



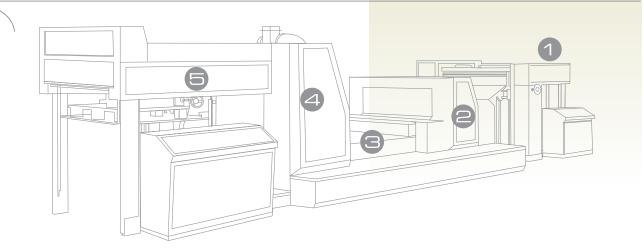


# High Speed U.V Spot Coating Machine

Tymi latest High Speed UV Spot Coating Machine, Model Ustar-102 has a max. coating speed of 8800 sheets/hr. The structure and design of Ustar-102 is different from the economic model Ustar-36, with improvement of the feeding system, transferring system, delivery gripper, frame, gears, transmission, lubrication, electricity...etc. to bear the high speed operation and to give better performance.

- moderation, suitable for thick sheets coating.
- Double diameter impression cylinder reduces the surface tension of coating varnish, thus decreasing the roller marks but increasing
- Robust construction with 13 tons weight capable of 15000 cycles / hr.
- Offset configuration with under swing arm feeding system.
- Gears & shafts bearing in oil bath system while machine in production.





# USTAR-102

- -High speed feeder head with maintenance free rotary valve requires no Jubricant or oil.
- Accurate registration with micro-adjustment to front and side
- Double sheet detector & Miss sheet detector.

#### 

- -Underswing arm infeeding system
- -High speed coating system up to 8800 Sheets/Hour.
- -Blanket cylinder φ 300 mm and double diameter impression cylinder φ 600 mm
- —Sealed body frames (thickness is 295mm) with inner
- -Automatic central lubrication system.
- —Suitable for both photopolymer plate and rubber blanket as
- Easy access to change plate or blanket with convenient cylinder position.
- IR. & HOT AIR DRYING SYSTEM (OPTION FOR WATER-BASE COATING)

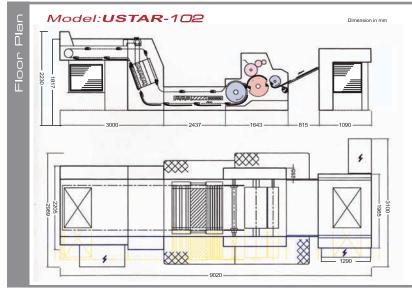
- Short-wave IR. lamps provides strong and large-area radiation.
- —Hot air system provides high heat energy and circulated air flow for fast drying.

#### ✓ U.V CURING SYSTEM

- Three U.V. lamps. (13 kw x 3 pcs)
- Precise radiators.
- Reliable electronic control.
- Effective cooling & ventilation system.
- Automatic temperature control and emergency stop
- —With half power and full power features, allowing for adjust lighting strength or faster start up.

#### DELIVERY UNIT.

- -16 pcs gripper on each delivery gripper shaft which gripped sheet more stably
- -Exhaust system with exhaust blower to extract UV fumes.
- Sheet counter device.
- -Vacuum suction sheet decurler for thin paper operation.



specifications:	Ustar-102
Max. sheet size	730 X 1030 mm
Min. sheet size	340 X406 mm
Coating area	720 X 1020 mm
Paper thickness	80 ~ 450 gsm
Machine speed	9000 sheets / hour
Dimension (L×W×H)	9020 X 3100X 2350 mm
Total weights	13750 kg
Total power required	58.1kw/82.1kw (water-base)

ndard equipment:	Optional equipment:
Stream feeder	☐ Pre-loading feeder device
Jnderswing infeed system	☐ Non-stop feeder / delivery devi
JV. coater	☐ Ceramic anilox coating roller.

UV. 3-lamps curing equipmen

☐ In-line brush type powder removal.

Water base coating and drying device. ☐ Photopolymer plate making processor







TYMI *Ustar* series spot U.V. coating system is introduced to replace the traditional silk-screen printing method for spot U.V. coating. It enhances production speed and adopts less expensive U.V. resin of lower cost.

By combining the construction of offset printing press and roller coating technology, the *Ustar* Series is a versatile U.V. system capable for both spot and full sheet coating.

- Robust construction with automatic
   Iubrication system.
- Machine meets all current security and safety standards, with warning signals and safety devices.
- Space saving, high productivity and low power consumption.



- Feeder suction head with maintenance free rotary valve requires no lubricant or oil.
- —The feeder can be adjusted while running.
- Micro-adjustment to front and side lays, ensuring accurate registration and control.
- Double sheet detector to avoid miss-feed or over-run.

#### ☐ ☐ MULTI-FUNCTION COATING MECHANISM

- Gripper chain delivery system for precise substrate control and stable transferring.
- Automatic pneumatic cylinder on/off control.
- Easy access to change plate or blanket with convenient cylinder position.
- Suitable for spot and full coating with photopolymer plate or rubber blanket as coating media.
- Equipped with ceramic anilox coating roller for more even application.
- HOT AIR DRYING UNIT (Option for water-base coating)

- Circulated air flow design, air pressure equally onto coating surface.
- Good for UV coating flow-out, reduce orange-peel.



- —Three U.V. lamps.
- Precise radiators.Reliable electronic control.
- Effective cooling & ventilation system.

USTAR-36

- Automatic temperature control and emergency stop
- With half power and full power features, allowing for faster
- I.R. DRYING UNIT (Option for water-base coating)
  - With mid-wave I.R. quartz lamps & heaters to enhance drying



#### DELIVERY UNIT

Technical specifications: Ustar-36

— Automatic gripper chain delivery for smooth paper transfer.

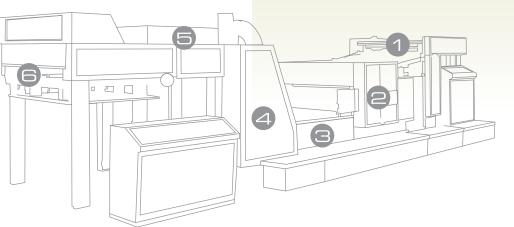
Ustar-40

Equipped with cooling and exhausting system for safety operation.

re d	Model: USTAR-36 (for water base)	Dimension in mm
Floor	Hel Air Drying Oven	
18	1190 - 1320 - 950 - 1634 - 1391 - 610 - 61	1300
1	Delivery Pile  U.V Curing Equipment	115
i i	U.V Electric Control Box 8395	Control Panel 380

Max. sheet size	800 X1100 mm	920 X 1280 mm
Min. sheet size	310 X 406 mm	310 X406 mm
Coating area	790 X 1090 mm	910 X 1270 mm
Paper thickness	80 ~ 600 gsm	80 ~ 600 gsm
Machine speed	Up to 4500 sheets / hour	Up to 4500 sheets / hour
Dimension (L×W×H)	8395 X 2840 X 2010 mm(WB) 7735 X 2840 X 2010 mm(UV)	( /
Total weights	7000(WB) / 6500(UV) kg	7500(WB) / 7000(UV) kg
Total power required	64.3(WB) / 40.3(UV) kw	68.9(WB) / 44.9(UV) kw
Power of U.V lamps	30 kw (10kw 3pcs.)	33 kw (11kw 3pcs.)
Standard equipment:	Optional equipment:	
Stream feeder.	☐ Pre-loading feeder device.	☐ Photopolymer plate making processor.
U.V coater system.	☐ Non-stop feeder / delivery devices.	
U.V 3-lamps curing equipment.	Cooling Air condition.	
☐ Delivery.	☐ 660 mm-Travel curing extension.	

Water base coating and drying device.





# URANUS-126

# **U.V Roller Coating Machine**

Uranus roller-type U.V. coating system features a spray powder and substrate dust removal function and an advanced base-coating/prime-coating unit with effective I.R. drying system to produce superb U.V. coating.



- Feeder suction head with maintenance free rotary valve requires no lubricant or oil.
- The feeder can be adjusted while running.
- Double sheet detector.

#### POWDER REMOVAL (Heating type)

- Adopting indirect removal of spray powder and substrate dust by calendering the surface with heated cylinder.
- Two driven brushes and vacuum cleaning device to clean printing powder
- Brush type, water type powder cleaner and corona treatment for option.

#### **URANUS -126 FEATURES:**

- With indirect powder & dust removal.
- Water-base / prime coating to fill up small pores on paper. Enhance crossing-linking between U.V coating & printing ink.

- Minimize U.V. resin wastage for cost saving.
- Achieve high-gloss, smooth & abrasion resistance
- Machine meets all current security and safety standards with warning signals.
- Continuous gripperless conveyers allowing for flexible substrate travel through the machine.
- Machine speed can reach 80 meters per minute regardless of paper size.

#### ■ SASE COATING UNIT

- Consists of three-roller system, with one-side adjustor device for easy operation
- Doing prime / base coating to enhance adhesion between UV varnish and printing ink
- To reduce osmosis of UV varnish and keep paper white.

#### ✓ I.R. DRYING CONVEYOR

- Equipped with mid-wave I.R. quartz lamp, prompt heating up without reflection and heat can be absorbed by paper
- Each individual narrow conveyor belt is equipped with its own tensioning device easily adjust and maintenance.
- Suction table with vacuum belt.
- Air fan cooling system.

#### ■ W.V. COATING UNIT

- Variable speed control for the metering roller permits adjustment to accommodate lower coating wastage.

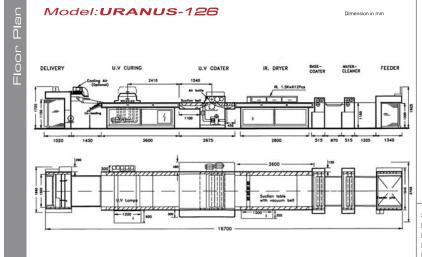
- Two pneumatic doctor blades to clean out the surface of pressure roller, and provide uncontaminated sheet.
- Optional air knife system for thin paper.
- Consists of four-roller system: rubber coating roller, chrome-plated metering roller, rubber metering roller and chrome-plated pressure roller.

#### ■ > U.V. CURING CONVEYOR

- Equipped with 3 U.V. lamps with auto air compressed opening control of the U.V oven.
- Vacuum suction conveyor with Teflon-coated belt.

#### DELIVERY UNIT

- Pneumatic sheet jogging device knocking up both sides of sheet and photo-electric cell controlled.
- Equipped with sheet counter.



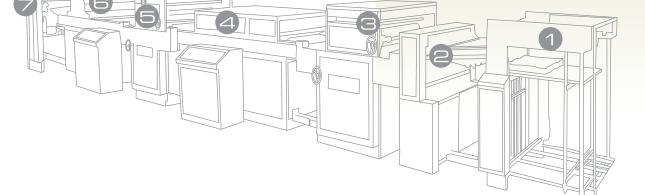
Technical specifications:	Uranus-126	Uranus-146
Max. sheet size	1200 X 1200 mm	1400 X1400 mm
Min. sheet size	310 X 406 mm	340 X 406 mm
Coating width	1200 mm	1400 mm
Paper thickness	80 ~ 600 gsm	80 ~ 600 gsm
Max. feeder speed	8000 sheets / hour	8000 sheets / hour
Conveyor speed	25 ~ 80 m / min	25 ~ 80 m / min
Dimension (L X W X H)	16600 X 2705 X 1925 mm	18040 X 2905 X 1925 mm
Total weights	11520 kgs	12395 kgs
Total power required	Heated powder cleaner 85.7 kw Water base cleaner 78.5 kw	Heated powder cleaner 92.5 kw Water base cleaner 85.2 kw

☐ 3-Roller system water-base coater. ☐ Auto delivery.
☐ I.R. dryer conveyor.
4-Roller system U.V coater

tandard equipment Optional equipment: Non-stop feeder / delivery devices Pre-loading feeder device. Powder removal (Heated type) Powder removal. (water type) 🗌 Cooling Air condition.

Powder removal. (brush type)

AAir-knife system for thin paper 1800 mm-Travel curing extension









#### OPP Laminating Machine (for Water & Solvent-base)

#### OCTANS-126ws Laminating..

OPP lamination is wildly used on books, posters, boxes, hand bag...etc nowadays. solvent-based lamination machines are replaced by water-based ones gradually for the sake of environmental consciousness.

Tymi's new opp lamination machine,Octans-126ws intergrades the latest technologies and is designed as Three-in-one model for water-base & solvent-base dry type lamination and Pre-coated/thermal lamination usages.Besides,high speed lamination(45m/min) and low power cost are also concerned for all users'needs.

#### OCTANS -126ws FEATURES:

- Vertical and compact structure required smaller space than horizontal type.
- Main unit contains coating, drying and laminating system for easy operation.
- Unique functional design with powerful drying unit.
- Registration tolerance of lamination with
- Cast iron frame (thickness 60mm) for firm stability even in high speed.
- Electrical PLC system and single electronic control cabinet for easy maintenance.
- With big diameter (800mm) heating cylinder for longer drying and lamination time to ensure fine laminating with good quality.
- Air pneumatic shaft device, easy and quick to change and adjust of BOPP film.
- Electrical tension control device and curved roller make film tensed and wrinkle-free.
- Proportional simultaneous driving system, easy for one man operation.
- Short change over time and no waiting after laminating, ready for next process.

- Electric gluing system for easy operation

#### □ ★ DRYING SYSTEM(for film)

- Vertical drying box design with short distance for stable film traveling without displacement.
- With thermostat control to ensure precise drying temperature.
- Hot air system allowing for efficient drying of adhesive at high speed.

#### STREAM FEEDER(for paper)

- Allow for Variable speed changing for different kind of paper.
  - Braking system without Inertia to minimize paper wastage.
  - Feeder suction head with maintenance free rotary valve requires no lubricant or oil.
  - Double sheet detector.

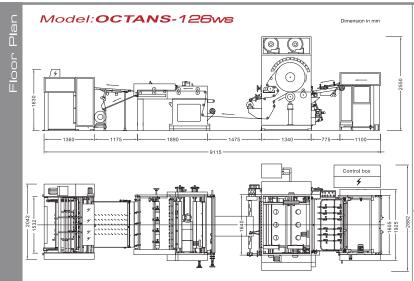
- With tension controller to ensure film a stable tension.

#### SEPARATOR & REWINDING UNIT

- ── → 4 knife rotary cutter set with micro adjustment control, easy to operate.
  - Joined system for auto speed changing follows with laminating speed.
  - Rewinding device can be continuous rewinding with fixed pull.

# 

- Equip with sheet counter
- Pneumatic sheet jogging device knocking up both sides of sheet and photo-electric cell controlled.
- Conveyor table with suction belt.
- Double leveled belt guiding device, suitable for thin paper conveyance.



Technical specifications:	Octans-86ws	Octans-126ws
Max. working width	800mm	1200 mm
Max. sheet size	580X 800 mm	720 X 1200 mm
Min. sheet size	340x406 mm	340x406 mm
Paper thickness	80 ~ 600 gsm	80 ~ 600 gsm
Adhesive	Water-base glue, solvent-base	se glue, thermo film.
Machine speed	7 ~ 45 m/min. (Depending on	qualityy of sheet,glue and film)
Dimension ( L×W×H )	8410 X 2200 X 2660 mm	8650X 2640X 2675 mm
Total weights	5300 kg	5800 kg
Power required	67kw	69kw

2882 -	Standard equipment:		Optional equipment:
Ϊ	Stream feeder.	Auto delivery.	☐ In-line Heated type powder removal.
	☐ Non-stop feeding device.		☐ In-line Heated + Brush type powder rem
	☐ Pre-loading device.		
	Laminating unit (with coating	and drying system)	







# **Automatic Varnishing Machine**

#### 1 >>> STREAM FEEDER

- Feeder suction head with maintenance free rotary valve requires no lubricant or oil.
- The feeder can be adjusted while running.
- Double sheet detector.
- Variable speed for adjustment to different kinds of sheet.
- Braking system for motor drive to minimize paper wastage.

#### 

- Consist of rubber coating roller, chromed metering & counter pressure roller.
- Equipped with independent control dial reading for each roller to ensure easy adjustment.
- Chain driven mechanism to prolong rollers service life.

## ☐ ☼ I.R. DRYING UNIT

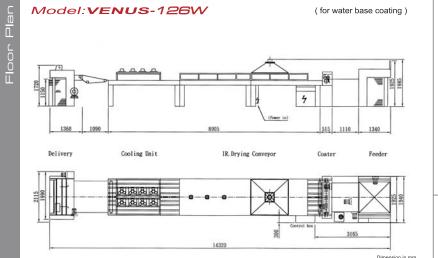
- Mid-wave I.R. drying device for effective drying with lower power consumption.
- Heat-resistant conveyor belts for easy adjustment & maintenance.
- Equipped with cooling fans.
- -Venus-126W / water-base model is equipped with additional hot air device.

#### ☑ ≫ DELIVERY UNIT

- Pneumatic sheet jogging device knocking up both sides of sheet and photo-electric cell controlled.
- Equipped with sheet counter.
- Automatic pile raising and lowering.
- High speed sheet guiding system ensure jogging effect, also adjustable and

#### **■ VENUS -126 FEATURES :**

Varnishing and calendering has long been the most common and economical method to apply on printed cardboard to achieve a glossy and smooth paper surface. VENUS series varnishing machine is designed as coating, calendering coating and with VENUS-W model specially designed for water-base coating to cope with growing environmental concerns. It can reach production speed up to 80m/min to make ordinary varnishing jobs efficient and profitable.



Technical specifications	Venus-126W
Max. sheet size	1200 X 1200 mm
Min. sheet size	310 X 406 mm
Max. working width	1200 mm
Conveyor speed	25 ~ 80 m/min.
Material required	Water-base varnish
Total power required	64 kw
Dimension ( L×W×H )	14320 X 1990 X 1985
Total weights	5090 kg

# Standard equipmen

VENUS-126

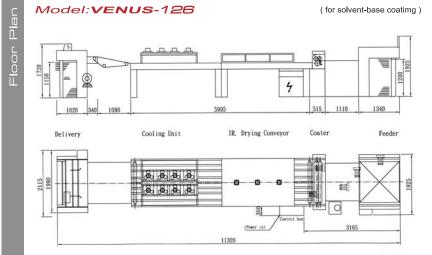
☐ Coating unit ☐ I.R. drying unit ☐ Hot Air drying device

Delivery unit

☐ Pre-loading device

Optional equipment:

AndalayENIIC ACC	( for only out book postings)	Г



Technical specifications:	Venus-126
Max. sheet size	1200 X 1200 mm
Min. sheet size	310 X 406 mm
Max. working width	1200 mm
Conveyor speed	25 ~ 80 m/min.
Material required	Solvent varnish
Total power required	25.2 kw
Dimension ( L×W×H )	11320 X 2115 X 1925mm
Total weights	4700 kg

☐ Stream feeder
☐ Coating unit

☐ I.R. drying unit
☐ Delivery unit

☐ Nonstop feeding device
☐ Pre-loading device

Subject to change without notice.









# **Automatic Calendering Machine**

In addition to the VENUS series, TYMI machinery has developed the COMET series calendering machine which is robust in construction and yet versatile in design. Both series can be integrated together with automatic feeder and delivery unit to become a Glossline system which can perform in-line calendering.

TYMI's Calendering Machine (Comet series) should work together with the Coating Machine (Venus series). PVA calendaring varnish was coated on sheets via Coating Machine, then sheets with PVA are melted by heat and pressure of heated plate of calendering machine. The design of COMET calendering machine emphasizes the heating performance on supplying proper heating energy and pressure to reach high gloss.

#### **■ COMET-126 FEATURES:**

- cylinder are firm and steady.
- Heater thermostat control, safety desian
- Optional gas heating system, electronic ignition system.
- Hydraulic press device for



- Frame structure and impression
- pressure evenly.



#### 1 >>> STREAM FEEDER

- Feeder suction head with maintenance free rotary valve requires no lubricant or oil.
- The feeder can be adjusted while running.
- Double sheet detector.
- Variable speed for adjustment to different kinds of sheet.
- Braking system for motor drive to minimize paper wastage.

### 

- Consist of chromed calendering cylinder, pressure cylinder and calendering
- Counter pressure cylinder is coated with special hardened synthetic rubber to stand high Pressure.

- Precise thermostatic control to maintain constant temperature.

- Sturdily constructed calendering cylinder to stand pressure up to 250 kg/cm²
- **3** >>

#### **HEATED CONVEYOR**

- Endless stainless steel conveyor belt.

- Electronic photo-cell for safe-guard.

COMET-126

- Cooling fan system.



#### ✓ WATER-COOLING DEVICE (OPTIONAL)

- Direct water cooling system equipped at the end of conveyor belt to eliminate cracking of paper surface.
- Moistening roller with cotton for even distribution of water on paper surface.
- Extended conveying system with independent driving to follow separating speed of sheets from calendering belt.

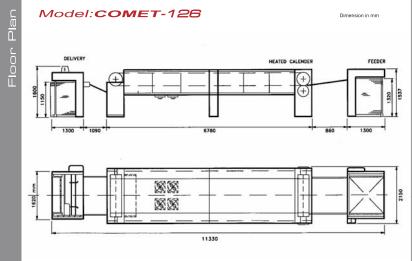


#### ■ ⇒ DELIVERY UNIT

- Pneumatic sheet jogging device knocking up both sides of sheet and photoelectric cell controlled.
- Equipped with sheet counter.

Standard equipmer Calendering unit

- Automatic pile raising and lowering.
- High speed sheet guiding system ensure jogging effect, also adjustable and simple at operation.



Max sheet size	1200 X 1200 mm
	12007(1200111111
Min. sheet size	310 X 406 mm
Sheet thickness	250 ~ 600 gsm
Max. working width	1200 mm
Conveyor speed	12 ~ 35 m / min.
Total power required	53.3 kw ( Heatting type )
Dimension ( L×W×H )	12300 X 2290 X 1925 mm
Total weights	6234 kgs
Total weights	6234 kgs

Pre-loading device ☐ Water cooling device







# Flute Laminating Machine

The LODESTAR series of laminating and mounting machines is specially designed for flute packaging, point of purchase, and display mounting. Adopting the flexibility of offset printing to enable laminating and mounting of the printed sheet to corrugated or solid fiberboard, to produce eye-catching graphics, also providing a strong and sturdy product. The equipment can be used on laminating and mounting board to single flute corrugated, or board-to-board.

#### **■ LODESTAR SERIES FEATURES :**

- The machine is user friendly with excellent ergonomics, consisting of a robust construction, allowing for continuous high-speed operation.
- Accuracy with tolerances within  $\pm 1.5 \ mm \ (1/16 \ inch).$
- Also suitable for laminating cardboard to 4 ply corrugated board (max. thickness up to 7mm).

#### 1 >> UPPER FEEDER (FOR CARDBOARD)

- Consisting of stream feeding suction head, equipped with a German vacuum pump.
- Four sets of forwarding suckers ensuring smooth transportation of substrate.
- Emergency stop for control double sheet feeding, or misssheet.

#### BOTTOM FEEDER (FOR SINGLE FLUTE CORRUGATED)

- Bottom feeding for easy operation, equipped with suction belts for accuracy.
- Six sets of suction belts of high grasp.

## ☐ ☐ FEEDER TABLE

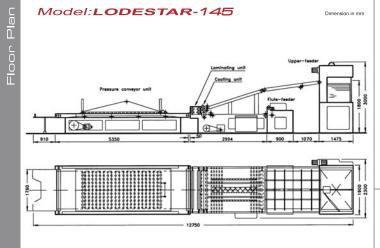
- Employ a spring type side guide system to control and transfer the substrate.
- Push type front guides for efficient feeding.
- Micro adjustment for registration and accuracy of lamination of two substrates, providing excellent registration.

#### ⚠ ★ LAMINATING AND MOUNTING UNIT

- Two sets of rollers are used to achieve overall evenness of pressure.
- Consisting of two precisely constructed rollers to achieve a consistent pressure for E-flute, B-flute and A-flute lamination.
- Precisely constructed adhesive and metering rollers for accurate level and consistent application.
- Counter pressure and doctor rollers are chromed for durability.

#### ■ PRESSURE CONVEYOR UNIT

- Extended pressure conveyer belts ensure flat lamination of the substrates.

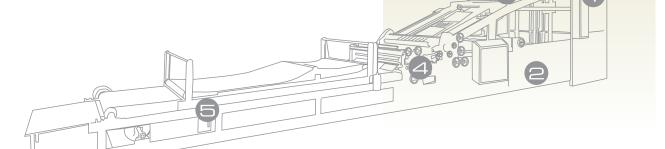


Technical specifications:	Lodestar-145	Lodestar-145-S	Lodestar-160
Max. paper size	1100 X 1450 mm	1450 X 1450 mm	1450 X 1600 mm
Min. paper size	350 X 500 mm	500 X 500 mm	500 X 500 mm
Working width	1450 mm	1450 mm	1600 mm
Cardboard thickness	200 ~ 600 gsm	200 ~ 600 gsm	200 ~ 600 gsm
Max. feeding speed	6000 sheets / hour	6000 sheets / hour	6000 sheets / hour
Dimension ( L×W×H )	12750 X 2300 X 3000	14875 X 2900 X 3000	15000 X 3050X 3000
Total weights	7585 kgs	8810 kgs	8585 kgs
Total power required	14.80 kw	17.2 kw	17.2 kw

#### Standard equipment

- Upper feeder Bottom feeder
- ☐ Feeder table.
- Laminating and mounting unit. ☐ Pressure conveyor unit.











# GLOBE-175

#### ♠ FEEDER

- With two sets of side stop, could feeds from two sides at same
- Bottom feeding for large sizes working.
- With vibrating belts and adjusting device for feeding smooth.

#### ② ★ GRINDER

- Girding wheel design destroy surface of PP film or UV. coating for gluing
- Strong dust suction device to reduce pollution.

#### ☐ ☐ GLUER

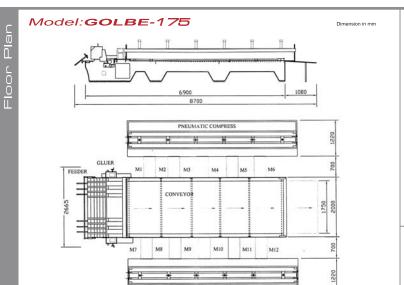
- Two sets of bottom gluer located on two sides for two sides
- Mechanical gluing wheel, steady volume, avoid gluing too much or less.

#### 

- Stepless motor control machine speed.
- Workers posited on both sides, increasing work efficiency.
- Wide size conveyor belt for operating process smoothly.

#### 

- Two sets of working table with 12 pneumatic compressor for 12 workers.
- Pneumatic press plates with pressure adjusting function.



Technical specifications:	Globe-175	
Max. paper size	1000X 1750 mm	
Min. paper size	300X 400 mm	
Working width	1750 mm	
Cardboard thickness	0.3 ~ 6.0 mm	
Max. feeding speed	32 m / min	
Total power required	4.6 kw	
Dimension (LXW XH)	8700 X 5840 X 1430 mm	
Total weights	3380 kgs	

#### Standard equipment

- Grinder
- Gluer
- ☐ Conveyor
  ☐ Compress unit