

DRIVE CONTROLS FOR COATER-LAMINATORS

Webmatic-L from Dynaspede is a multi-motor drive system tailor-made to suit unwinder, intermediate sections and rewinder of a coater-laminator. It comprises the following sections:-

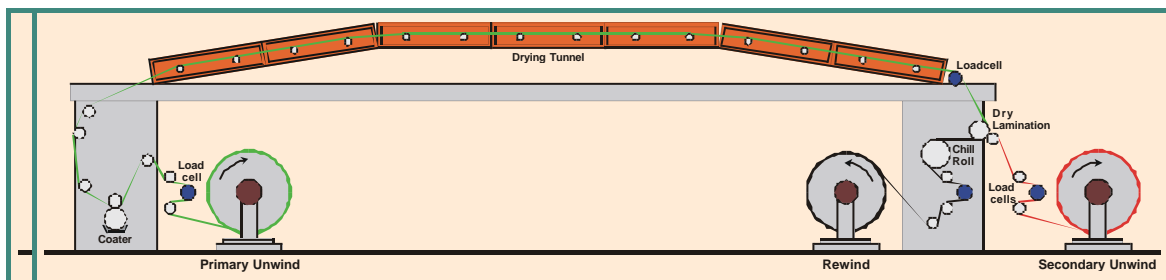
Unwind: In this zone, tension of the web entering the infeed section or the coating section, is controlled. Actuation is normally through a pneumatic brake or magnetic particle brake, depending on the application requirement. Tension sensing load cells or dancer position sensors are used for feedback purpose. Tension controller for the magnetic particle brake or pneumatic brake, ensures that the set tension is maintained throughout the roll turn-down. In case AC or DC drive is preferred, this can also be incorporated.

Infeed: An infeed nip unit drive pulls the substrate off the unwinding roll and simultaneously ensures that tension in the span between the infeed section and the coating station is maintained a constant.



It maintains set tension independent of whether it is called to drive or prevent overhauling. An AC or DC motor actuates the infeed nip through appropriate mechanical transmission arrangement. Tension transducers or dancer position sensors are used for feedback. Speed-follow tension-trim (or dancer-trim) controls ensure that the tension in this zone is maintained.

Coating & Laminating



Coater drive: The coater section powered by a single AC or DC motor through appropriate mechanical transmission arrangement . It is the pilot or master section of the Coater-Laminator. Speed can be set by means of push buttons and monitored by a digital speed readout. The digital AC or DC drive ensures that set speed is maintained. Acceleration and deceleration times are adjusted on this drive.

Outfeed drive: The outfeed unit establishes outlet tension values and isolates the processing section from tension disturbances of the rewinder. The principle of operation of drives and controls in this section will be similar to that of the infeed. The only difference in operation of drive and controls in this section is that while the infeed will be operating at a speed slightly lower than the line speed, the outfeed operates at a marginally higher level.

Rewinder drive: The rewinder forms a roll out of the process material. Tension control is either through load cell or dancer position feedback and digital vector controlled AC drive or digital DC drive. Provision for taper tension, GD^2 compensation, profile gain setting are among the many site adjustable features.



A choice of operator control stations is available. Optional features include PLC with touch screen or PC based system for storage of jobs. Temperature controls / indicators, electricals for exhaust / blower motors, heater controls can be provided on request.

Options like remote operator stations to be placed at convenient locations on the coater-laminator can also be tailor made to aesthetically suit the machine being controlled.

Dynaspede control panel are fabricated from steel sheet; adequately surface treated and finished to ensure long life in industrially harsh environment. All electrical accessories used are of standard make. AC and DC drives used are of Eurotherm make, which are available over a highly functional range. These are digital drives, based on sound principles of ease-of-use, worldwide standards and above all, reliability. Tension sensing load cells, dancer position sensors, speed sensing encoders / tachogenerators can also be optionally offered.

Dynaspede's application engineering cell is backed by more than two decades' experience. A qualified and trained team of pre-sales and post-sales Engineers not only choose the right drive for the application envisaged they also ensure optimal performance.

Whilst this description is for dry laminators, options for wet laminator or only coaters or extrusion coating machines are also available.

Dynaspede Integrated Systems (P) Limited

136A, Sipcot Industrial Complex, Hosur 635 126 TN, India.

Tel : 91 - 4344 - 276915 (5 Lines)

Fax : 91 - 4344 - 276841

e-mail: mail@dynaspede.com

web : www.dynaspede.com

Sales & Service:

• Bangalore • Baroda • Calcutta • Chennai • Delhi • Lucknow • Mumbai • Secunderabad