

Introduction

Phyllis, Taiwan



<u>About</u>

Phyllis

Phyllis is globally recognized turnkey plant supplier for sacks and packaging products made of woven polypropylene fabric. We have been devoted in this field for over 40 years with continuous development and technology innovation to achieve highest machinery quality standard while providing cost-effective and flexible solutions for our users.

Customer Relations

Phyllis bonds closely with customer by offering a complete portfolio of consulting services, after sales service, and technical support.

Reliability

Adopting well known brand electrical components to ensure machine operation stability, and availability worldwide.







Worldwide Presence

• <u>Africa:</u>

Algeria, Congo, Egypt, Ivory Coast, Kenya, Madagascar, Malawi, Mauritius, Morocco, Mozambique, Nigeria, Senegal, Tanzania, Uganda, Zambia

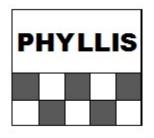
- <u>Central & South America:</u> Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Peru, Suriname
- <u>Asia:</u> Azerbaijan, India, Indonesia, Malaysia, Thailand, Turkey, Pakistan, Vietnam
- Europe:
 - Austria, Bulgaria, Germany, Portuguese, Poland, Spain, Romania, Russia
- <u>Middle East:</u> Iraq, Iran, Bahrain, Israel, Kuwait, Saudi Arabic

Quick glance

- Founded in 1972, Phyllis has been in the machinery business for over 40 years
- Estimated 15,000 circular looms have been installed worldwide
- Customers located in 70 countries across 5 continents



<u>History</u>



First logo was created in 1970s to symbolize the PP woven bag pattern. Choice of color was red and gold to represent bricks which builds up Phyllis with strong foundation



Minor modification on second logo started after millennium brought the passion and new strength to Phyllis



New logo of Phyllis reserves the spirit of PP woven bag symbol with extended flexibility and simplicity. As a turnkey solution provider, Phyllis is moving toward next level, and pledged to continue our search of excellence and innovation in plastic industry.





PP Woven Bag Production



1.1 Extrusion tape lines – Standard Tapes



One layer extrusion tape line for PP, or HDPE flat tapes. With melting capacity from 120kg/hour to 700kg/hour, producing films width from 460mm to 1400mm. Tape Winding speed from 250m/min to 450 m/min, which produces premium quality tapes for use in woven sack, Kraft Paper cement sack, PE Tarpaulins, and various applications.

Integration with

Dosing units, automatic screen change, HMI with touch screen panel, thickness measurement system, and waste yarn reclaiming system.

Specification

- Processing of PP, HDPE
- Melting capacity of 120 700 kg/hour
- Tape winding speed from 250 450 m/min
- Customization with modular design

* Output varies with quality of raw material and additives

| Model Number | PH-FY75-88H | PH-FY100-156H | PH-FY120-216SH | PH-FY135-372HE |
|-------------------------|--------------|---------------|----------------|----------------|
| T-Die width | 560 mm | 860 mm | 1300 mm | 1530 mm |
| Film width | 460 mm | 770 mm | 1200 mm | 1400 mm |
| Denier | 600D - 1000D | 600D - 1000D | 600D - 1000D | 600D - 1000D |
| Melting capacity (max.) | 120 kg/hour | 300 kg/hour | 500 kg/hour | 700 kg/hour |
| Tape winding speed | 250 m/min | 350 m/min | 450 m/min | 450 m/min |



1.2 Extrusion tape lines – FIBC Fabrics



One layer extrusion tape line specially designed to produce PP tapes for high performance application at premium quality mainly used for FIBC fabrics, and various technical applications.

Integration with

Dosing units, automatic screen change, HMI with touch screen panel, thickness measurement system, and waste yarn reclaiming system.

Specification

- Processing of PP
- Melting capacity of 300 600 kg/hour
- High tenacity tapes
- Tape winding speed from 250 450 m/min
- Recommended with Thickness measurement system
- Precision fibrillator available upon request (4500 20000 Denier PP Fibrillating Yarn)
- Flat tape folding device available as option
- Customization with modular design

* Output varies with quality of raw material and additives

| Model Number | PH-FYJ100-182SH | PH-FYJ115-240SH | PH-FYJ130-252SH |
|---------------------------|-----------------|-----------------|-----------------|
| T-Die width | 960 mm | 1250 mm | 1300 mm |
| Film width | 860 mm | 1130 mm | 1180 mm |
| Denier | 600D -2500D | 600D -2500D | 600D -2500D |
| Melting capacity (max.) | 300 kg/hour | 400 kg/hour | 600 kg/hour |
| Tape winding speed (max.) | 450 m/min | 450 m/min | 450 m/min |



1.3 Extrusion tape lines – 3 Layer Tapes



Three layer extrusion tape line with break-through technology to produce 3 layer PP tapes at premium quality and lowest manufacturing costs. The tapes are mainly used for PP woven sack, and various applications.

Integration with

Dosing units, automatic screen change, HMI with touch screen panel, thickness measurement system, and waste yarn reclaiming system.

Specification

- Processing of 3 layer PP tapes (ABA)
- Allow total 20% of CaCo3 addition
- Melting capacity of 450 kg/hour 700 kg/hour
- Max. tape winding speed 450 m/min depends on tape specification
- Recommended with Thickness measurement system
- Equipped with Gear Pump unit
- Customization with modular design

* Output varies with quality of raw material and additives

| Model Number | PH-FY100-75D-200SH-3L-ST1 | PH-FY115-90D-372HE-3L-ST2 |
|---------------------------|---------------------------|---------------------------|
| T-Die width | 1220 mm | 1500 mm |
| Film width | 1100 mm | 1390 mm |
| Denier | 600D -1000D | 600D -2000D |
| Melting capacity (max.) | 400 kg/hour | 700 kg/hour |
| Tape winding speed (max.) | 350 m/min | 450 m/min |



2.1 Circular loom - Light Duty Fabrics



The simplicity and energy saving design of circular looms have led to high efficiency performance with stable quality of weaving.

Specification

- Application for woven sack, cement sack, HDPE woven fabric, and various applications
- Production speed up to 1020 ppm*
- Patented design with enhanced life time of spare parts
- New circular rail design ensures stable shuttle movements
- Slitting device as optional equipment
- Low noise operation
- Lowest possible energy consumption

* depending on tape quality, fabric width and density

Technical Data

| Model Number | PH-4/80 | PH-6/100-B | PH-6/125 |
|--------------------------------|--------------------|--------------------|--------------------|
| Application | Woven sack | Woven sack | Cement sack |
| Shuttle/machine | 4 pcs | 6 pcs | 6 pcs |
| Max. Shuttle Speed | 180 rpm | 170 rpm | 140 rpm |
| Weft insertion up to | 720 ppm | 1020 ppm | 840 ppm |
| Working width, tubular | 35 cm – 75 cm | 40 cm – 80 cm | 48 cm – 120 cm |
| Weft bobbin diameter (max.) | 90 mm | 90 mm | 105 mm |
| No. of warp creel (bobbins) | 720 pcs | 640 pcs | 864 pcs |
| Warp/weft core inside diameter | Ф23 mm–Ф38 mm | Ф23 mm–Ф38 mm | Ф23 mm–Ф38 mm |
| Warp/weft length of core | 215 mm – 230 mm(L) | 215 mm – 230 mm(L) | 215 mm – 230 mm(L) |
| Winding roll diameter (max.) | Ф1200mm | Ф1200mm | Ф1200mm |
| Main motor with inverter | 5 HP | 3 HP | 5 HP |

* depending on weaving construction, fabric, and quality of tapes



2.2 Circular loom - Heavy Duty Fabrics



Consistency with simplicity and flexibility, the looms are easy to operate and maintain, while producing high quality heavy duty fabrics suitable for FIBCs, Tarpaulins and other special textiles.

Specification

- Application for FIBC, Tarpaulin, and various applications
- Optional equipment of center slitting device, or both side slitting device
- Patented design with enhanced life time of spare parts
- New circular rail design ensures stable shuttle movements

* depending on tape quality, fabric width and density

Technical Data

| Model Number | PH-6/150 | PH-8/215H |
|--------------------------------|--------------------|--------------------|
| Application | FIBC, Tarpaulin | FIBC, Tarpaulin |
| Shuttle/machine | 6 pcs | 8 pcs |
| Max. Shuttle Speed | 90 rpm | 75 rpm |
| Weft insertion up to | 540 ppm | 600 ppm |
| Working width, tubular | 90 cm – 130 cm | 180 cm – 210 cm |
| Weft bobbin diameter (max.) | 100 mm | 110 mm |
| No. of warp creel (bobbins) | 1360 pcs | 2600 pcs |
| Warp/weft core inside diameter | Ф23 mm–Ф38 mm | Ф23 mm–Ф38 mm |
| Warp/weft length of core | 215 mm – 230 mm(L) | 215 mm – 230 mm(L) |
| Winding roll diameter (max.) | Ф1200mm | Ф1200mm |
| Main motor with inverter | 10 HP | 15 HP |

* depending on weaving construction, fabric, and quality of tapes





2.3 Circular loom - Leno



Looms designed dedicated to leno sacks for fruits and vegetables. The high quality of open mesh leno fabric ensures the delicate surface of fruits and vegetables are under maximum protection.

Specification

- Application for leno sack
- Weft break sensor

* depending on tape quality, fabric width and density

Technical Data

| Model Number | PH-3/leno |
|--------------------------------|--------------------|
| Application | Leno Sack |
| Shuttle/machine | 3 pcs |
| Max. Shuttle Speed | 110 rpm |
| Weft insertion up to | 330 ppm |
| Working width, tubular | 40 cm – 76 cm |
| Weft bobbin diameter (max.) | 100 mm |
| No. of warp creel (bobbins) | 800 pcs |
| Warp/weft core inside diameter | Ф23 mm–Ф38 mm |
| Warp/weft length of core | 215 mm – 230 mm(L) |
| Winding roll diameter (max.) | Ф1000mm |
| Main motor with inverter | 5 HP |

* depending on weaving construction, fabric, and quality of tapes



3.1 Lamination line – woven sack, FIBC, tarpaulin



Lamination application for woven sack, FIBC, tarpaulin, Kraft paper cement sack, BOPP film laminated with woven sack, and other applications. High level of coating technique provides smooth and even coating surface, which reduces material waste, while maintaining highest quality of coated fabric.

Specification

- Automatic roll change system with max. machine running speed at 80 m/min
- Line speed up to 150 m/min*
- Dosing unit as optional equipment
- Edge trimming system
- Modular machine concept
- Customization upon request

* Depends on machine type, fabric and roll quality



Technical data

| Model Number | PH-LA-S PH-LAJ-S | PH-LA-SD PH-LAJ-SD | PH-LA-SW PH-LAJ-SW | PH-LA-SWD |
|--------------------------------|--|------------------------|--|--|
| Туре | Single side | Single and double side | Single side and sandwich | Single side, double side and sandwich |
| Application | - Kraft paper - Tarpaulin - FIBC | - woven sack - FIBC | - woven sack + Kraft paper - woven sack + BOPP film - FIBC | - woven sack - woven sack + Kraft paper - woven sack + BOPP film |
| Working width (single side) | 800-5200 mm | 850-2300 mm | 400-3050 mm | 850-1690 mm |
| Working width (double side) | - | 350-1100 mm | - | 300 -800 mm |
| Working width (sandwich) | - | - | 400-1650 mm | 850-1650 mm |
| Operating speed(max.) | 100 m/min | 150 m/min | 150 m/min | 150 m/min |
| Melting capacity (max.) | 760 kg/hour | 360 kg/hour | 420 kg/hour | 380 kg/hour |

* Machine specification depends on machine type, fabric type, application and roll quality



3.2 Lamination line – leno sack label



Lamination application designed specifically for label lamination on leno sack. High value added application creates better values and images for our customer.

Specification

- Line speed up to 110 m/min*
- With special separation device to avoid both sides of leno sack stick together
- Customization upon request

* Depends on machine type, fabric and roll quality

Technical data

| Model Number | PH-LA-leno | |
|-------------------------|-------------------------------|--|
| Туре | Single side | |
| Application | Label lamination on Leno sack | |
| Working width | 120 - 250 mm | |
| Operating speed (max.) | 80 m/min | |
| Melting capacity (max.) | 36 kg/hour | |

* Machine specification depends on machine type, fabric type, application and roll quality



4.1 Flexographic Printing machine – Manual feeding type



Combination of simplicity and user-friendly design, the manual feeding type flexographic printing machine provides excellent price/performance ratio for small and medium scale purpose.

Specification

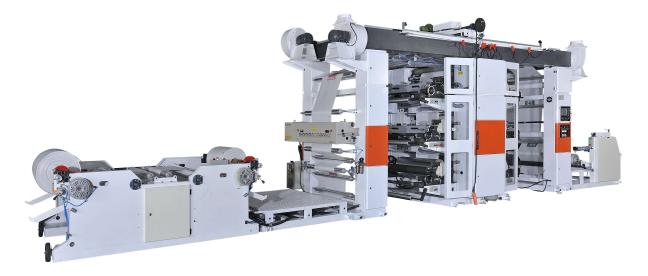
- Suitable for uncoated and coated woven sack and FIBC
- Max. 50 pcs/min production capacity
- Flexographic printing technique from 2 color to 6 color
- Extra dryer as optional equipment
- Customization upon request

*Depends on application, and bag specification

| Model Number | PH-2C ~ PH-6C | PH-J3C ~ PH-J6C |
|--------------------------|---------------|-----------------|
| Application | Woven sack | FIBC |
| No. of printing cylinder | 2 – 6 color | 3 – 6 color |
| Bag length | 600-1250 mm | 600-2500 mm |
| Bag width | 400-800 mm | 600-2200 mm |
| Max. printing width | 700 mm | 1500 mm |
| Max. printing length | 940 mm | 1500 mm |
| Max. production capacity | 50 pcs/min | 30 pcs/min |



4.2 Flexographic Printing machine – Roll to roll



Flexographic roll-to-roll printing machine for coated and uncoated tubular PP woven fabric and film. Advantage of using same printing cylinder with various bag lengths. Easy touch screen operation with doctor blade system for high quality printing with minimum ink consumption.

Specification

- Up to 12 color stack-type and CI type printing
- Max. printing speed of 180 m/min for woven sack, 300 m/min for film
- Gearless drive system available
- Sleeve type available as option
- Short web stroke with better tension control to reduce waste
- Precise doctor blade chamber system with ceramic anilox roller, suitable for superfine printing quality.
- Printing inspection system available as optional equipment

| Model Number | PH-S4C ~ PH-S8C | PH-S4C-M ~ PH-S8C-M | РН-S4C-H ~ PH-S8C-H | PH-CI4C ~ PH-CI8C |
|--|-----------------|---------------------|---------------------|-------------------|
| Туре | Stack type | Stack type | Stack type | Central Drum type |
| Application | -Woven sack | -Woven sack | -Woven sack | -Film |
| | | -Non woven | -Paper | |
| | | -Film | | |
| No. of printing | 4 – 12 color | 2 – 8 color | 4 – 8 color | 4 – 8 color |
| cylinder | | | | |
| Max. material width | 850 mm | 1000 mm | 1520 mm | 1520 mm |
| Max. printing width | 840 mm | 900 mm | 1500 mm | 1480 mm |
| Repeat length | 500 - 1350 mm | 400 - 1350 mm | 330 - 1200 mm | 360 - 1200 mm |
| Max. printing speed | 120 m/min | 180 m/min | 180 m/min | 300 m/min |
| Depends on application, type of material, inks and other variables | | | | |

Technical data

Depends on application, type of material, inks and other variables



5.1 Conversion line – Woven sack



The new generation of woven sack conversion line for bottom-sewn sacks is suitable for coated and uncoated woven fabric, BOPP film laminated fabric, and leno fabric. With great variety of options, a wide possibility of applications is brought for the customer.

Specification

- Max. machine operating speed 55 sacks per minute
- Smooth bag mouth opening
- Modular design with various optional devices for selection
- Inline printing available
- Inline gusseting available
- Easy open sewing machine available upon request

*Speed varies with different sizes of sack, and quality of fabric

Technical data

| Model Number | ABMM-2012 | ABMM-2012/G | ABMM-2012/C |
|------------------------------------|---------------------------|--------------|-------------|
| Application | -Woven sack | -Woven sack | -Woven sack |
| | -BOPP film laminated sack | | |
| | -Leno sack | | |
| Roll diameter (max.) | 1400 mm | 1400 mm | 1400 mm |
| Coated/uncoated cloth width (max.) | 250-1300 mm | 250-850 mm | 250-850 mm |
| Sack length | 450-1800 mm | 450-1500 mm | 450-1500 mm |
| Gusset Depth | - | 50 – 100 mm | - |
| Bag width before gusset | - | 435 – 645 mm | - |
| Bag width after gusset | - | 280 – 550 mm | - |
| Max. machine capacity | 55 pcs/min | 50 pcs/min | 40 pcs/min |
| Printing Stations | - | - | 2 – 6 |

*Speed varies with different sizes of sack, and quality of fabric



5.2 Liner Insertion Conversion line – Woven sack



Innovative design for inner liner inserting-cutting-sewing in one process.

Specification

- Liner insertion capacity up to 25 bags per minute
- Choice of liner Insertion only, or liner insertion with sewing
- Equipped with enhanced mouth opening device
- Automatic liner insertion process reduces possibility of contamination caused by traditional manual type liner insertion.

*Speed varies with different sizes of sack, and quality of fabric and liner

Technical data

Automatic PE Liner insertion conversion line

| Model Number | ABMM-2016 |
|---|---------------------------------------|
| Application | PE liner insertion into PP woven sack |
| Roll diameter (max.) | 1200 mm |
| With liner insertion | |
| Coated/uncoated cloth width (max.) | 400-700 mm |
| Sack length | 600-1100mm |
| Max. production capacity | 25 pcs/min |
| Without liner insertion (cutting-sewing only) | |
| Coated/uncoated cloth width (max.) | 400-800 mm |
| Sack length | 450-1350mm |
| Max. production capacity | 30 pcs/min |

*Speed varies with different sizes of sack, and quality of fabric



5.3 Dedicated Conversion line – Woven sack

Special purpose conversion line with application of gusseting, tubing, and valve forming.

Technical data

Gusseting / Tubing / Valve forming

| Model Number | ABMM-Gusset | ABMM-Tube | ABMM-Valve |
|------------------------------|----------------------|-----------------------------|-----------------|
| Application | Gusset and Twist | Tubing | Valve forming |
| Input material | -Woven Sack | -Laminated Woven Sack | Woven Sack |
| | -BOPP film laminated | -BOPP film laminated fabric | |
| | fabric | | |
| Production Output | Max. 80 M/min | Max. 100 M/min | Max. 19 pcs/min |
| Gusset Fold-in Depth | 40 – 90 mm | 40 – 90 mm | - |
| Before gusset width | M size: 500 – 680 mm | - | - |
| | S size: 360 – 500 mm | | |
| After gusset width | M size: 360 – 580 mm | - | - |
| | S size: 220 – 360 mm | | |
| Flat fabric width | - | 640 – 1350 mm | - |
| Fabric width can be gusseted | - | 740 – 1150 mm | - |
| Fabric width can be gusseted | - | 640 – 740 mm | - |
| Tube length | - | - | 680 – 1200 mm |
| Tube width | - | - | 320 – 450 mm |
| Valve size | - | - | 80 – 140 mm |

*Speed varies with different sizes of sack, and quality of fabric



5.4 Conversion line – FIBC conversion



Suitable for converting tubular fabrics and flat fabrics. The FIBC conversion line extends the possibility to produce hoses and bodies used for 1 loop, 2 loop, and 4 loop FIBC. Depends on customer's request, optional O and X punch device available for selection.

Specification

- Suitable for cutting fabrics used for Hose, and Body
- O punch and X punch device available
- Choice of Sewing machine, or Ultrasonic welding head for sewing/welding the edge of the FIBC fabric
- Easy operation

*Speed varies with different sizes and quality of fabric

Technical data

FIBC conversion line

| Model Number | ABMM-20 | ABMM-30 |
|--------------------------|--------------|------------------------------------|
| Application | Cutting only | Cutting with both side sewn/welded |
| Fabric width | 400-2400 mm | 900-1300 mm |
| Fabric length | 600-6000 mm | 600-6000 mm |
| Max. production capacity | 24 pcs/min | 24 pcs/min |

*Speed varies with different sizes and quality of fabric





5.5 Conversion line – FIBC accessories



High speed automatic needle loom dedicated for producing carrying belt and filler cord used for FIBC.

Technical data

High Speed Automatic Needle Loom

| Model Number | PH-4/65 | PH-8/30 |
|------------------------|----------------|-------------|
| Application | Carrying loops | Filler cord |
| Suitable Material | PP/Polyester | Carpet Yarn |
| Number of output tapes | 4 tapes | 8 tapes |
| Loop Width | 35-45mm | 8mm |
| Bobbin Creel | 600 Ends | 224 Ends |
| Max. Speed | 1100 RPM | 1100 RPM |

*Speed varies with different sizes and material





5.6 Conversion line – FIBC loop cutting



Automatic loop cutting machine for producing carrying belt used for FIBC

Technical data

Automatic cutting machine (for loops)

| Model Number | PH-LC160 |
|--------------------------|-----------------|
| Application | Cutting loops |
| Loop Width | Max. 160 mm |
| Max. production capacity | 10 - 14 pcs/min |

*Speed varies with different sizes and quality of fabric



6.1 Tarpaulin Making Line (Automatic Line)



Our automatic tarpaulin making line is designed to weld multiple rolls together with 2 side eyeleting, and cut to desired length simultaneously.

Specification

- Electrically controlled unwinder minimizes manual handling efforts
- Automatic fabric tension control
- Minimized human work while optimizing production efficiency and product quality
- Max. Welding speed 30M/min
- Precise eyeleting technique brings maximum production rate with automation
- Cut to desired length capability ensures accurate product size.

*Speed varies with different quality of fabric, and application

Technical data

Automatic Tarpaulin Making Line

| Model Number | PH-5380 |
|-------------------------------|------------------------------|
| Suitable Material | PE laminated woven fabric |
| Speed of Welding | Max. 30M/min |
| Rope size | Ø 3 mm – Ø 6 mm |
| Input fabric roll width | Customization from 1.5M – 4M |
| Output Tarpaulin Fabric Width | Customization from 3M – 24M |
| Suitable Eyelet Material | Iron and Aluminum Eyelets |
| Seam width | 32mm |

*Speed varies with different quality of fabric, and application



6.2 Tarpaulin Making Line (Manual Type Welding Machine)

With user-friendly and flexible machine design, the standalone welding machines are capable to produce strongest seams without extra adhesive.

Specification

- Max. Welding speed 35M/min
- Simple foot pedal controls for fabric clamps and weld head action
- Touch screen control available as optional equipment

 $\ensuremath{^*\text{Speed}}\xspace$ varies with different quality of fabric, and application

Technical data

| | veluing machines | | | |
|-------------------|-----------------------|-------------------|--------------------|-------------------|
| Model Number | PH-6003 | PH-101 | PH-201 | PH-601 |
| Application | Welding Multiple | Side Welding & | Welding Multiple | Side Welding & |
| | Fabric Rolls Together | Rope Insertion | Fabric Rolls | Rope Insertion + |
| | | | Together | Welding Multiple |
| | | | | Fabric Rolls |
| | | | | Together |
| Suitable Material | PVC Tarpaulin, PE | PVC Tarpaulin, PE | PVC Tarpaulin, PE | PVC Tarpaulin, PE |
| | Tarpaulin | Tarpaulin | Tarpaulin | Tarpaulin |
| Speed of Welding | Max. 9M/min | Max. 20M/min | Max. 35M/min | Max. 20M/min |
| Rope size | | Ø 3 mm – Ø 6 mm | - | Ø 3 mm – Ø 6 mm |
| Input fabric roll | - | - | Customization from | - |
| width | | | 1.5M – 4M | |
| Seam width | 32mm, 40mm, 50mm | 32mm | 32mm | 32mm |

Manual Type Welding Machines

*Speed varies with different quality of fabric, and application









6.3 Tarpaulin Making Line (Manual Type Eyeleting Machine)

New generation of eyeleting machine ensures highest precision to reach maximum production stability and efficiency.

Specification

• Suitable for Aluminum and Iron eyelets

*Specification varies with different input

Technical data

Manual Type Eyeleting Machine

| Model Number | PH-5701 | PH-701AL |
|------------------------|-----------------------------|-----------------------------|
| | | |
| Application | Eyeleting | Eyeleting |
| Suitable Fabrics | PVC Tarpaulin, PE Tarpaulin | PVC Tarpaulin, PE Tarpaulin |
| Eyelet Material | Iron eyelets | Iron and Aluminum eyelets |
| Applicable Eyelet Size | Upon request | Upon request |

*Specification varies with different input







6.4 Tarpaulin Making Line (Manual Type Packing Line)

Finishing touches for tarpaulin packing.

Technical data

| Machine | Automatic Sealing Line | Automatic Strapping Line |
|--------------|---|--------------------------------|
| Model Number | PH-820V | PH-830V |
| Application | Tarpaulin Packed in sealed plastic film | Strapping for Packed Tarpaulin |
| Capacity | 20-25 seconds per action | 2.2 seconds per strap |



7.1 Paper Cement Sack Making Line – (Tubing and Printing)



Automatic tubing process produces multi-ply printed Kraft Paper bags in 1 line. Applications of gusset and valve forming available on the same line. Inline flexographic printing from 1 to 4 color.

Specification

- Maximum production capacity 250 pcs/min
- Up to 6 ply
- Printing stations available for selection
- Easy operation with automation

*Speed varies with different sizes of material, and quality of material

Technical data

Tubing Machine

| Model Number | PH-15M | PH-26MP | |
|-------------------------|---------------|---------------|--|
| Capacity (tubes/min) | Max. 250 | Max. 160 | |
| Cutting Length | 508~1,092mm | 508~1,092 mm | |
| | 1,016~2,032mm | | |
| Tube width (gusset) | 368~495 mm | 368~495 mm | |
| Tube width (flat) | 368~597 mm | 368~597 mm | |
| Gusset Width | 50~152 mm | 63~152 mm | |
| Valve extension height | 25~51 mm | 25~63 mm | |
| Valve extension width | 57~76 mm | 57~76 mm | |
| Number of ply | Up to 6 | Up to 6 | |
| Paper width | Max. 1,220 mm | Max. 1,220 mm | |
| Paper roll diameter | Max. 1,000 mm | Max. 1,300 mm | |
| No. of Printing station | _ | 1 – 4 Color | |

*Speed varies with different sizes of material, and quality of material



7.2 Paper Cement Sack Making Line (Automatic sewing line)



Finish touch of automatic sewing line produces final product of Kraft paper cement sack.

Specification

- Maximum production capacity at 50 pcs/min
- Equipped with NEWLONG sewing machines
- Up to 6 ply

*Speed varies with different sizes of material, and quality of material

Technical data

Automatic Sewing Line

| Model Number | PH-VF2S | PH-VF2S-L |
|---------------|------------------|------------------|
| Capacity | Max. 45 bags/min | Max. 50 bags/min |
| Tube Length | 500 – 863 mm | 660 – 1100 mm |
| Tube width | 420 mm | 419 – 545 mm |
| Gusset Width | 63 – 127 mm | 76 – 200 mm |
| Stitch Range | 7 – 12 mm | 7 – 12 mm |
| Number of ply | Up to 6 | Up to 6 |

*Speed varies with different sizes of material, and quality of material





8.1 Hydraulic Bale Press



The bale press was specially designed for the packing of woven sack application with easy operation. Finished bales are suitable for domestic or international transportation. Special pressing capacity of bale press can be provided upon request.

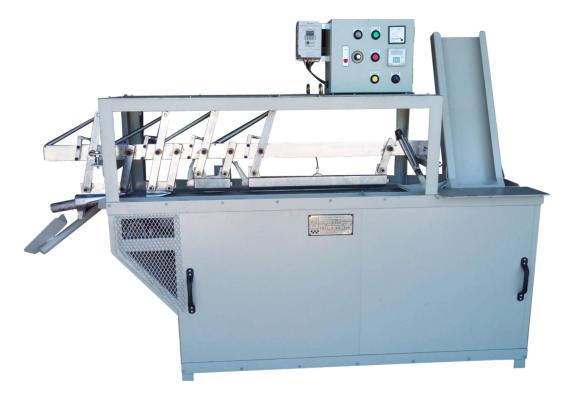
Technical data

Hydraulic Bale Press

| Model Number | PH-30T | PH-60T | PH-100T | PH-200T |
|-------------------|---------------|---------------|---------------|---------------|
| Application | Bale Press | Bale Press | Bale Press | Bale Press |
| Pressing Capacity | 30 TON | 60 TON | 100 TON | 200 TON |
| Size of table | Customization | Customization | Customization | Customization |



8.2 Waste Yarn Bobbin Cleaning Machine



Dedicated design for removing waste yarn on bobbins with high efficiency

Technical data

Waste Yarn Bobbin Cleaning Machine

| Model Number | PH-WYBC |
|-------------------|--------------------------------|
| Application | Removing waste yarn on bobbins |
| Input material | Iron / Aluminum bobbins |
| Production Output | 15 – 30 bobbins/min |

*Speed varies with different material of bobbins



8.3 Strip Slitter



Slitting paper rolls, or laminated woven fabric rolls. Cylinder driven unwinder with optional choice of shaftless unwinder. In-house designed bow roll to avoid over lapping for the finish rolls.

Technical data

| Model Number | PH-Slit |
|-----------------------------------|---|
| Application | Paper rolls, Laminated Woven fabric rolls |
| Cloth width (max.) | 1000 mm |
| Roll diameter on unwinding stand | 1300 mm |
| Roll diameter on rewinding system | 800 mm |
| Rewind core size | I.D. 100 mm cardboard core |
| Operating speed (max.) | 100 m/min |

Customization available upon request



9.0 Recycling line – Pelletizing



The recycling line transforms re-granulate to pellet form as a valuable secondary resource which could be used again in production. It helps the customer reduce the percentage of waste materials produced during manufacturing, and creates sustainability for our environment.

Specification

- Top feeding and side feeding for selection
- Takes various type of plastic waste material
- Metal detector available as optional device
- Vibrating screener available as optional device
- Easy operation and maintenance

*capacity varies with different input of waste material

Technical data

| Model Number | PH-WPR series | PH-WPR-L series |
|-------------------------|--------------------|--------------------|
| Input of waste material | PP,LDPE,HDPE,LLDPE | PP,LDPE,HDPE,LLDPE |
| Production capacity | 60 – 350 KG/hour | 350 – 600 KG/hour |
| Storage Barrel | 1000 L | 1000 L |

*capacity varies with different input of waste material



Non Woven Production



1. Carding Section



A complete carding section including fiber pre-opener, blend bin, fine opener, hopper feeder, weight pan, carding machine, cross lapper and other peripheral equipment. Taylor made complete carding line according to customer's needs leads to great flexibility of production

Specification

- Double cylinder carding machine available upon request
- Metal detection available upon request
- Automatic weight correction ensures proper amount of feeding
- Safety lock system available upon request
- Customization upon request

Technical data

| Machine | Carding Machine |
|---------------|-------------------------|
| Working Width | 1500 - 3200 mm |
| Control Panel | Key pad, or Touch panel |

(Machine specification is subject to change)



2. Needle Punching Section



A complete needle punching section including feeding system, pre-needle punching machine, finish needle punching machine, edge cutter, and other peripheral equipment. Taylor made complete needle punching line according to customer's needs leads to great flexibility of production. Wide range of application covers geotextile, car carpet, filtration, mattress, and more.

Specification

- Vibration free design reaches maximum stability and lower noise
- Automatic lubrication design of all main bearings combined with unique protection devices extends spare part life time
- Double needle board design available
- Customization upon request

Technical data

| Machine | Needle punching machine |
|--|-------------------------|
| Working Width | Up to 6 Meter wide |
| Production speed | 1 – 10 M/min |
| Control Panel | Key pad, or Touch panel |
| (Machina specification is subject to shange) | |

(Machine specification is subject to change)



3. Pressing and Drying Section



A complete pressing and drying section including heat pressing rollers, oven dryer, embossing rollers, cooling system, accumulator, cutters, winders, and other peripheral equipment. It furnishes the final product with different extent of hardness and touches.

Specification

- Optimum design of air flow ensures proper heating on the non-woven materials •
- Energy saving design

Technical data

| Heat dryer |
|----------------------|
| Up to 4.5 Meter wide |
| Max. 150 M/min |
| |

(machine specification is subject to change)





Accessories



<u>Circular Loom</u>

Consumable spare parts, and special upgrade kit are available upon request

Conversion Line

Consumable spare parts and electrical components available upon request

Sewing Machine

With our great numbers of customer bases, we are offering competitive prices of consumable spare parts for NEWLONG, Juki, Union Special sewing machines and other brands.

In addition, as a new trend of green industry is emerging, we added special Servo Motors for sewing machines as our new items. The main advantages of servo motors over traditional clutch motors are as the following. More information is available upon request.

- 1. Lighter weight and smaller size
- 2. Power saving with high efficiency
- 3. Compatible to any type of sewing machine
- 4. Simple upgrade

<u>Air Shaft</u>

High quality air expanding shafts used on printing machine, lamination machine, coating machine, slitting machine, bag making machine, and rewinders for application of textile, paper, film, foil and plastic are available upon request.

