

7 DRIVE CONTROL SYSTEM FOR ROTOGRAVURE PRESSES

The **Rotomatic 7** drive control panel from Dynaspede is a drive panel tailor-made to suit unwind turret, rewind turret and intermediate sections on a rotogravure printing press. It comprises the following sections:-

Unwinder turret controls: In this zone, tension of the web entering the Infeed section is controlled. Motors connected to each unwind shaft will be controlled by four-quadrant digital drives. The controls incorporate feedback of dancer position. All the sequence & logic operations which include pre-drive of fresh roll, turret rotation, roll positioning, bump roll & knife actuation and retraction are controlled through a suitable PLC with provision for fully automatic/semi-automatic splicing.



Infeed: The 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 first printing station is maintained a constant.

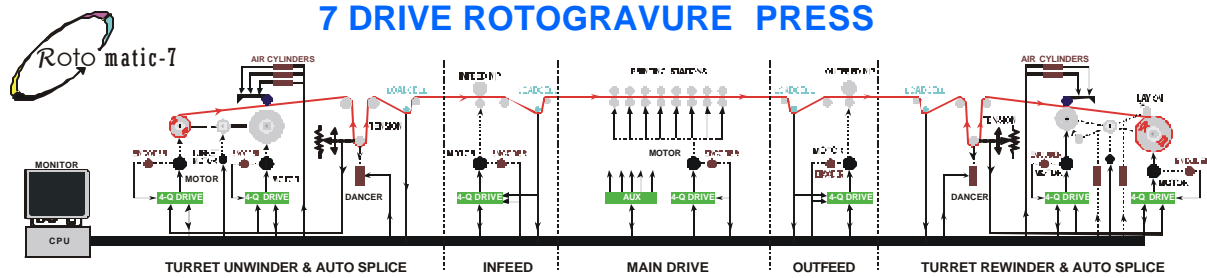
It maintains set tension independent of whether it is called to drive or prevent overhauling. An AC or DC motor actuates the Infeed nip through appropriate mechanical transmission arrangement.

Tension transducers or dancer position sensors are used for feedback. Speed-follow-tension-trim (or dancer-trim) controls along with vector controlled digital AC drive or digital DC drive ensures that process tension is maintained constant.

Main drive: All colour stations of the printing section are powered by a single AC or DC motor through line shaft. It is the pilot or master section of the rotogravure printing press. Speed can be set by means of push buttons and monitored by a digital tension 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 drive and controls in this section will be similar to that of the Infeed. The only difference being 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 turret controls: In this zone, tension of the web coming out of the Outfeed section is controlled. Motors connected to each rewind shaft will be controlled by four-quadrant digital drives. The controls incorporate feedback of dancer position. All the sequence & logic operations which include pre-drive of fresh roll, turret rotation, roll positioning, bump roll & knife actuation and retraction are controlled through the PLC with provision for fully automatic/semi-automatic splicing.



Choice of operator control station is available. A free standing floor mounted panel as shown alongside can be offered. Optional features include PC based management system for machine control with additional facility for storage of jobs, generating reports and monitoring overall machine performance & output. Temperature controls / indicators, electricals for exhaust / blower motors, heater controls and impressions nip controls can be provided on request.

Options like remote operator stations to be conveniently located at convenient locations on the rotogravure printing press can also be tailor made to aesthetically suit the machine being controlled.



Dynaspede control panels are fabricated from MS 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, which are available over a highly functional range. These are digital drives, based on sound ease-of-use principles, worldwide standards and above all, reliability.

Dynaspede, an ISO 9001 company, is backed by more than two decades' experience. A qualified and trained team of application and customer support engineers not only choose the right drive for the application envisaged, but also they also ensure optimal performance.

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