

SHINKO SUPER

α

新幸超级阿尔法

シンコースーパーアルファ

<http://www.shinkom.com>

<http://www.klcartonmachinery.com>

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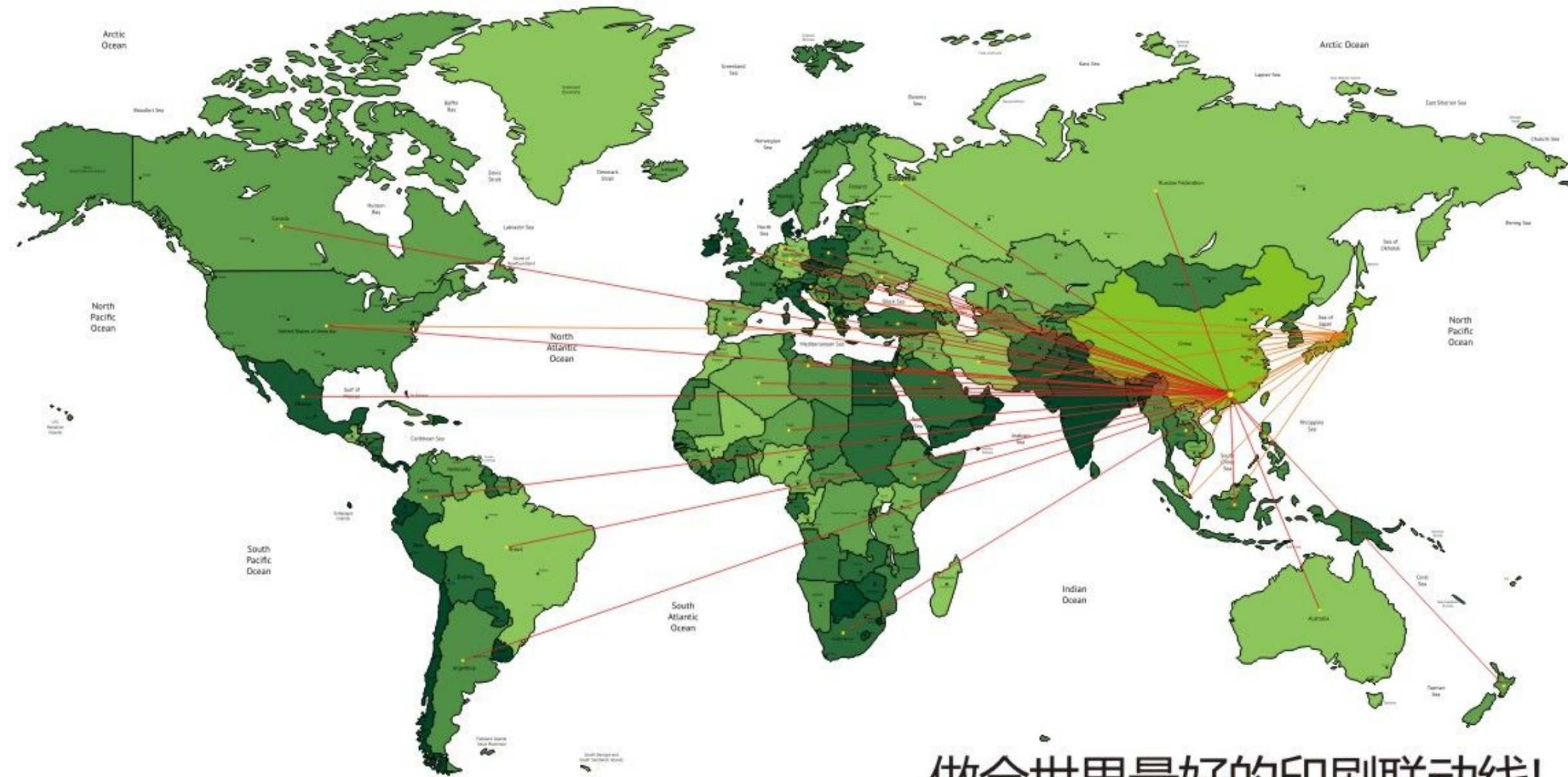
GUANGZHOU KESHENGLONG CARTON PACKING MACHINE CO.,LTD.

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 **SHINKO MACHINE CO.,LTD.**



做全世界最好的印刷联动线!
 MAKE THE BEST FLEXO FOLDER GLUER IN THE WORLD!
 世界でNo.1のFFGを作しましょう。

SHINKO MACHINE CO.,LTD.

Shinko Machine Co.,Ltd. was established in 1931. It is the pioneer manufacturer of fixed structure FFG Corrugated box-making machine, and one of the top manufacturers of corrugated printing machine in the world. Specialized in manufacturing fixed structure, full servo control, intelligent FFG corrugated box-making machine, Shinko has sold more than 500 FFG box-making machines all over the world, among which more than 200 in Japan, and almost 50 in China mainland.

In 2017, Shinko merged into Guangzhou Keshenglong Carton Packing Machine Co.,Ltd., The Japan factory keeps as the R&D center and Production base, the factory is reconstructed and the output is doubled, and set up another production base in Guangzhou, China. Main parts are imported from Japan, instructed, installed and tested on site by experienced technicians from Japan, to ensure machine quality up to the same standard as Japan Shinko.



Japan Plant



Japan Office



Japan Machining Workshop



Guangzhou Shinko Plant



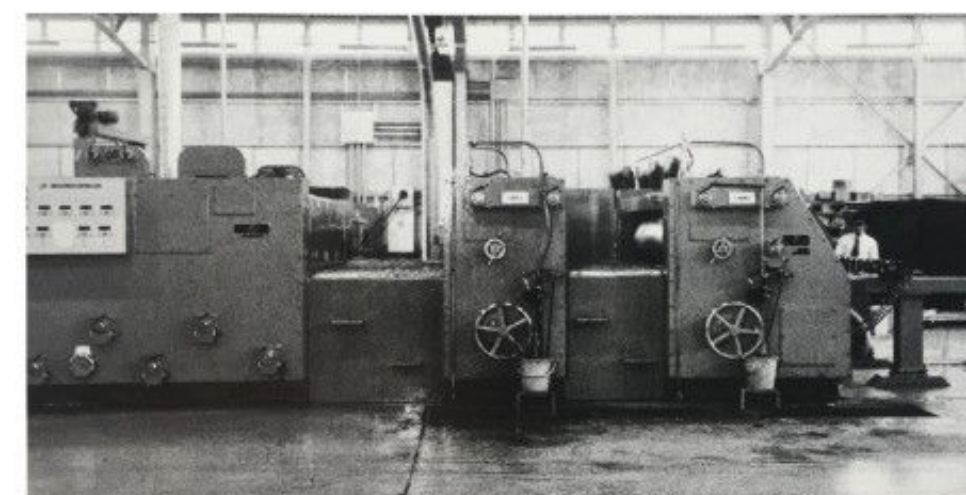
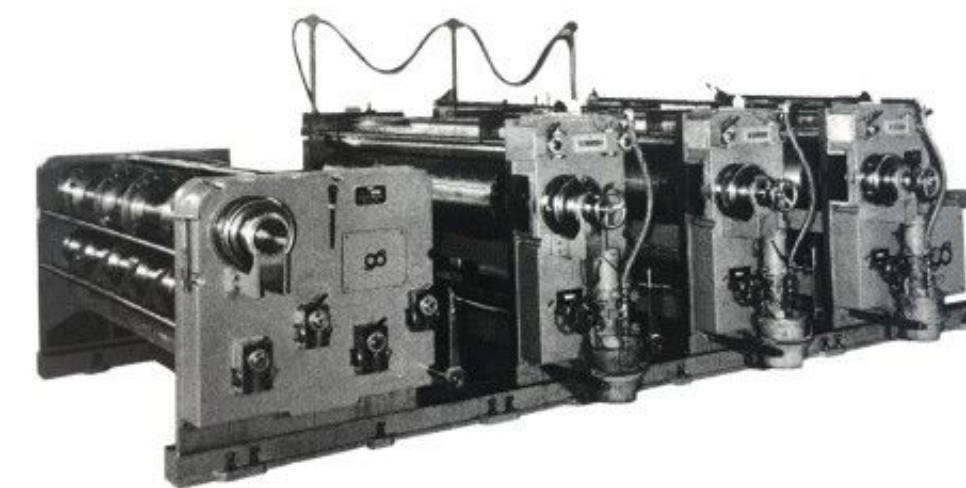
Guangzhou Shinko Assembly Workshop

Company History

- In 1931 Mr. Masatoshi Tsukasaki founded TSUKASAKI SEISAKUSHO MGF. CO.,LTD.
- In 1934 Mr. Masatoshi Tsukasaki began to manufacture and sell printing machines in Minato-ku, Osaka, Japan.
- In 1947 He started his business in Suminoe-ku, Osaka.
- In 1950 Manual printing machines were exported to South America and Southeast Asia by Osaka Printing Ink MFG. Co.,Ltd.
- In 1953 the flexo printing machine for carton was completed through a lot of experiments and studies in flexo printing machine.
- In July 1961 the company was renamed as Shinko Machine MFG. Co.,Ltd. (Registered fund at JPY 1,500,000)
- In 1967 FPS-Type Flexo Printing Slotting machine was released in Osaka World Trade Center.
- In March 1968 Cooperated with Marumatsu Corp. and developed Flexo Printing Die-Cutting machine.
- In May 1968 Researched on developing waste water-base ink treatment device, and promoted improved SKFH-II.
- In 1971 It invested in Marumatsu Corp. to strengthen sales.



Founder MASATOSHI TSUKASAKI



- In September 1972 the first carton making machine in the world was completed by assembling computer in the flexo printing slotting machine. The brand name was SHINKONUC.
- In March 1976 The flexo printer Folder Gluer for carton was released in Tamade Factory, realized high precision and high strength that the existing printing machine couldn't achieve.
- In July 1983 computerized flexo 4 colors Printer Folder Gluer "SHINKO ALPHA" was released at JCBM exhibition, won great praises in the industry.
- In March 1992 established a factory in Wakayama
- In 1995 the Super Alpha was released at INDEX OSAKA EXHIBITION (The 1st set of fixed structure full servo control case maker) (SUPER ALPHA 18 axes independent drive—Servo Drive).
- In 1996 began to manufacture Flat Die-Cutter for HIGH PRINTER (Bottom Printer)
- In 1997 completed the independent drive SHINKO SUPER ALPHA, and released at JCBM exhibition.
- In June 2003 SUPER ALPHA model 921 was released at INDEX OSAKA EXHIBITION, machine speed reached 400 sheets/min.
- In the same year began to research on developing HARD DIE-CUTTER with independent drive.
- In July 2004 began to manufacture HARD DIE-CUTTER.
- In October 2004 Tokyo Service Office was established.
- In March 2005 merged with KYOSHIN CO.,LTD., the registered fund increased to JPY 93.3 million.
- In 2006 developed the new type Counter Ejector with uphill conveyor.
- In 2008 established Taiwan Office, began to expand the Asian market.
- In 2011 developed the special Slotter for two pieces of cardboard.
- IN 2012 the sales performance in Asian market was improved significantly.
- In 2017 Merged into Guangzhou Keshenglong Carton Packing Machine Co.,Ltd., restructured SHINKO MACHINE CO.,LTD., and set up another production base in Guangzhou.

SHINKO SUPER

新幸超级阿尔法

シンコースーパーアルファ



Shinko has been making fixed frame flexo folder gluers for over 40 years. As markets changed, so have Shinko's designs. The end result is the most advanced flexo folder gluer the corrugated industry has ever seen.

The Shinko Super Alpha answers the industry's desire for better feeding performance, tighter print registration, unmatched folding accuracy and the ability to do quick order changed for the ever-increasing small-lot business. Labor-saving versatility, speed and accuracy are synonymous with the Shinko Super Alpha.

SAVING ENERGY

Machine running cost is reduced by energy conservation in electric power 140 KW, saving more than 40% than others in the industry.

MULTI DRIVE

Each unit is individually driven by a servo motor, enabling high-precision, high-quality printing.

QUICK SET

High productivity for small orders with setup times within two minutes achieved by the latest fixed frame unit.

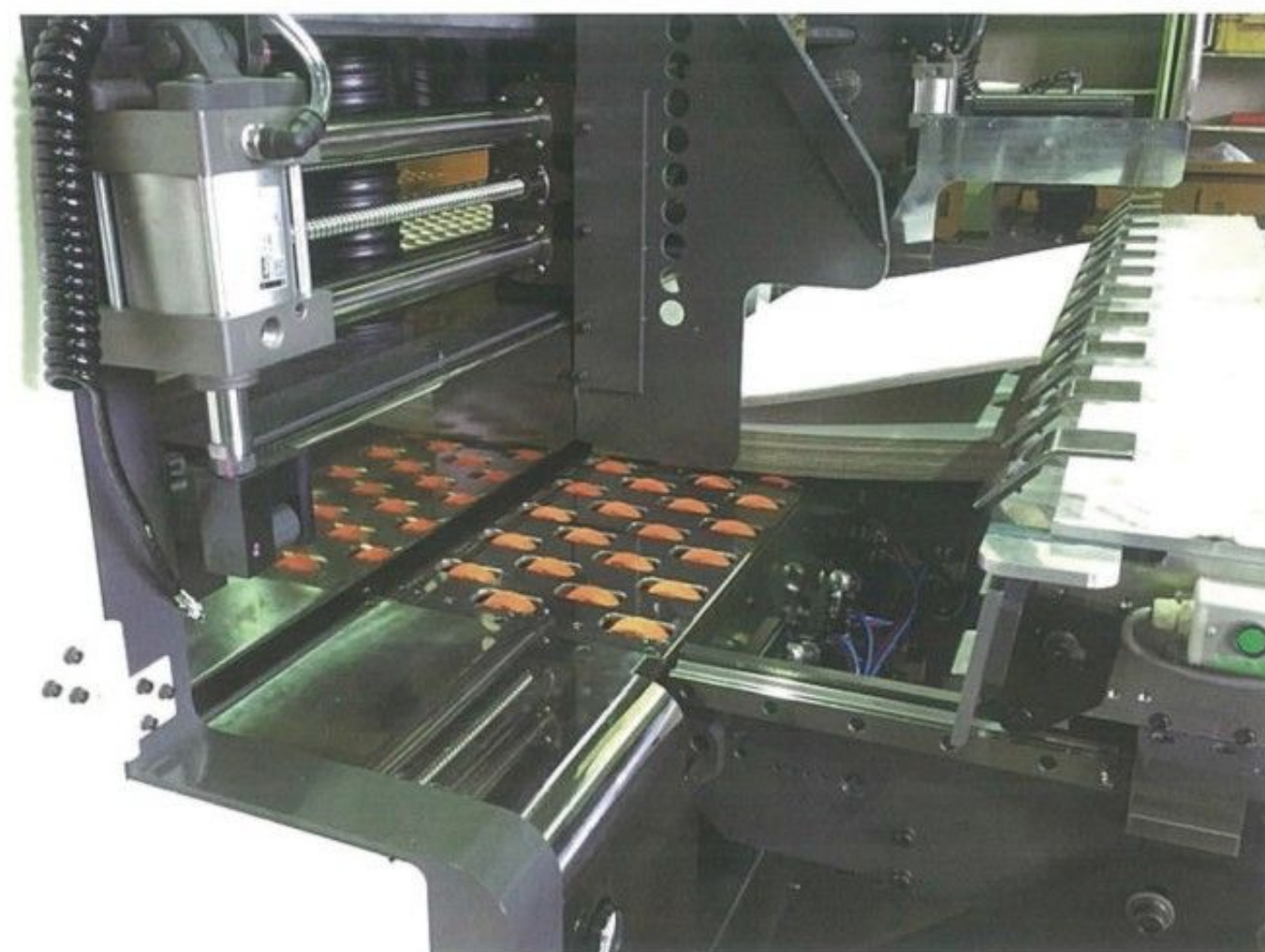
FORMING ROLLER

High folding accuracy that meets every customer's demands, using Shinko patented computer-designed forming roller system based on 40 years of experience as a long-established manufacturer.

Feeding Unit



Feeding performance and reliability are increased dramatically by adopting a lead edge feeder that is capable to handle curled paper and by independently driving each axis (four axes) by servo motor. The feeder is designed to decrease noise and vibration when running at high speed, creating a safer, quieter environment for operators and plant personnel. An added registration compensator greatly increases the accuracy of the feeder.



Lead Edge Feeder System

Based on a new idea, Shinko developed a unique paper feeding system, a lead edge feeder system driven by servo motors, which allow feeding of paper from AA flute to G flute with an automatic setting. The sheets are sucked by the suction fan at the tip and feed by the friction of the urethane roller, each shaft of which is individually driven by a servo motor.

Grating-Less

The lead edge feed table, driven by a servo motor, substantially eliminates vibration and noise during high-speed operation, and prevents sheet warping compared with the kicker method. In addition, the elimination of a gear box realized maintenance-free operation. (Patent applied)

Paper Dust Remover

Fans located on the upper feed pull roll remove paper dust from the sheets for superior printing quality.

Optional Device

First Sheet Setting Device

When link to an Auto Pre-feeder, a small stack of sheets must be place in the lead edge feeder for a pre-feeder to operate.



Non-pressure Feeding Device

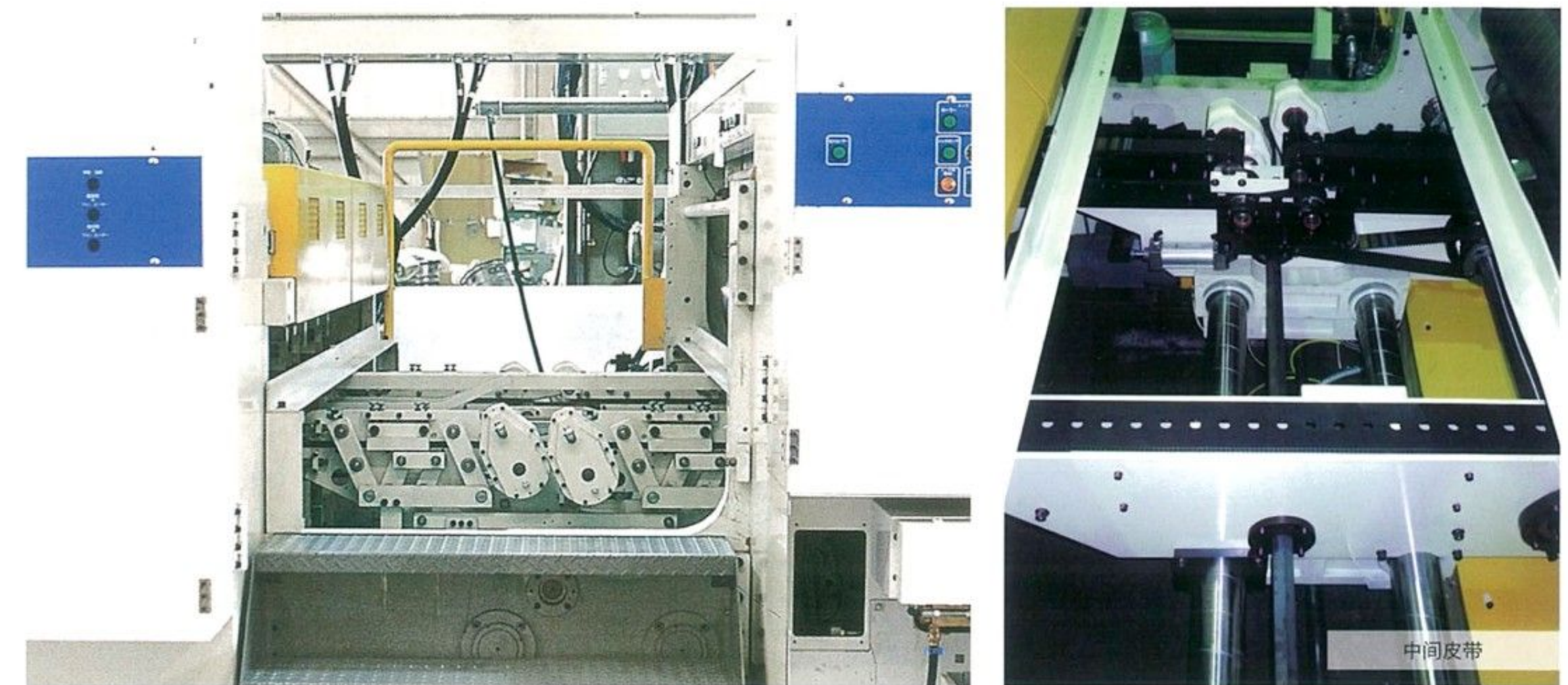
Ensure the strength of corrugated sheet. (Patent applied)



CBS (Carrying Belt System)



Heavy-duty timing belts feed the sheets by clamping them at 20 mm from the left and right edges. In addition, a center belt with suction function located at the center of the machines stably feeds the sheets without hanging or offsetting.



Fixed Unit Design

Fixed unit design without the need of opening and closing, allow the Shinko to operate safely, while sharply reducing set up time.

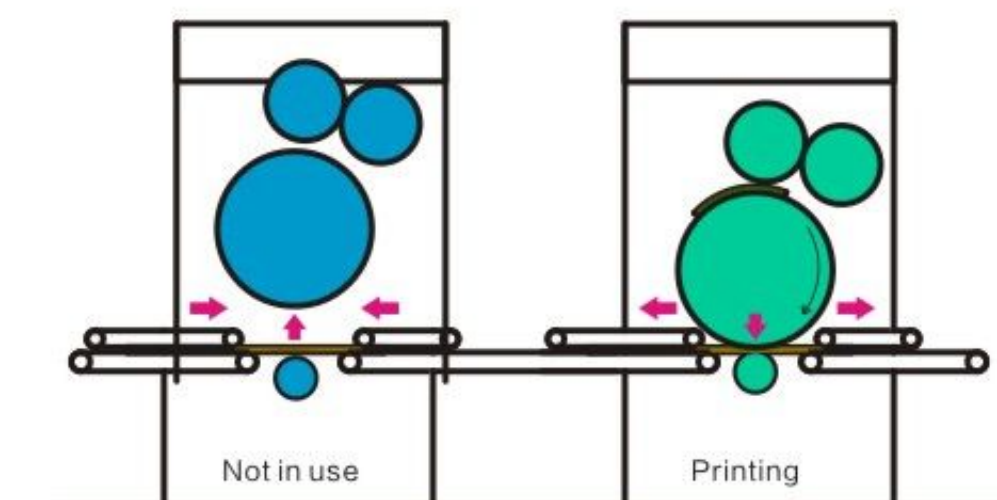
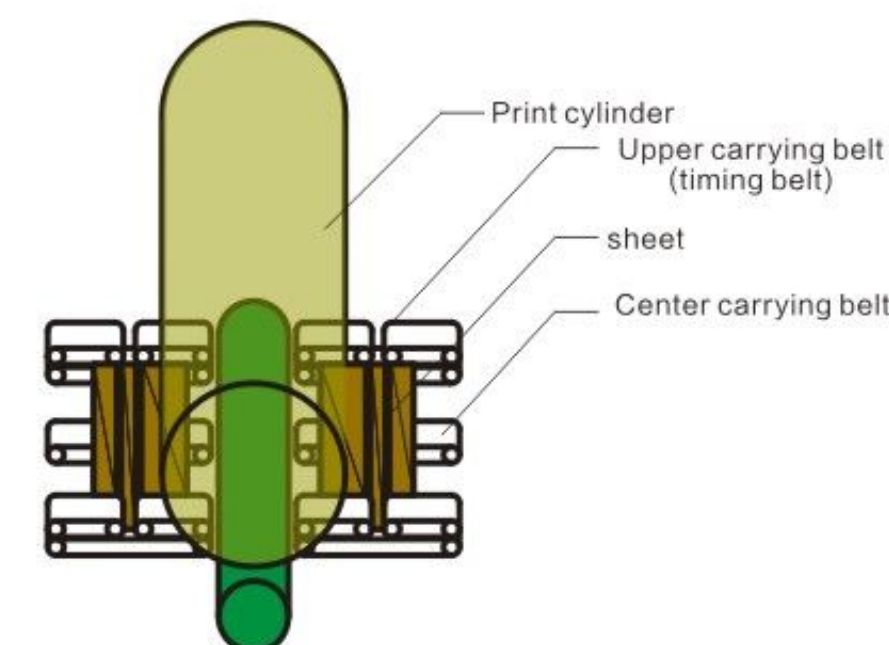
The CBS prevents the sheets from offsetting during feeding, enabling clear and high-quality printing. The sheet-holding force is adjustable depending on the types of sheets used, eliminating sheet offsetting and edge crushing.

Printing Plates and Ink can be changed while the machine is operating

Using unique system that raises the print cylinders 100mm from the board line, it's possible to change printing plates and ink while the machine is operating. This allows the operator to set up on the next order, reducing set up time and increasing productivity.

No Transfer Stereo is Necessary.

When the print cylinders are moved for setup, the upper carrying belt will move forward and backward to keep the sheet feeding. This makes it possible to run the minimum size sheet without using transfer stereo on the printer cylinder.



Printing Unit



The use of a chamber doctor blade system, which scrapes excess ink from a ceramic anilox roll, covers ink uniformly regardless of machine speed or sheet size, eliminating uneven or faded color. The carrying system with excellent stability enables high-quality, sharp printing with less misalignment. A fixed unit design responds to stripe printing and solid printing, allowing preparation for next lot in advance while in operation and significantly reducing the time for set change order.



Print Unit Setup

Each unit is connected by the carrying belt, the plate cylinder can be raised about 100mm above the sheet pass line. The plate cylinder of the not-in-use printers can be raised for changing printing plate, or prepare for the next order, even while the machine is running. It shortens the setup time significantly, and reduces the work.

Diaphragm System

Ink feeding, recycle and wash-up are fully automatic. Shinko's unique pumping system decreases ink loss, and shorten the inking and recycling time. Shinko's original wash-up system for ink roll, ink duct and ink tube thoroughly while using a minimum amount of water.



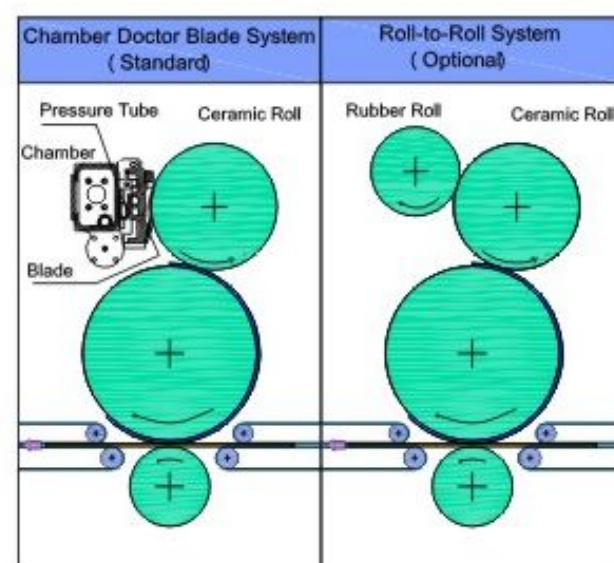
Automatic Printing Plate Mounting Device

Printing Plate winding is motorized, allowing the operator to set up the print units fast and accurately.

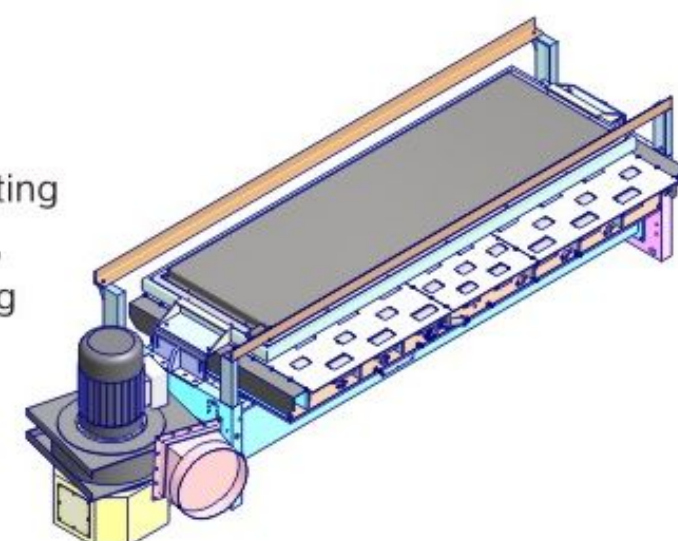


Optional Device

The Roll-to-Roll System, combining a ceramic anilox roll and a rubber roll, enables sharp, high-quality printing effect for solid printing.



For solid plate printing or varnishing work, Independent Drying Unit is optional.



Slotting Unit



Shinko's 8-shaft slotting unit adopts double slotting, no need to add or remove knives, and keep stable creasing strength. Improve the creasing accuracy, and smooth slitting, makes the precise joint.



Double Slotting Unit

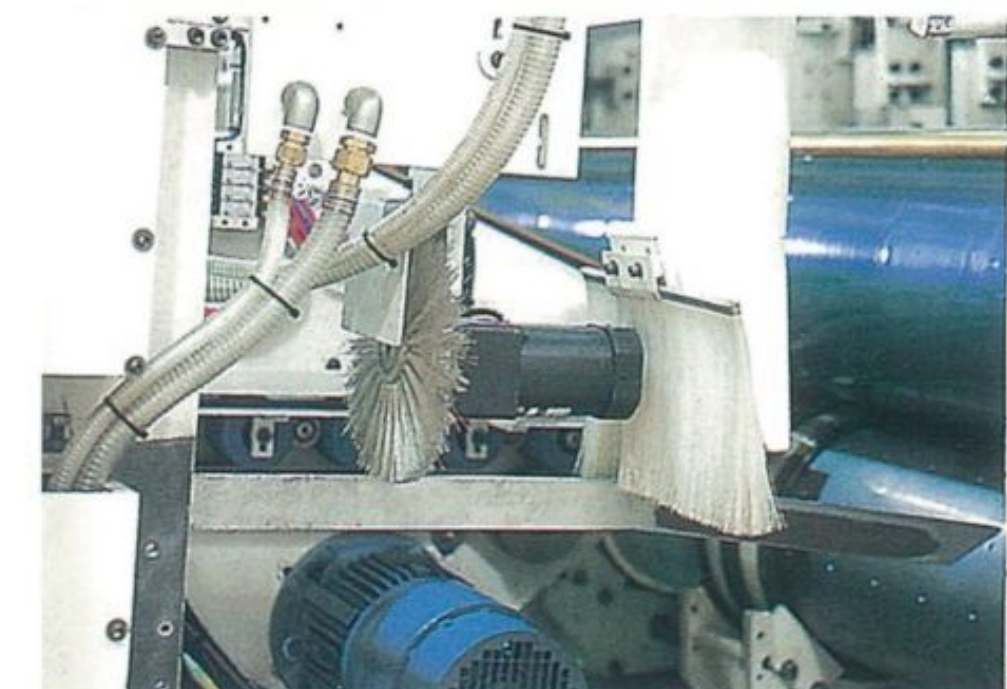
Cutting by the upper flap and lower flap will be individually processed by two axes. The upper axis holds the convex blade and the lower axis holds the concave blade.

Double Creasing Unit

Using the same diameter for creasing and crushing axes with slotting axes enables uniform sheet crushing and creasing. It is possible to stably crush and crease sheets, even with an AB flute or reinforced core, without bending in high-speed rotation, compared with a small-diameter crushing roller. Opening the space between the slotting unit and creasing unit enables easy maintenance such as replacing blades. Both creasing and crushing axes can mount two different shape wheels, allowing the selection of a maximum of four combinations of creasing wheel and crushing wheel according to the type of flute, size and liner. (Patent applied)



Glue Joint Waste Remover



Glue Joint waste is removed by a rotary brush and fan system, delivering clean product to the folding section.

Automatic RSC Setup with a Selection of Regular or Extended Glue Flap

Whether regular or extended glue flap is needed, it can be set up through CNC. When choose extended glue flap, the length of glue joint can be adjusted from 0mm to 50mm manually.

Automatic Setup of Slotting Depth

The upper and lower flap length can be adjusted through CNC.

Optional Device

Automatic adjustment of the length of the joint flap (in case of sheets with extended glue flap)

Die Cutting Unit



A full size, soft anvil rotary die cutter gives flexibility to the Shinko line. In addition, a “one touch” hand hole cutting device with automatic positioning system is standard. No tools are necessary to mount or remove the “one-touch” device.

“Soft Cut” Roll Die Cutter

A “soft cut” serrated blade is used for the die and the anvil is wrapped with urethane. You can choose either cut up or cut down type in mounting wooden molds.
(The pin method is available with a cut down type only.)

Optional Device

A pin-type waste fraction cleaning device is available. Remove the waste paper fraction on the die cutting blade, with pin mounting in die cutter cylinder.



One Touch Hand Hole Cutter

Hand hole cutting dies are easily mounted with Shinko's patented sprinting die holder.

Optional Device

A pin-type waste fraction cleaning hand hole is available.



Forming Gluer



Shinko's forming roller system, which is patented in seven major countries in the world, minimizes joint gaps and fishtailing. This combined with Shinko's accurate creasing and slotting system, produces the highest quality folding and forming.

Folding Unit

Folding is done using the forming roller, which was designed by Shinko's patented technique (patented in seven major countries in the world) and 40 years of experience. The roller bends the paper and produces boxes with high joint accuracy. With its stable joint accuracy, the device enables the production of suitable cases for automatic boxing machines that fit today's requirements.

The forming roller driven by a timing belt ensures stable transportation and bending of sheets.



Underneath Belt

The underneath belt at the exit side of the gluer has a suction function to achieve stable sheet feeding. In addition, the belts of both operating and driving sides are individually driven, which improves joint accuracy, even for special shape cases.



Glue Unit

Adopt USA Valco or Germany HHS Glue System (equipped with air pressure adjusting device), Automatic adjustment of position through touch screen, Automatic distinguish the length of box with high speed.

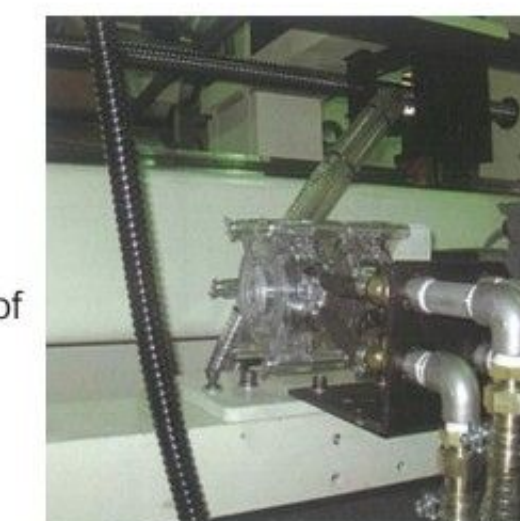
Optional Device

Adoption of a glue roll type

High speed glue heads or an advanced glue roll is standard. The advanced glue roll has horizontal slots that maintain uniform glue coverage through a doctor blade system. An independent drive prevents the glue from drying if the machine is stopped.

High-Performance Glue Pump

Used together with glue roll. With newly applied high-performance tubing, the life of the tube extended 10 times compared to conventional pump, significantly reducing maintenance and trouble.



Counter Ejector

Shinko's one-stage counter system can easily handle finished boxes, even at the highest speeds.



One-Stage Counter

The folded boxes are counted by a photo sensor in the Ejector unit. Then the squaring section checks and corrects the angles of boxes bundled in a set quantity. Cycling 25 times per minute, the highest speed in the world.



Holding Fan

The folded boxes are kept in place by a fan system located on the squaring hopper, which prevents jamming and stably discharges boxes even at high speeds. The air blow volume can be adjusted by the inverter unit.

The position of the squaring hopper is automatically set by instructions from a CNC machine.

Squaring Hopper

A squaring section corrects the edge of folded paper by patting from the front and rear. This is independently driven and adjustable in terms of the number of movements.



Optional Device Big-Wave Counter

The boxes corrected at the squaring section are fed from the bottom by the suction belt and counted one by one by a photoelectric sensor. Then the boxes are wrapped on thesecond suction belt, bundled into a set quantity at the sheet stopper, and then fed to the binding machine to finish counting. (Patented)



CNC

Shinko has developed dedicated software for the flexo folder gluer that is easy to use while still giving the operator flexible control.



CNC Overview

Operators simply enter the flute information, blank dimensions, and style of boxes, and the computer does the rest. By setting up the print units during the previous run, setup times can be significantly decreased. It takes only 90 seconds to change from the minimum size to the maximum size, enabling a test print of the next order within two minutes.



Touch Panel



Most adjustments can be done from the main control panel located at the operator side of the squaring section.

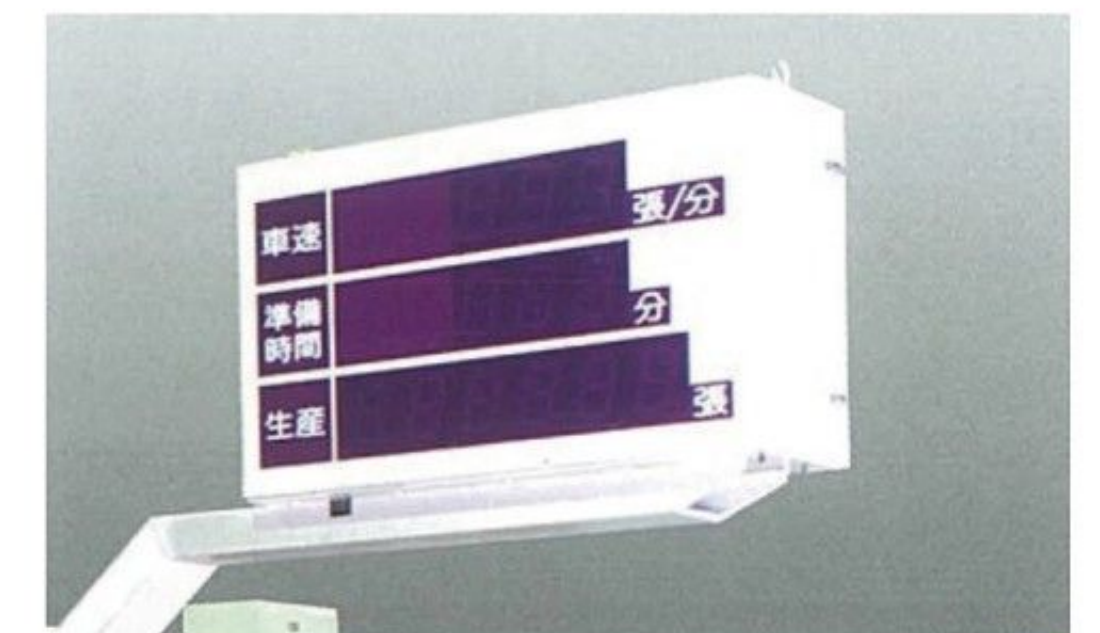
Adjustments can also be made on the individual displays at each unit. These functions, such as printing and a slot knife pressure, help the operator during initial set up and running of an order.

The operation panel at the one-stage section can appropriately configure the setting at each section according to both sheet and feeding conditions.

If an error does occur, the monitor shows the operator where the problem is located.

Large LED Display

The large LED display shows machine speed, set up time, etc. for easy viewing by all operators and production personnel.

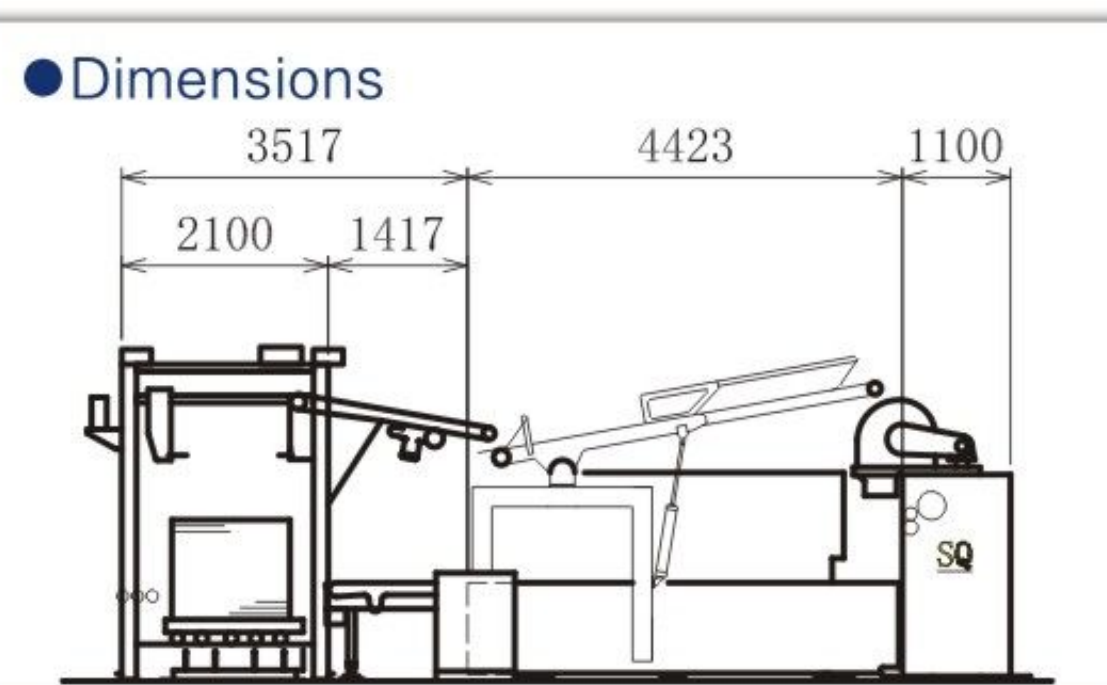


Excellent Conveyor (Option)

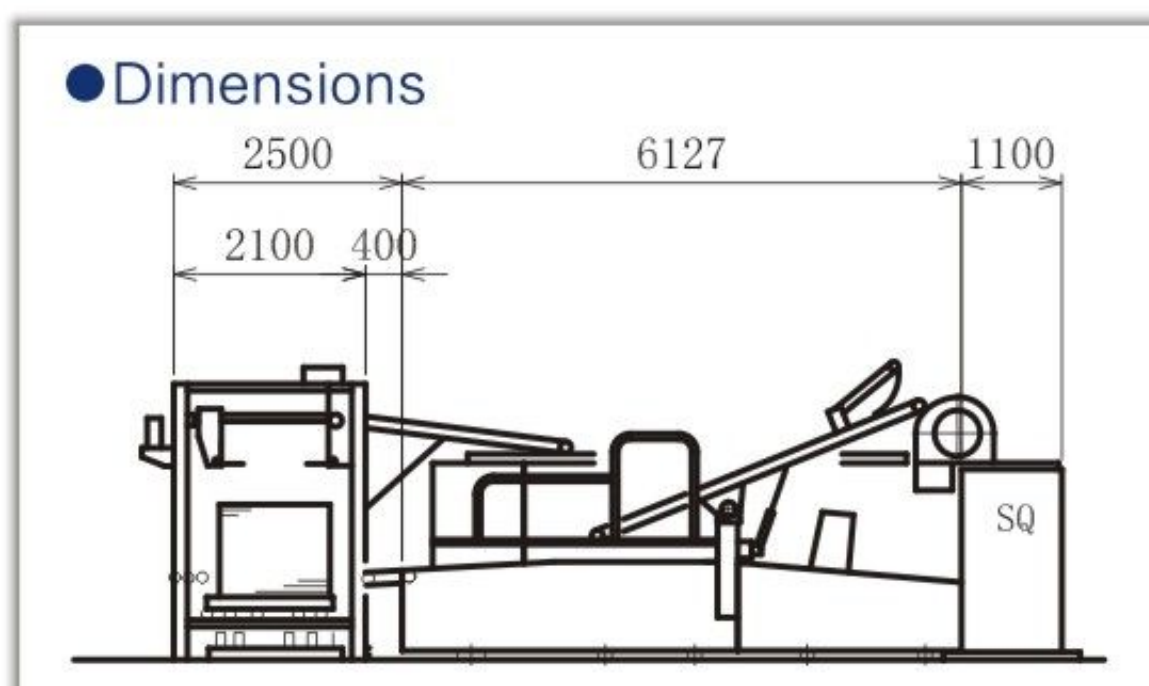


This conveyor is located above the counter and is used when the folder function is not used by the flexo in-line machine (flexo gluer machine).

One-Stage Type



Big-Wave Type



Excellent Conveyor Overview

For instance, in processing flat through or dihedral joints, the sheets are fed by this excellent conveyor and stacked at the back of the counter. The stacker is controlled by software installed in CNC machine and can be set for complete automatic operation, without the need for a designated worker at the machine. The sheets ejected from the folding unit are transferred to the conveyor extended over the squaring section in wrapped form, and then sent to the downstacker behind the counter. While being fed to the hopper, the sheets are then aligned at the downstacker and ejected in the desired direction (operation side or drive side) for preparing the next process, to be stacked in a certain quantity (stack height), or to finish the process.

Spec

Unit	Equipment	Standard	Optional	Unit	Equipment	Standard	Optional
Feeding Unit	Lead edge feeder	○		Die Cutting Unit	"One touch" hand hole cutter	○	
	Auto return to "zero" position	○			Polyurethane anvil	○	
	Back guide auto positioning	○			Running register auto set	○	
	Lead edge auto set	○			Pin type stripping system		○
	Trial sheet running device	○			Anvil polishing device	○	
	Paper dust remover (Shinko's original design)	○			Forming Unit	Forming rollers	○
	Sheet jam detector	○		Guide bars		○	
	Batch counter	○		Upper suction belt		○	
	Side jogger	○		Underneath belt with suction function (with variable speed)		○	
	Lead edge table grating-less mechanism	○		Select device to change clearance based on flutes		○	
First sheet setting device		○	Double tanks		○		
Carrying	Center belt suction	○		Glue roll		○	
Printing Unit	Printing plate cylinder lifting device	○		Glue gun system	○		
	Printing plate cylinder motorized lateral adjustment	○		Guide-bar position automatic setting	○		
	Printing plate cylinder auto return to "zero" position	○		Outer gluing device	○		
	Ink flow monitoring buzzer	○		Squaring Unit	Squaring hopper	○	
	Ceramic anilox roll	○			Holding fan	○	
	Automatic ink touch	○			Side jogger		○
	Automatic printing plate winder	○		Counting Unit	One-stage counter	○	
	Chamber doctor blade system	○			Big-wave counter		○
	Anilox and rubber roll system		○	CNC	Touch panel	○	
	Ink bath teflon coating	○			Main control panel	○	
Ink supply area teflon coating	○		Universal power supply		○		
Independent Drying Unit		○	Teaching function		○		
Slotting Unit	Double slotter system	○			Communication to production manager system	○	
	Crush rolls	○			Communication to prefeeder	○	
	1:1 creasing rolls	○			Communication to robot/load former	○	
	Automatic setting of yoke heads	○			Communication to office computer	○	
	Automatic setup of glue flap	○			Communication to bundling/strapping machine	○	
	Glue joint waste removing fan	○			Detecting equipment		○
	Glue joint waste removing rotary brush	○		Large LED display	○		
Automatic adjustment of the length of joint flap		○	Remote control touch panel	○			

Visual Detecting Device (Optional)

Visual Detecting Device can be used to detect and mark the printing defects on the printed sheets. It improves production efficiency and saves labor, comprehensively realize intelligent and automatic production.



FFG Model

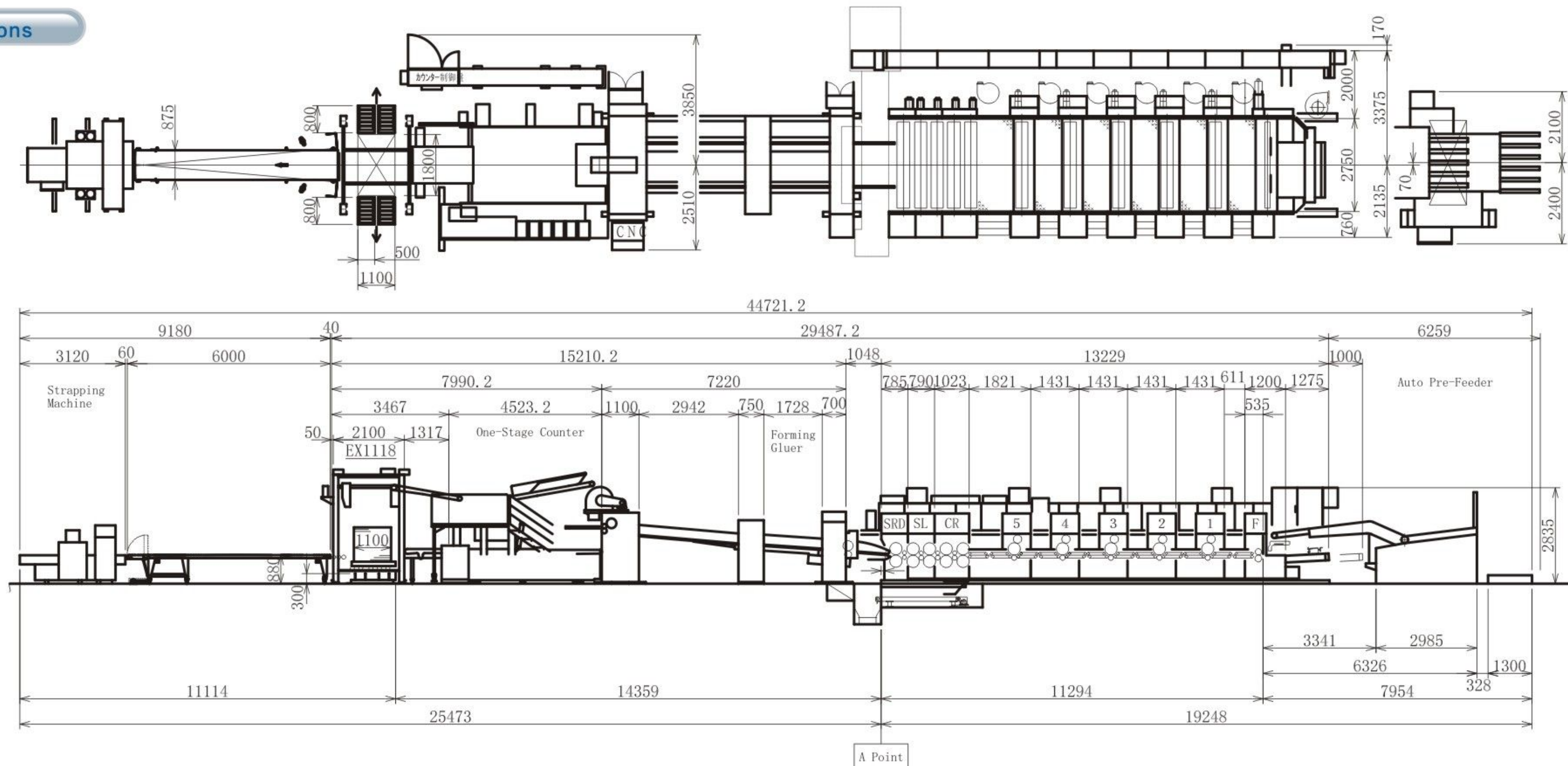
Contents of each model specification

Specification	Model 920	Model 925	Model 1125	Model 1227	Model 1230
Maximum machine speed (sheet/min)	350	330	330	300	280
Maximum sheet size (RSC) (mm)	880x2000	880x2500	1050x2500	1210x2700	1210x3000
Minimum sheet size (RSC) (mm)	230x695	230x695	260x755	290x755	290x755
Minimum glue bridge size (mm)	330	330	360	360	360
Maximum sheet size (no folding) (mm)	880x1100	880x1300	1050x1300	1210x1400	1210x1600
Minimum sheet size (no folding) (mm)	230x600	230x600	260x650	290x650	290x650
Maximum printing area (mm)	820x1900	820x2400	1020x2400	1100x2600	1100x2900
Maximum printing plate length (mm)	880	880	1075	1210	1210
Guide joint width (mm)	35	35	35	35	35
Minimum box height (mm)	50	50	50	50	50
Required power (kw)	≈ 120	≈ 120	≈ 130	≈ 140	≈ 140
Approx. weight (kg)	≈ 50000	≈ 52000	≈ 74000	≈ 82000	≈ 90000

※ Required power and weight may change depending on configuration.
 ※ Speed may need to be reduced when running the maximum and minimum sheet.
 ※ Shinko reserves the right to change specifications without notice.

Dimensions

Unit : mm



Printing Slotting Die-Cutting Machine (Soft Die-Cutting)

Specification	Model 920	Model 925	Model 1125	Model 1227	Model 1230	Model 1425	Model 1430	Model 1628	Model 1632
Maximum machine speed (sheet/min)	350	330	330	300	280	280	250	200	180
Maximum sheet size (RSC) (mm)	880x2000	880x2500	1050x2500	1210x2700	1210x3000	1350x2500	1350x3000	1520x2800	1520x3200
Minimum sheet size (RSC) (mm)	230x695	230x695	260x755	290x755	290x755	360x815	360x815	460x935	460x935
Maximum sheet size (no folding) (mm)	880x1500	880x1500	1050x1500	1210x1800	1210x2000	1350x1600	1350x2000	1520x1800	1520x2200
Minimum sheet size (no folding) (mm)	230x600	230x600	260x650	290x650	290x650	360x700	360x700	460x760	460x760
Maximum printing area (mm)	820x1900	820x2400	1020x2400	1100x2600	1100x2900	1300x2400	1300x2900	1400x2700	1400x3100
Maximum printing plate length (mm)	880	880	1075	1210	1210	1380	1380	1600	1600
Minimum box height (mm)	50	50	50	50	50	50	50	80	80
Required power (kw)	≈85	≈85	≈110	≈120	≈120	≈140	≈140	≈160	≈160
Approx. weight (kg)	≈37500	≈40000	≈50000	≈55000	≈60000	≈70000	≈77000	≈77000	≈86000

※ Required power and weight may change depending on configuration.
 ※ Speed may need to be reduced when running the maximum and minimum sheet.
 ※ Shinko reserves the right to change specifications without notice.



Printing Slotting Die-Cutting Machine (Hard Die-Cutting)

1. Good effect of die-cutting (can achieve flat die-cutting effect)
2. Fast speed, reach speed of 10800~12000 sheets/h

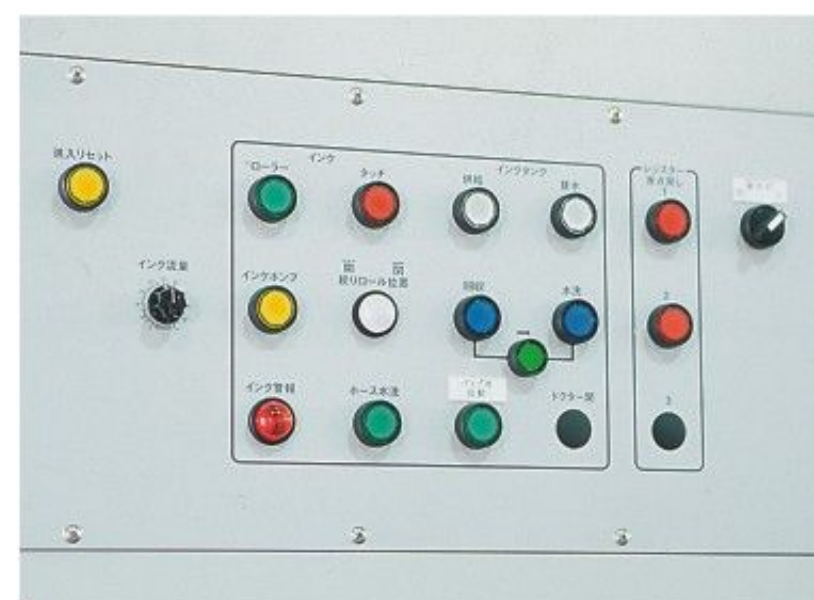


※ Required power and weight may change depending on configuration.
 ※ Speed may need to be reduced when running the maximum and minimum sheet.
 ※ Shinko reserves the right to change specifications without notice.

Specification	Model1422	Model1425	Model1426	Model1620	Model1626
Maximum machine speed (sheet/min)	200	200	200	180	180
Maximum sheet size (mm)	1350x2200	1350x2500	1350x2600	1520x2000	1520x2600
Minimum sheet size (mm)	360x650	360x650	360x650	460x760	460x760
Maximum printing area (mm)	1300x2100	1300x2400	1300x2500	1400x1900	1400x2500
Maximum printing plate length (mm)	1380	1380	1380	1600	1600
Required power (kw)	≈115	≈115	≈115	≈140	≈140
Approx. weight (kg)	≈52700	≈57100	≈58600	≈54000	≈66000

Shinko High Printer FP-1216/1220

Shinko has developed a revolutionary flexo printer to deliver high quality printed sheets directly to a high-speed flat bed die cutter. The machine prints from the bottom while the sheets are transferred at the die cutter's pass line at over 2m from the floor.



Control Panel (Print Unit)

Illuminated buttons indicated the operating status of each print unit. Ink change-over and wash-up are controlled by the flip of a switch.
* Safety sensors keep the operator safe at all times.



Print Unit

Motorized stereo mounting ensures accurate plate mounting. Print units automatically stop if an operator enters the machine.



Transfer Unit

Unique belt transfer system with suction assist transfers the sheets between print units. Belts automatically adjust to the caliper of the board running, eliminating edge crush.



Control Panel (Feeder)

All functions are easily accessed. Operator can monitor the speed of the machine using a digital speed meter.



Feeder

Sun lead edge feeder ensures accurate handling of all sheets including warped board. With Shinko's improvements, the only set up on the feeder is the adjustment of the front gates.

● **First sheet setting device (Optional)**
When link to an Auto Pre-feeder, a small stack of sheets must be place in the lead edge feeder for a pre-feeder to operate. This device feeds a block of sheets automatically to the Sun feeder from the pre-feeder, decreasing operator labor and setup time.



Automatic Ink Wash-up

Simple push button control of all ink functions.



Computer

The operator can control all functions of the machine through a user-friendly computer interface. The computer can save 20,000 orders and has a teaching function, which will decrease time necessary for operator training.

Communication to Office Computer

the machine can receive order information from the plant's main computer system. Allowing the jobs for the day to be preloaded into memory, which decreases set up time.

Shinko High Printer FP-1216/1220

Specifications

Specification		FP-1216 Model	FP-1220 Model
Sheet Caliper	(mm)	1~10	1~10
Maximum sheet size	(mm)	1210x1650	1210x2050
Minimum sheet size	(mm)	400x600	400x600
Maximum printing area	(mm)	1150x1600	1150x2000
Maximum machine speed	(sheet/min)	250	250

※Speed may need to be reduced when running the maximum and minimum sheet.
 ※Shinko reserves the right to change specifications without notice.

Dimensions

Unit : mm

