High efficiency, Energy-saving Five Layer High Speed Corrugator Line WL-C250-25

Specification

1. Effective breadth: 2500mm
2. Machine speed: 250M/min
3. Work speed: 180-220 M/min (Width: 2200mm)
4. Total length of the line: 110M
5. Capacity: 450KW
6. Heating mode: Steam pressure P=1.3MPa
7. Steam dosage: 6.6T/H
8. Paper standard:
   Liner: 125g/M² - 180g/M² Containing water 8%±1%
   Burst: 4KGF/CM² - 7KGF/CM²
   Medium: 105g/M² - 130g/M² Containing water 8%±1%

Equipment List & Technical Parameter

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<td>Double Guides &amp; In-floor Trolleys (SGT80-9M)</td>
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<td>Duplex Glue Machine (GU205-2500)</td>
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<td>Sizing Cask JB(L)1000</td>
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<td>Glue Storage Cask JB(L)1250</td>
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<td>Canvas Belt (Import)</td>
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<td>One set</td>
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</table>
**1. Machine description**

Single facer is design for producing single-side corrugated paper, the medium process into wave-paper, and past glue on the side of wave-tine, joint with liner become single-side corrugated paper. Do not operate above designed parameter. Please contact with us if you have problems.

**2. Machine capability?**

2.1 Max. design speed?300M/min

2.2 Max. working speed?250M/min

2.3 Natural working speed:200-220M/min.

2.4 Paper standard?

- Liner:125g/ M 2 -180g/ M Containing water 8%±1?
- Medium:105g/ M -130g/M Containing water 8%±1?

2.5 Driving horsepower:45KW

<table>
<thead>
<tr>
<th>Paper breadth</th>
<th>Machine breadth</th>
<th>Length</th>
<th>Height</th>
<th>Weight</th>
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<tr>
<td>2500mm</td>
<td>2000mm</td>
<td>5800mm</td>
<td>2100mm</td>
<td>20000kg</td>
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</tbody>
</table>

2.6 The suction blower horsepower:22KW

2.7 Steam pressure:1.0 ? 1.2MPa

2.8 φ360mm, φ402mm Corrugated roll (UV) Type, upper roll φ360mm, down roll φ402mm

2.9 Material of corrugated roll: Cr-Mo alloy steel.

2.10 Brief instruction of Making technics: At first, forge the raw material, rough machine, the journal ends assemble into the roll blank, joint, backfire forge process, machine to the second destined size and the rough shape of the flutes, harden process, grind by CNC numerical control computer grinding machine, Chrome plating at the flute tips

2.11 Corrugated roll flute form?

A, B, C, D, E, F flute and special flute form, standard flute form will not indicate flute height (A=4.6?4.9,B=2.6?2.9,C=3.5?3.9,E=1.2?1.8?F=0.75?0.85) and flute type(UV).
2.12 Liner pressure roll: φ380mm, make from the no slot carbon-steel tube 45#, the surface experienced grinding and chrome plating treatment.
2.13 Glue roll: Ф268mm, steel, the surface experienced beautifying and chrome plating treatment.
2.14 Doctor roll: Ф145mm, steel, experienced grinding, chrome plating and polishing treatment.
2.15 Up and down action of upper corrugated roll is controlled by two pneumatic cylinders and lever.
2.16 Cylinder spec: HOB-100*50+CA, with electromagnetism valve button to operate.
2.17 Advance and retreat of the glue roll house is controlled by two pneumatic cylinders.
2.18 Cylinder spec: Ф160×25, with electromagnetism valve button to operate.
2.19 Adjust glue thickness: Quantity of pasting glue and controlling glue is controlled by the clearance between glue roll and doctor roll adjustment and the inter-face appear control, there are manual and automatic control.
   a. When at manual control, according to speed act motor to reach the required quantity of glue.
   b. When at automatic control, according to speed change to finish by coder and PLC auto-control.
2.20 Motor spec: CH100-2000SB gear down motor imported from Taiwan.
2.21 Adjust Advance and retreat of glue roll and pressure roll clearance: The electric motor drive cam micro-adjust, and display the adjusting quantity on inter-face by the displacement sensor.
2.22 Adjust pressure roll clearance: The electric motor drive cam micro-adjust, and display the adjusting quantity on inter-face by the displacement sensor.
2.23 Motor spec: GV22-200-50-S gear down motor imported from Taiwan, cooperate with RV40-40-0.25FA worm wheel, worm self-lock reduce box.
2.24 With magic eye track set, break-paper detect system, glue roll and pressure roll automatic disengage when paper break.
2.25 Main drive with the separate gear box to shift drive, gear is made from high quality alloy steel and the dip oil type, low noise, high life.
2.26 The energize axis of the three rolls (upper, down corrugated roll and pressure roll) equip universal unite-axis to pass power, improve the stability, ensure easy and fast to maintenance.
2.27 Exchange corrugated rolls fast, convenience and shortcut.
2.28 With the glue roll automatic racing system at the stop machine time.
2.29 Drive by R67-46 0.75KW gear down motor, avoid glue dry on roll when machine paused, two imported separate glue motor CV100-10S.
2.30 Fingerless suction blower type, convenient for fluting clinging corrugated roll, easy to form.
2.31 Add three steam turning tie-ins, steam tube and one backwater equipment.
2.32 The suction case configured the adjustment alloy aluminium board, not need backout when change rolls.
2.33 The iron blank on top of machine can separate disconnect to clean garbage inside, not need disconnect whole machine.
2.34 The medium adjustment adopted spray set to intenerate paper, ensure medium easy to form:
   With spray tube, steam trough: whiff valve and whiff spigot
2.35 The axis of upper, down corrugated roll and pressure roll adopt the resistant high temperature oil to lubricate, the axis type: Two NU226 and two adjustment axis 23226C/W33, there are high-precision axis imported from Japan.
Hydraulic Mill Stand MRV5B-2500

1 Machine description:
1.1 This machine is used for supporting and outputting device, supply paper for production.

2 Specification
2.1 Max width: 2500
2.2 Max Diameter of paper roll: 1500mm?60inch?
2.3 Min Diameter of paper roll: φ300mm
2.4 The pick-up cylinder adopted with cast iron curve structure, slinky, firm and steady.
2.5 The moving chain weld with the bearing axis, by way of weld, stress, numerical control and plating. This process ensure the intensity and precision of the chain.
2.6 Go up and down, clamp and loose, and left or right of the pick-up arm are controlled by hydraulic pressure.
2.7 The valves, oil cylinders, oil pump, all the hydraulic parts are imported from Taiwan.
2.8 The clamping part is made of 45# cast steel, deal with intermediate frequency induction, 3 inch core. 3 inch and 4 inch core of sharing is for optional.
2.9 Multi drop break device and expandable chuck.
2.10 Pneumatic gas control the tension, with acetabuliform gas brake device, tension controlling system is imported from WICHITA, Britain.
2.11 Oil Cylinders:
The oil cylinders controlling up & down HOB150×500 2 /Two sets.
The oil cylinders controlling left & right HOB80×800 4 /Four sets

Guides & In-floor Trolleys

A set includes one in-floor trolley, one guide, each stand have two in-floor trolleys and two guides
1. Machine description:

1.1 This machine is used for pasting glue on top of single-side corrugated paper. Don’t operate about designed parameter. Please contact with us if you have problems.

2. Machine type: Used for five layer corrugator line

3. Capability:

3.1 Max width: 2500mm
3.2 Machine speed: 250M/min.
3.3 Max working speed: 180M/min
3.4 Two glue rolls and the diameter is: φ268mm.
   Made from steel, the surface experienced beautifying and chrome plating treatment.
   Two doctor rolls and the diameter is: φ160mm.
   Made from steel, and the surface experienced grinding, chrome plating and polishing treatment.
3.6 Three pre-heaters: φ450 (Upper) - Two for single-face corrugated paper.
   (Down) - One for liner.
   Made from steel, and the anti-pressure capability of every roll passed the nation pressure vessel pressure text, add the pressure vessel certification.
3.7 Pressure roll or contact bar
   Made of high quality carbon solid steel, and experienced machining and chrome plating. The customer can choose the contact bar.
3.8 Glue roll of every layer controlled by transducer separately, to ensure the rolls run with same pace, and also run separately.
3.9 Quantity of pasting glue and controlling glue controlled by the clearance between glue roll and doctor roll cooperate with the inter-face.
a. Manual controlling: Press the button that controls motor to adjusts the clearance, to ensure enough amount of paste.
b. Auto-controlling: The coder and PLC auto-controls according to change of speed. With wide inter-face system, convenient to adjust, ensure pasting glue evenly and in order to the quality stability of the paperboard.
3.10 The automatic recycle pasting glue device control the quantity of glue, avoid glue precipitate, and in order to the quality of glue and save glue.
3.11 When stopping, the contact bar raise automatic, and glue roll revolve automatically.

Conveyor Bridge PT205 (1)
1 Machine description:
1.1 This is conveyer bridge is designed for transport single-side corrugated paper by the top of the single facer to the triplex pre-heater.
2 Specification:
2.1 Max breadth:2500mm
2.2 The main structure adopt 25b#slot-steel and 150HW profiled bar.
2.3 Two conveyer belt of the five layers line transport single-side corrugated paper come out from the single facer to the triplex pre-heater.
2.4 With automatic adjustment the position of corrugated paper equipment and the double tension and section bridge on the bridge

Single-face Paper Transfer Machine CS22-2500(2)
1. Machine description:
1.1 This machine is designed for transfer single-side corrugated paper by the top of the single facer to the bridge.
2. Specification:
2.1 Max breadth:2500mm
2.2 Upper and down main framework made up of twoδ20 wallboard.
2.3 With two transportation stands on the bridge, and two canvas belt transfer corrugated paper to the bridge.
2.4 With the transportation strap structure transfer board to the bridge, which drive by 5KW×4P frequency conversion motor (add transducer), and control the speed keep the same pace with the mainframe speed.
2.5 The guide paper adjusts the transport tension of paper, and adjusts the traction of corrugated paper.
2.6 The meatus of come out paper equipped block, in order to corrugated paper stack well on the bridge when the machine on high speed.
1 Machine description:
1.1 With the transducer control suction quantity, and ensure the tension reliability and stability.
1.2 Input width of paper into the operation stand of the gluer machine direct, and with coder and PLC automatic finish, upper, and down layer reach the target value at the same time, the precision within 1mm, and improve pass paper speed to step up average speed.
1.3 The automatic adjustment the position of corrugated paper reduced waster paper ratio of the manual operation.
1.4 The frequency conversion wind machine adjust suction and reach the rating adsorption number within five seconds to reduce the waster paper quantity, and the pneumatic valve open and close within one second make paper rush through and tension paper fast, reduce waster paper.
1.5 The frequency conversion wind machine adjust suction and reach the rating adsorption number within five seconds to reduce the waster paper quantity, and the pneumatic valve open and close within one second make paper rush through and tension paper fast, reduce waster paper.

2 Structure:
2.1 Wind motor?9-26# 3.6A Y2-4KW  2 / Two
2.2 Reducer motor imported from Taiwan?CH200-15SB 4  台 / Four
Tension Device ZJ205 (1)

1. Machine description:
The equipment is used for high and placidly put corrugated paper in the triplex per-heater by friction tension, after automatic adjust the position of corrugated paper, in the high speed carton product line.

2. Machine parameter:
2.1 Design speed: 300M/min.
2.2 Natural working speed: 200-250M/min.
2.3 Breadth: 2500mm.
2.4 Diameter of friction roll: \( \phi 320mm \).

3. Machine capability:
With the pneumatic cylinder control tension of brake.

Double Facer DF20-2500

1 Machine description:
The double facer is corrugated paper enter into hot plates heating and molding after pasted glue, and become into board after cooling. Do not operate above designed parameter. Please contact with us if you have problems.

2. Board molding stand:
2.1 Hotplate: Made from steel and dimension is 600mmx2650mmx160mm…… Twenty-one
2.2 The surface experienced grinding, chrome plating and polishing treatment, the thickness of chrome plating not less than 100 micron, clean up the within-stress after jointed hot plates, and that ensure heated temperature equably.
2.3 Passed the nation pressure vessel text, add the pressure vessel certification.
2.4 Each hot plate has six weight rolls, in all 126 weight rolls.
2.5 The main girder of the double facer adopt heavy slot steel, and that steel character fine, structure fixedness, figure slinky.
2.6 With right and left flexible automatic adjusting system of the up and down canvas belt, in order to the stability of canvas belt in working and air pressure control degree of tightness of canvas belt.
2.7 The hydraulic pressure system automatic control the hot plate up and down.
2.8 Hot plates steam heating have four group separate supply steam and drain off water, and later two group are cut off steam by the temperature controlling valve, and adjust the surface temperature according to the humidity of each season, to ensure the paper quality.
2.9 The Screen displays the temperature
2.10 With one canvas belt around regulator, use the hand-wheel pole to adjust, convenient to operate.

3. Cooling stand:
3.1 The total length is 6000mm.
3.2 Upper pressure roll: \( \phi 69mm \).
3.3 Down roll: \( \phi 85mm \).
3.4 With two upper canvas belt tension regulator (contain canvas around automatic control function), and two imported cylinders.
3.5 With one down canvas belt tension regulator (contain canvas around automatic control function), and two imported cylinders.

**Heavy Drive Stand DR30-2500**

1. Machine description:
   1.1 The main motor is transducer, adopt single driving box through universal unite-axis drive the upper and down roll running, and the upper and down roll drag cotton belt to fish up the molded board and switch to next working procedure.
   1.2 The diameter of the upper and down roll is φ910mm, and covered with wear-resistant rubber, the lines of the upper and down roll is reverse.
   1.3 The driving gear box with oblique gear structure, that is made of high quality Alloy steel, and the surface is heated and grinded. And it is high precision, high strength, low noise, big passing square, and convenient for servicing and maintaining.
   1.4 The speed-down box adopt separate oil-pump cooperate coppery tube cooling at the station of axis and driving gears, improve the life of speed-down box.
   1.5 The main motor is transducer, and large speed scope, drive stable.
   1.6 The principal axis of driving gear box have synchronism generator, which keep the same pace with glue machine, that in order to adjust synchronization.
   1.7 Apply the brake fast, only need 5 seconds to stop machine straight when the speed of hotplate is 120M/min, and that reduced waster paper rate and save electricity.
   1.8 The main motor power: 2.5M five layers carton line motor power is 110KW,
1. Machine description:

This machine has special structure, better intensity, and high precision, high rigidity grinding gear, hand-tailor high precision knife rest, high speed cut placid, low noise, and the drive part use AC serve motor, cooperate industry computer to control system, convenient to operate.

2. Capability:

2.1. Cutting width 2500mm
2.2. Mechanical structure, the soleplate designed exact, reliable and slinky.
2.3. Main drive: AC serve motor is from West Europe: 91KW
2.4. The material of drive gear: High quality alloy steel, experienced machining and cementite grinding treatment. The hardness is HRC58-60, precision JLSL degree-O group.
2.5. The machine speed decided by the main motor power, Min speed is 200M/min, Max speed is 300M/min.
2.6. Cutting length 500mm-9999mm
2.7. Special adjustment structure, convenient to micro-adjust knifes.
2.8. Cutting precision +/-1MM
2.9. Computer controlling make tantamount to 1/3 electricity of common cutter, and save energy 70%.
2.10. The system has automatic check function, and can prevent equipment mangled by operate out of the way or cursoriness operation.
2.11. Characteristic of the system: High speed, high precision, high stability.
2.12. The headstock imported from West Germany.
2.13. With separate oil pump and filter cooperate with two group copper tubes in supply oil, lubricate and refrigerate distribute at every gear wheel. And set the protector of in-pressure, if no oil pressure, the relay working, but knifes stopped, that avoid gear of the cutter mangled when no oil.

Operation Platform, Control Tank & Wire

1 Electric-control and circuitry system
1.1 The electronic-control operation platform separated with the strong electricity, convenient to operate and maintenance.
1.2 The control line has many sections cable, and that can reduce interfere.
1.3 All switches and electric parts of strong electricity are national & foreign famous brands.
1.4 When exceptional circs happen, every platform send the warn signal out, and the light case prompt, that can assort with production of the product line.
1.5 Client just need connect strong electricity into the main electric tank, and our company set electro-circuit of the whole product line, through line-slot link line to every machine reference point.

Pre-heater PHN100-2500(2)

1. Machine description:
1.1 This machine is used for heating liner, and dry to control temperature and humidity of liner.
2. Capability:
2.1 Max paper width?2500MM.
2.2 Heat cylinder diameter?φ1000MM.
   Passed the nation pressure vessel text, add the pressure vessel certification.
2.3 Paper roll: four per set, two fixed rolls, and other two floating rolls can adjust almost at 360°bound any wrap. The material is no slot steel tube.
2.4 The wrap size controlled by electro-motion, which change the preheating area of paper on cylinder, and ensure heating temperature of paper to save energy, even steam pressure on the low side.
2.5 The transducer system control the motor adjust the running speed of the cylinder to make quantity of heat uniformity, and also can help splice paper, improve the performance of the automatic splicer.
2.6 With the worm wheel speed-down machine developed by self and the chain wheel as a group to drive the cylinder, and the other group with the bevel worm wheel speed-down machine and the chain wheel to adjust the heated area of paper.

Pre-conditioner PCN100-2500(2)
1. Machine description:
1.1 This machine is used for heating the medium, and dry to control temperature and humidity of medium.
2. Capability:
2.1 Max paper width?2500MM.
2.2 Heat cylinder diameter?φ1000MM
   Passed the nation pressure vessel text, add the pressure vessel certification.
2.3 Paper roll: four per set, two fixed rolls, and other two floating rolls can adjust almost at 360° bound any wrap. The material is no slot steel tube.
2.4 The wrap size controlled by electro-motion, which change the preheating area of paper on cylinder, and ensure heating temperature of paper to save energy, even steam pressure on the low side.
2.5 The transducer system control the motor adjust the running speed of the cylinder to make quantity of heat uniformity, and also can help splice paper, improve the performance of the automatic splicer.
2.6 With the worm wheel speed-down machine developed by self and the chain wheel as a group to drive the cylinder, and the other group with the bevel worm wheel speed-down machine and the chain wheel to adjust the heated area of paper.

Triplex Pre-heater 3-PHN100-2500 (1)
Glue Making System (1)
1. Blender capability: 1850Kl
1.1 Main motor, 7.5KW Four lever one
1.2 The whisk axis is helical laminas jointing, and make glue mix round to uniformity in cask.
1.3 The sizing cask is 1000KL, three motor of the blender 1.45KW Four lever
1.4 The whisk type glue storage cask: 1800KL (Two)
1.5 Three circle glue cask
1.6 Two Three 2 inch slurry pump, with three 4KW-4lever motor.

Sheet Delivery SD-2500 (1)

1. Machine description:
1.1 The inspection platform length is 8M, two canvas belt (4M) to transport, and can control differant speed of every strap, convenient to inspect and stack board, with the 90 0 turnaround electric roller to output.
1.2 With the client’s requirement, output parts can be more when the machine produce two or three different size sheets at the same time.
1.3 Specification?
The output platform (Two): 4M(length)×2.89M(width)×0.95M(height)
Tumbling path: 3.4M(length)×2.6M(width)×0.77M(height)
Serried slip rack (Two): 5.2M(length)×0.6M(width)×0.72M(height)
1.4 Two motor: YCT180-4A.
1.5 The roller stacker.
1.6 Width?2500mm

Fittings of Steam System
1. Product description:
1.1 Brake valve, draining valve (in the carton product line)

N. C. Slitter Scorer(ZC25D/S-2500)7Blades24Lines
1、Machine description:

This machine is equipped for the product line that the speed above 250M/min, 5-8 second exchange order, change order fast, and designed for slitting and cutting board for the carton product line. When you operate, don’t overstep the designing bound. If you have problems you should consult us.

2、Specification:

N.C. Computer Slitter Scorer(ZC25D/S-2500) 7 Blades 24 Lines
- Machine type ZC25D/S-2500
- Design speed 300M/min
- Work speed 250M/min
- Natural work speed 200-220M/min
- Paper width 2500mm
- Min score width: Special order for two groups of scorer, the min width will be 40mm
- Min slitter width 170mm
- Cutting precision ±0.75mm
- Score roll Dia. φ160
- Paper knife Dia. φ260mm (Tungsten steel blade)
- Paper number 6
- Paper knife group 7
- Score group 12+12
- 3.7KW 7.5KW 各1
- Main motor
- Wuxi inventor motor?5.5KW,7.5KW each one
- Total motor 15KW
- Machine size 4700x1100x2320mm (length×width×height)
- Machine weight 6000kg One Set?
There are standard specification, according agreement to check and accept

2.1   The electromagnetism valve of pneumatic cylinder control high speed lines.
      Pneumatic cylinder?SDA-50*50-7 Seven (by knives)
      Pneumatic cylinder?SDA-40*30-24 Twenty-four (by lines)

2.2   GV-400-5-S-B
      The imported ball bearing screw control the blade and the anvil, the left and right scorers. It can
      be manual and automatic control
      The drive motor is reducer motor which import from Taiwan?GV-400-5-S-B?.

2.3
      Thin blade?1.2MM?slitter system. With anvil for cutting, the invision is trim and the waste will be 5mm at
      least.
      And each blade with Automatic sharpening equipment, both oil and gas for cooling blades
      ensuer the cutting precision and the life of the blade.

2.4   With high quality tungsten steel blade, the blade can cut paper within 5-8 million meters, and
      with Siemens S 7 -300PLC system and 10.4inch color inter-face of Siemens.

2.5   For special order which the min score width is 50mm, only adopt the 12+12 score groups will
      be OK. If the paperboard will be full-printing, just use the first score group will be OK.
2.6   The scorer motivity is canceled. The motivity from the crushless wheels drive the paper
      board, which is better for the synchronization of the scorers and the paper board as well as a
      better endurance.

**Canvas Belt**

1.1 High quality cotton belt imported

21 The canvas belt acreage of twenty-one hot plates: Length(53.3M+23.6M)×Width(2.58M)
   a) wenty hot plates: Upper belt:53.3M(Length)×2.58M(Width)×10mm(Thickness)
      Down belt: 23.6M(Length)×2.58M(Width)×10mm(Thickness)