GENERAL DESCRIPTION

1) SIX UNWIND SYSTEM

Six single shaft unwind systems floor mounted to unwind the inner & outer plys of film. The use of driven unwind systems gives smooth, trouble free web control at constant tension.

Features

- System holds 6 reels of film
- Roll Size: 800mm dia. x 2150mm wide
- Paper Core: 76mm/152mm OD
- A.C. driven center unwind （FORD）
- Ultrasonic sensor system to detect roll diameter
- Servo web guide system (GN solution with Schneider Servo)
- Start/stop/E-stop station
- Floor mounted

2) SIX COMPENSATORS

The compensator system is designed to take the film from the unwind at a constant velocity and tension. The compensator allows the film to be processed intermittently for all the sealing processes.

Features

- System is 108” (2743mm) wide
- Non-friction style roller brakes
- Low inertia roller 4” (100mm)
- Regulated air loaded dancer arm assembly
- Optional: Static Recharger (HAUG)

3) UPPER FITMENT INSERTION

System have one stations mounted on structural steel X-Y frames with manual adjustment. System to punch hole in upper webs and seal discharge gland. Shuttle system is used to switch between punching and sealing. Our punch system allows for quick changeover of punches.

Punch Station Features

- System moves in repeat with insertion system
- Independent across web adjustment

- Vacuum draw off
- Punch: - size to be confirmed

Fitment Insertion Features

Our systems allow for a manual insert of the fitment to maintain endless production with no scrap.

- One conveyor feeding system
- Direct table lift
- Spout conveyor with low alarm
- Change set (3 total) or adjustment (3 total)

4) LOWER FITMENT INSERTION

System have one station that is mounted on structural steel X-Y frames with manual adjustment System to punch hole in lower webs and seal discharge gland. Shuttle system is used to switch between punching and sealing. Our punch system allows for quick changeover of punches.

Punch Station Features

- System moves in repeat with insertion system
- Independent across web adjustment
- Vacuum draw off
- Punch: - size to be confirmed

Fitment Insertion Features

Our systems allow for a manual insert of the fitment to maintain endless production with no scrap.

- One conveyor feeding system
- Direct table lift
- Spout conveyor with low alarm
- Change set (3 total) or adjustment (3 total)

5) SERVO ENTRY DRAW ROLLER

Driven by its own independent servo drive supplies the film to the longitudinal sealing section. The servo allows the operator to control the tension in the film.

Features

- A.C. independent servo drive, motor (Schneider)
- Air loaded upper draw roller with LH, RH & center control
- Gear driven upper
- Web tension control from PLC input
- Adjustable large dia. upper wheels complete with scale for setup
- Equipped with diversion rollers to control position of the upper fitment

4) LONGITUDINAL SEALING STATIONS WITH WEB SPREADER

This machine is equipped with two longitudinal seal bars. The seal bars are designed for single and multiple hit sealing and therefore designed to accept seal inserts and is repeat adjustable in machine direction. This single hit system eliminates the overlap and offset leg seal problems.

Features Longitudinal Sealing Stations

- 2 stations
- Seal side to side adjustment
- Adjustable in repeat direction
- Synchronize linkage
- Upper and lower seal include extra lift 3” (76mm) and cooling channel
- Independent parameter adjustment via PLC for each bar
- 3000mm long seal bars with water cooling
- Impulse seal technology
- PE option includes air blast cooling with regulation
- Belt style support/stripper
- Quick teflon scroll system on all bars
- 6mm rubber (30 & 60 duro) included
- Web supporting table between seal bars – low static charge materials

Features of one Web Spreader

- Air driven clamps
- Air driven spreading to eliminate wrinkles

5) SERVO EXIT DRAW ROLLERS

Driven via an independent A.C. servo the final draw roller accurately moves the film to the cut-off or serration.

Features

- A.C. independent servo with brake (SCHNEIDER)
- Air loaded upper draw roller with LH, RH and center control
- Gear driven upper
- Web jam-up detector system with adjustable fingers
- Two high powered static bars
- Adjustable large dia. upper wheels complete with scale for setup
- Retractable web support fingers to aid transfer of material over Transverse Seal Cut Off Station

6) TRANSVERSE SEALING SYSTEM WITH CUT OFF AND WEB SPREADER

This machine includes one transverse sealing station. The design overcomes all the problems associated with the production of PE film structures.

Features of one Transverse Sealing Station

- Repeat adjustment with pneumatic position locks
- Independent parameter adjustment via PLC
- Impulse heat technology
- 108” long and 2” wide sealing bars with water cooling
- Synchronizing linkage
- Upper and lower bars have extra lift 76mm
- Web clamp for PE film structures
- Air blast cooling with regulation
- Rubber sealing (30 & 60 duro rubber included)

Features of one Web Spreader

- Air driven clamps
- Air driven spreading to eliminate wrinkles

Features of one Cut Off

- Servo drive (Schneider)
- 3 blades supplied
- Adjustable webwidth via proximity limits
- Quick change blade system (holder: DIENES)

14) DELIVERY TABLE

System allows pouches to be shingled or individually delivered with stop timers.

Features

- Adjustable speed control
- AC motor driven belt (Schneider)
- Independent timers via PLC

15) CE GUARDING

Machine is interlocked with light curtain guarding full length of the sealing system.

Features

- CE guarding standard

16) CONTROL SYSTEM

GN have adopted a very simple control philosophy which allows for on the fly adjustment to all crucial parameters. Job retrieval and custom skip are standard features.

Features

- PLC - Schneider
- Touch screen interface on remote arm (one in the insertion area and one at the exit draw roller, Schneider)
- On the fly adjustment
- Servo control for web tension (Schneider)
- Custom skip
- Job storage/recall
- PLC control all parameters (Schneider)
- Full documentation of all programs
- Message center - alarm & fault display
- Heat control (OMRON)

17) MACHINE COLOUR

GN can supply:
GN Green

GN White – RAL #9003
GN Beige – RAL #7032

If another colour is required – please specify the colour and the ~~RAL #_____~~
Note: Customer to specify prior to order confirmation.

OPTIONS: ***Should any of these options be required please consult your technical sales representative for explanation and pricing.***

All pneumatic parts, like cylinder, valves, pressure gages etc., are SMC branded

TECHNICAL SPECIFICATIONS:

MACHINE RANGE OF PRODUCT:
Max. web width: 2150mm
Min. size: to be defined by customer
Max. single draw: 2840 mm or to be further defined by customer. Current proposal is 3000mm sealing bars.

PRODUCTION OUTPUT:
Actual production speed is dependent on type, quality and thickness of material used. It is expected that consistent, good quality, lay flat material will be supplied to achieve the maximum cycle rates achievable on this unit quoted. Samples of product and/or film expected to be produced/run on the configured machine must be supplied to GN prior to order confirmation.

SPEED
10 - 16 seconds/cycle for the bags with top fitment and one bottom fitment.

Note:
The above speed was estimated based on the data we received from customer. The actual max. speed will be finally decided by running the material customer supply to GNPT.

ELECTRICAL SUPPLY:
A 3 phase isolation transformer is included with the machine. Primary voltage of the transformer is the customer supplied voltage.
Customer supplied voltage____3-phase 415 ACV, 50 Hz____

GN machines are equipped with a non fused electrical disconnect. Any fused disconnects required by local electrical codes are the full responsibility of the purchaser and are not supplied by GN.

AIR CONSUMPTION:
Minimum 100 psi, 8 bar **(Consumption is based on the final machine configuration).**

WATER CONSUMPTION:
15 litres/minute. ***NOTE: WATER MUST NOT BE BELOW DEW POINT***

TIME OF SHIPMENT:

Approximately 16– 20 weeks from order,
Actual delivery depends on backlog at time of order.