



WIDE WEB SELF ADHESIVE COATER - Page 1

Description

1 off single Gravure head Line complete with drying tunnel and ancillary web handling equipment for the coating of solvent/water based lacquers onto OPP and PET films of 1350mm maximum width and from 9 to 50 micron thickness. Machine mechanical speed to be 300m/min maximum. The line would be comprised of the following sections:

Unwind

Guided unwind mounted on Linear Bearings
Five guider/actuator. Sensing head would be easily accessible for setting without the requirement for ladders
Batch lifting arms to load batches automatically from trolley to machine.
Pneumatically operated and interlocked bearing housing supports/clamps
3" pneumatic air shafts and 6" pneumatic chucks, complete with integral bearing housings
Tension control via transducer roll and pneumatic brake.
Unit will accommodate batches of up to 1500 kgs.
1 off batch loading/unloading trolley is supplied to service the unwind and rewind.

Draw Nip

Pneumatically actuated nip as tension isolation point of the unwind from the embosser with the rubber roller in contact with the non-embossed side of the film.
Tension control via transducer roll to provide optimum tension control/stability into the gravure coater.

Gravure Coater

1 off direct/reverse gravure coating head comprising engraved ceramic coated gravure roll and rubber covered impression roll pneumatically loaded and with automatic gap control.
This system would enable the operator to "dial-in" the required gap which would then be set automatically via the electronically controlled motorised system.
The impression roll would be of composite construction utilising a base steel roller carrying a removable rubber sleeve mounted
The rubber sleeve is mounted on a central air mandrel and mounted in special bearing assemblies which allow the sleeve to be changed without the need for tools and without removing the roller from the machine.
This addresses the requirement for different face lengths of rubber roll when coating different widths of web to avoid the possibility of the coating spreading on to the edges of the non-coated side of the web.

The sleeve(s) to be covered in anti-static Hypalon rubber.

The unit would incorporate a stainless steel container and pneumatic pump system to enable the solvent based coating to be pumped via a chambered doctor blade onto the gravure roll.

The gravure roll would be driven on a variable speed drive with speed trim linked into the main drive. Prior to the coating nip, a double-sided contact type of web cleaner would be fitted.

Dryer

The dryer will comprise one free standing, 2 zone, 6 metre long unit complete with supporting steelwork and designed to allow suitable headroom for the operator to obtain access from below.
To ensure the dryer operates within safe solvent levels, the unit is equipped with a two point solvent monitoring system, each utilising a type FFA (SNR671) sensor and its housing.
Each unit will monitor the solvent level in the exhaust duct of the relative zone and will sound an alarm when the level is approaching the alarm set-point.
Should the level continue to rise a further set-point will be reached which will automatically trigger a "machine shut-down" sequence.
To facilitate cleaning and threading the dryer will incorporate the following features.

- i) Sliding panels in the underneath of the dryer.
- ii) Tendency driven rollers in an 'arch' configuration with a non-stick coated finish mounted at approximately 1 metre pitch.
- iii) Motorised threading chain mechanism.

The dryer will comprise of an insulated enclosure housing nozzleed pressure chambers, recirculation fan unit, gas heaters with control valve and interconnecting ductwork.
Insulation panels 75mm thick are carried from the dryer body the access doors (hinged type) complete with locking handles. Panels will be powder coated in a colour to suit. Exhaust ports will be taken from the dryer and connected into a common manifold that will terminate at a centrifugal belt driven fan unit mounted adjacent to the dryer.

