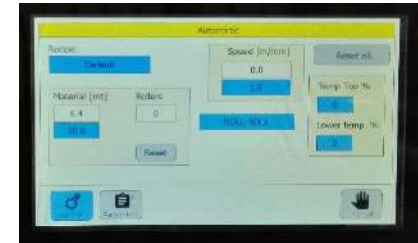
Material

Width	1600 mm
ID	76 mm
OD	500 mm
Weight	100 Kgs



Laminator Configuration

Safety device and Panel Control



Rewiner features

Norms Standard	EC/UL norms Machine, observing to machines Directive 2006 /42/EC ANNEX II/A and following modifications
Safety Devices	Light signals, emergency buttons, photocell barriers or laser scanner safety barriers
Control Panel	PLC and Touch screen interface with possibility to save working recipes, and pannel control
Other Options	Embedded electronic counter of meters
	Start and Stop foot pedal / Automatic & Manual Working Cycle



Thank you for your attention