

## Application Information

### Polybag Machinery

**Electro Cam Corp. PL $\mu$ S Programmable Limit Switches are often used on polybag machinery to increase production and quality!**

#### Machine Description

Polybag machines convert rolls of plastic (poly) film material into plastic bags. Although these bags can vary widely in size and style, the machines that produce them are of similar design. An empty bag is the finished product from these machines. Polybag machines should not be confused with Form, Fill, and Seal machines, which form a pouch, fill it with product, and seal it in one operation.

#### Common Problems

Controlling sequence of various machine functions is critical to production performance and efficiency. Traditional controls can be difficult to program, awkward to adjust, and incapable of retaining accuracy at high speed or variable speed situations.

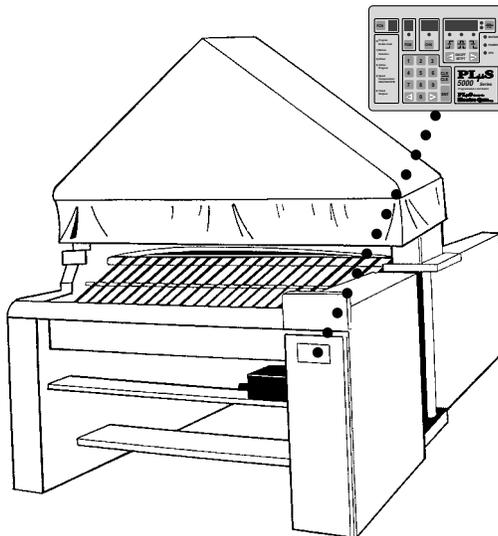
#### Electro Cam's Solution!

The Electro Cam PL $\mu$ S Programmable Limit Switch is a state-of-the-art replacement for the older style sequence controllers. It utilizes solid state digital electronics to provide precise sequence control for machine functions. Solid state design helps eliminate production downtime and erratic performance, especially during high speed operation.

The PL $\mu$ S can control various polybag machine functions, such as:

- **Feed Roll Clutch/Brake**  
Synchronizes film feed to machine cycle and control length of film being fed (bag length).
- **Gate Registration Eye**  
Establishes a cycle position window during which the eye should look for a registration mark. This allows printed information on the bags to be ignored and not cause false registration signals.

- **Clutch Voltage Reducer**  
Reduces clutch holding voltage after initial engagement to quicken disengagement and braking.
- **Auxiliary Functions**  
Synchronizes attachments to the machine for creating handles, holes, zip locks, draw strings, etc.



Programming features and ease of use promote efficient set up for each application, resulting in optimal performance and efficiency.

The ability to fine tune sequence timing while the machine is in operation provides many benefits, including higher machine speed. Multiple program storage allows for virtually instant changeover for various products. For equipment that is frequently changed from product to product this is invaluable.

Speed compensation automatically advances and retards the output setpoints as the machine speeds up and slows down. This feature is particularly valuable when controlling slow moving mechanical devices. When speed compensation is used, changes in production speed do not require setpoint changes. Outputs are properly synchronized while ramping up to speed or slowing down to a stop.

The PL $\mu$ S can be retrofitted to most polybag machines.

Electro Cam Corp. is highly experienced in supplying automation solutions to a variety of industrial machinery. For assistance with your application, please contact the factory.