















# **Company Profile**

No.1 shipment supplier(400+/year)
14 years experience
Plant size:10,000 M<sup>2</sup>
Employee:150persons
ISO9001, CE
High-Tech Enterprise

PAPER FLUTE
LAMINATOR MASTER

Guangdong Fengchi Printing Machinery Co,,LTD. started business since 2009, who is the only manufacturer specialized in single category of laminating machine all the time. As master in this industry, we provide world-class laminating machines with reasonable price. We serve the paper printing & packaging industry such as color boxes and corrugated carton, help solve the manufacturing process of over-gluing laminating and stacking after the post-printing for color cardboard & corrugated cartons. Customized service is carried out according to the actual needs of users.

Be different from other multi-category equipment company, FENGCHI only focus on laminating machines and made continuous breakthrough innovations in laminating speed and 30 self-developed patents in past 14 years. All products are strictly granted by CE standard and factory is granted with ISO9001 quality system.

FENGCHI is a technology-oriented factory with strong R&D team of nearly 30 people with more than 35 years in the printing and packaging industry, half of them are Doctor Degree. Now we have after-sale office in China, Europe, Vietnam, India, Malaysia, Korea, Indonesia, we aim to build global after-sale center before 2025. Because of the professional design, stable quality, innovative technology, reasonable price and perfect after-sale service, FENGCHI became the top one turnover in China for paper laminator machine in 2022.



# FULL SERVO HIGH SPEED FLUTE LAMINATOR

(Suitable for paper cardboard and corrugated board laminating)



# Leading edge feed version:

Model:	GW-1450LP	GW-1700LP	GW-2200LP
Max paper size:	1450mm * 1450mm	1700mm * 1650mm	2200mm * 2100mm
Min paper size:	360mm*360mm	360mm*360mm	450mm*380mm
Bottom Paper Sheet Thickness:	F flute-10mm		
Upper Paper Sheet Thickness:	150g-700g		
Max Speed:	16000 Sheets/hour (165 m/min)		
Laminating Accuracy:	±1.5mm (Standard Sheet Paper)		
Applicable Glue:	Resin adhesive, starch glue,milky glue (PH6~8 will be suitable)		
Machine Weight:	8000kg	8500kg	9000kg
Dimension (LxWxH):	15700mm*2400mm*2550m	16300mm*2650mm*2550m	18500mm*3050mm*2880mm
Power:	26kw	30kw	32kw
Applicable paper:	A,B,C,E,F,3ply,5ply,7ply corrugated board, and cardboard within above mentioned thickness range.		

# Belt feed version:

Model:	GW-1450BP	GW-1700BP	GW-2200BP
Max.Sheet Size (W x L):	1450mm*1450mm	1700mm*1650mm	2200mm*2100mm
Min.Sheet Size (W x L):	360mm*360mm	360mm*360mm	450mm*380mm
Bottom Paper Sheet Thickness :	300gsm –10mm		
Upper Paper Sheet Thickness :	150g-700g		
Max. Working Speed :	16000 Sheets/hour (165 m/min)		
Laminating Accuracy:	±1.5mm (Standard Sheet Paper)		
Applicable Glue :	Resin adhesive, starch glue,milky glue (PH6~8 will be suitable)		
Machine Weight :	8000kg	8500kg	9000kg
Dimension (L $\times$ W $\times$ H) :	15700mm*2400mm*2550m	16300mm*2650mm*2550m	18500mm*3050mm*2880mm
Voltage :	380VAC/3P		
Power:	26kw	30kw	32kw
Bottom paper applicable:	Cardboard above 300gsm, and A,B,C,E,F, 3ply,5ply corrugated board.		



- Working speed: 165m/min (16000sheets/hour): For small paper sizes, the speed can be faster.
- Easy to switch according to different production batches: Make ready in 2-5 minutes. Improve production efficiency.
- Optional machine sizes: 1450/1700/2200mm. match with different printing machines and other post-press machines sizes.
- Full servo control, large size rollers with double bearings at each end, automatic lubrication system, photoelectric detection/sensor and alarm system and self-developed operation system to achieve high stability, high speed, and high efficiency.
- Very easy to operate and maintain. Remote control for debugging is also available.

# PRODUCT IMAGE







# PRODUCT HIGHLIGHTS

Paper Aligning System



Full-servo tracking system to ensure stability and high precision.

# Leading-edge Feed System



Self-developed leading-edge feed system specially for deformed, warped corrugated papers.

## Automatic Refueling System



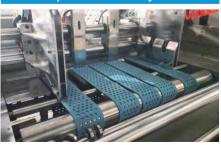
Automatic refueling system aim for maintenance-free

## Double Bearing with 150mm Roller



Bigger roller with diameter 150mm, double bearings for better stability and longer service life.

# Special Belt Feed System



The unique belt feed specially applies for all kind of thick and thin cardboard paper, improve the lamination accuracy. Minimum bottom paper thickness is 300gsm.

## **Operating System**

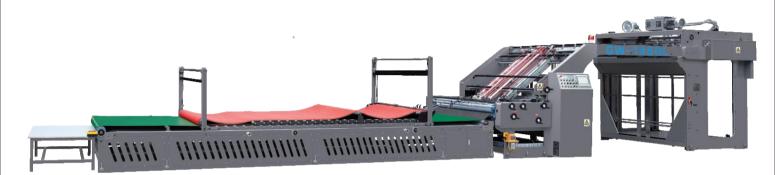


Self-developed full servo control system in accordance with CE standard.



# FULL SERVO HIGH SPEED FLUTE LAMINATOR

(Suitable for paper cardboard and corrugated board laminating)



# Leading edge feed version:

Model:	GW-1450L	GW-1700L	GW-2200L
Max paper size:	1450mm * 1450mm	1700mm * 1650mm	2200mm * 2100mm
Min paper size:	360mm*360mm	360mm*360mm	450mm*380mm
Bottom Paper Sheet Thickness:	F flute-10mm		
Upper Paper Sheet Thickness:	150g-700g		
Max Speed:	16000 Sheets/hour (165 m/min)		
Laminating Accuracy:	±1.5mm (Standard Sheet Paper)		
Applicable Glue:	Resin adhesive, starch glue,milky glue (PH6~8 will be suitable)		
Machine Weight:	8000kg	8500kg	9000kg
Dimension (LxWxH):	15700mm*2400mm*2550m	16300mm*2650mm*2550m	18500mm*3050mm*2880mm
Power:	26kw	30kw	32kw
Applicable paper:	A,B,C,E,F,3ply,5ply,7ply corrugated board, and cardboard within above mentioned thickness range.		

# Belt feed version:

Model:	GW-1450B	GW-1700B	GW-2200B
Max.Sheet Size (W x L):	1450mm*1450mm	1700mm*1650mm	2200mm*2100mm
Min.Sheet Size (W x L):	360mm*360mm	360mm*360mm	450mm*380mm
Bottom Paper Sheet Thickness :	300gsm –10mm		
Upper Paper Sheet Thickness :	150g-700g		
Max. Working Speed :	16000 Sheets/hour (165 m/min)		
Laminating Accuracy :	±1.5mm (Standard Sheet Paper)		
Applicable Glue :	Resin adhesive, starch glue,milky glue (PH6~8 will be suitable)		
Machine Weight :	8000kg	8500kg	9000kg
Dimension (L $\times$ W $\times$ H) :	15700mm*2400mm*2550m	16300mm*2650mm*2550m	18500mm*3050mm*2880mm
Voltage :	380VAC/3P		
Power:	26kw	30kw	32kw
Bottom paper applicable:	Cardboard above 300gsm, and A,B,C,E	F,3ply,5ply corrugated board.	



- Working speed: 165m/min (16000sheets/hour); For small paper sizes, the speed can be faster.
- Easy to switch according to different production batches: Make ready in 2-5 minutes. Improve production efficiency.
- Optional machine sizes: 1450/1700/2200mm, match with different printing machines and other post-press machines sizes.
- Full servo control, large size rollers with double bearings at each end, automatic lubrication system, photoelectric detection/sensor and alarm system and self-developed operation system to achieve high stability, high speed, and high efficiency.
- Very easy to operate and maintain. Remote control for debugging is also available.

# Paper Aligning System

Full-servo tracking system to ensure stability and high

# Leading-edge Feed System

Self-developed leading-edge feed system specially for deformed, warped corrugated papers.



Automatic refueling system aim for maintenance-free equipment,

Double Bearing with 150mm Roller

Bigger roller with diameter 150mm, double bearings for better stability and longer service life.

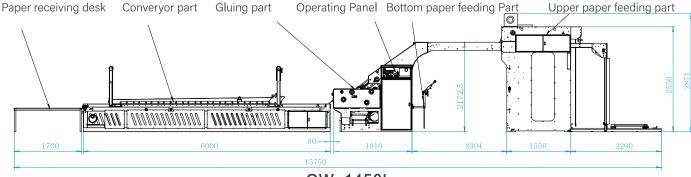
# **Special Belt Feed System**

The unique belt feed specially applies for all kind of thick and thin cardboard paper, improve the lamination accuracy. Minimum bottom paper thickness is 300gsm



Self-developed full servo control system in accordance with CE standard.

# INSTALLATION DRAWING





# UNIVERSAL AUTOMATIC HIGH SPEED PAPER LAMINATOR



- Laminating speed: 153 m/min (13,000 sheets/hour)
- Change over in: 2-5 minutes
- Maintenance-free with auto-refueling system
- Kinetic energy recovery system, save power, more economical

Model:	GE-1450B	GE-1450BP
Max paper size:	1450mm * 1450mm	
Min paper size:	360mm*360mm	
Bottom Paper Sheet Thickness:	300gsm~10mm	
Upper Paper Sheet Thickness:	150gsm-700gsm	
Working Speed:	13,000 sheets/hour (153M/min)(	Depends on paper quality)
Laminating Accuracy:	±1.5mm Standard Sheet Paper	
Applicable Glue:	Resin adhesive, starch glue and	etc. (PH $6{\sim}8$ will be suitable for laminating glue)
Machine Weight:	7000kg	
Dimension (LxWxH):	15.4m × 2.3m × 2.55m	
Power:	20kw	
Applicable paper:	A,B,C,E,F, 3ply,5ply corrugated boa	rd, and cardboard within above mentioned range
Automatically adjust glue amount:	No	Yes
Automatically adjust roller height:	No	Yes



# Paper Aligning System:



Full-servo tracking system to ensure stability and high

# Feeding System for Bottom Paper



Adopting advanced high speed motion control servo tracking system to ensure the laminating accuracy.

# Auto Refueling System



Automatic refueling system aim for maintenance-free equipment.

# Pre-stacking System



Pre-stacking system ensure job-change around 2-5 mins

# **Operating System**



Self-developed full servo control system in accordance with CE standard.

# Sinple operation interface



Full servo automatically adjust the amount of glue and the height of bottom board, the quality control becomes simpler and easier, and greatly reduce dependence on operator

# **Major Clients**











**Main suppliers** 









# **OMRON**

# **INSTALLATION DRAWING**

Gluing part Operating Panel Bottom paper feeding Part Paper receiving desk Converyor part Upper paper feeding part 80-1700 2304 1556 2200



# FULL AUTOMATIC CARDBOARD PAPER LAMINATOR



- High Accuracy--the full servo controlled with digital operating system automatically adjusts the machine, laminating accuracy up to ± 0.5mm.
- High Speed--maximum laminating speed can reach to 10,000 sheets/hour
- Wide Applicability-Using front feeder suitable for the thinnest top paper 100gsm and thinnest bottom paper 180gsm.
- High Automation-One key operation by inputting paper size, automatic feeding on upper and bottom paper, and automatic paper collecting after laminating.
- Makeready Time: 2-5 minutes.
   When paper size and thickness is input and all functions work automatically.

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Model:	GK-1307	GK-1310
Max paper size:	1300mm*720mm	1300mm*1000mm
Min paper size:	450mm*350mm	450mm*350mm
Top paper thickness:	100-700gsm	
Bottom paper thickness:	200-900gsm	
Max speed:	10000 Sheets/hour	7800 Sheets/hour
Laminating accuracy:	±0.5mm (Standard Sheet Paper)	
Applicable glue:	Starch glue, resin glue, milky glue etc.,(PH value 6-8)	
Machine weight:	6500kg	
Machine size:	9900mm*2250mm*2180m	
Input voltage:	380VAC/3P	
Power:	20kw	
Applicable paper:	Thin paper, cardboard paper,coated paper,gray board,thick paperboard etc.,	

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# **Laminating Part**



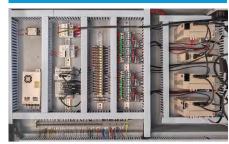
The paper lamination alignment adopts differential speed tracking, and the top paper and bottom paper are simultaneously handed over to the alignment guide to ensure accurate lamination.

# Feeding System



Using 360-degree rotating high speed, front suction and separate servo-controlled feeder, equipped with 4.0KW vacuum pump ensuring paper transmission speed is faster and more stable, can deliver thick & thin paper smoothly.

# Electric System



Adopt well-known brands from domestic and abroad, in accordance with the European CE standard design can achieve remote control and maintenance of equipment upgrade.

# Servo-controlled Stacking System



Using servo control system ensuring each lift or drop speed can be adjusted freely, stable, smooth and seamless conversion.

# **Aligning System**



Full-servo tracking system to ensure stability and high precision

# **Paper Collecting System**



The laminated paper can be automatically stacked and moved out with forklift, can greatly save the labor cost.

# Basic Configuration

PLC:	MORSINT
Servo Motors:	VEICHI
Main Motor:	CHENGMING
Conveyor Motor:	CHENGMING
Glue Pump:	A-RYUNG Korea
Vacuum Pump of Feeder:	BECKER Germany
Inverter:	VEICHI
Contactor, Relay:	Germany Schneider
Photoelectric Detection:	OMRON Japan, Baumer Switzerland
Touch Screen:	MORSINT
Air Switch, Circuit Breaker:	Germany Schneider
Switching Power:	Taiwan Ming wei
Upper paper lifting table Count photoelectric proximity detection:	Taiwan FOTEK
Spindle Encoder:	Germany Hengstler
Relay:	IDEC Japan
Bearing:	SKF IKO

<sup>\*</sup>This is the current configuration. It may be updated with technical updates and upgrades.



# FULL-SERVO FLIP FLOP STACKER

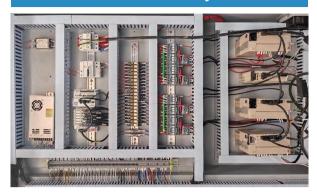


- Full servo motion control system, high-speed, smooth operation and trouble-free.
- High-speed silent track, quiet operation, long term service life.
- Minimalist operating system, safe and reliable without training, easy to operate.
- Front and back stacking with one key operation.

Model:	FZ-1450	FZ-1700
Max.Sheet Size (W x L):	1450mm×1450mm	1700mm×1650mm
Min.Sheet Size (W x L):	500mm × 380mm	500mm × 380mm
Max. Working Speed :	15000 sheet/hour	15000 sheet/hour
Machine Weight :	3800kg	4000kg
Dimension (L $\times$ W $\times$ H) :	6955mm × 2432mm × 2892mm	7555mmmm × 2682mm × 2892mm
Voltage :	380	VAC/4P
Power:	12	2KW
Gas source :	0.8MF	Pa >5.5KW



# **Electrical Control System**



Adopting the international leading motion control technology, digital control which makes the whole machine run smoother, faster, more stable, and easier to operate.

# **Control Department**



Adopting simple man-machine interface which only need to input the paper size, one key to adjust the machine, no need to use any tools, one key to start. The equipment adopts operation control technology.

# **Pile Turning Mechanism**



Adopting High-speed silent track which is smooth, silent, wear-free, and with long term service life; the flipping servo and the lifting servo electronic cam are locked, the flipping lifting speed can be adjusted disposable.

# **Paper Division**



The three-section independent frequency conversion speed regulation mechanism can adjust the speed of each section of the paper according to the thickness of the paper output from the main machine press.

# Basic Configuration

EtherCAT:	MORSINT
Touch Screen:	MORSINT
Servo Motor:	VEICHI
Frequency Converter:	VEICHI
AC Contactor:	Schneider
Overload Protector:	Schneider
Intermediate Relay:	IDEC Japan
Photoelectric Sensor:	Taiwan FOTEK
Proximity Sensor:	Taiwan FOTEK
Terminal Block:	PHOENIX CONTACT
Breaker:	Schneider
Pneumatic components,air pipes:	AirTAC
Switch Button:	TAYEE

\*This is the current configuration. It may be updated with technical updates and upgrades.



# HIGH SPEED AUTOMATIC GLUING AND FOLDING MACHINE



- **Strong Stability** -- independently controlled dual suction and feeding mechanism to ensure the operation stable, reliable and high accuracy.
- High Speed -- maximum AB sheet gluing speed over 2,500 sheets/hour.
- **High Accuracy** -- motion control servo position system to ensure the high precision on the alignment and automatic digital adjustment.
- Wide applicability -- work with hot-melt or cold glue, and pressure automatic gluing from bucket.
- One-man operation -- professional delivery line mechanism, one-men operation to save the labor cost
- Full Digital Automation -- servo motors control for key parameter adjustments and one-key operation.

Model:	FC-2300Z
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Maximum sheet size (single):	1150mm*1150mm
Minimum sheet size (single):	750mm*350mm
Feeding pile height:	400mm
Power:	14kw
Registration Accuracy:	+/- 1 mm
Sheet thickness:	E flute to 10mm
Gross weight:	3.3T
Machine size (Receiving parts exclusive):	4915mm*3300mm*1450mm



# ROBOUT HIGHEIGHT



Dual suction and feeding mechanism are independently controlled to ensure paper feeding is stable and reliable, and paper feeding with high accuracy and easy to adjust.



Individual drive structure for AB sheet feeding to avoid the scratches.



The hot glue uses an aluminum glue box to heat quickly. Cold glue uses stainless steel glue box to resist corrosion. Glue storage in a bucket with pressure for automatic gluing.

# Independent dual feeding mechanism



Equipped with front and rear positioning devices, which can be easily adjusted according to different products,

## Special Belt Feed System



Equipped with four conveying belts to ensure smooth sheet conveying.

# Well-known brand electrical components

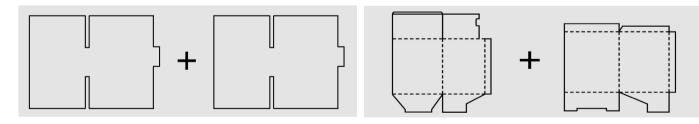


Well-known brand electrical components for stable operation and long-life time cycle.

Kunlun

# Part Five--Application

This high speed automatic folder gluer machine is specially designed for the double-piece(AB sheet) box gluing and folding.



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	TITVII.	Karnari
	PLC:	Explicit control
	Frequency converter:	Shilin
	Power supply:	Taiwan Mingwei
Doois	Servo system:	Zhongchuang Tianqin
Basic Configuration:	Contactor:	Schneider
	Intermediate relay:	Izumi
	Control button:	Schneider
	Photoelectric switch:	Omron Dubuque
	Pneumatic Components:	AirTAC
	Motor:	Taiwan Aoqili CUHK





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