SM-Register

High Speed Motion & Registration Control

SM-Register is a new drive option module that is designed to provide a flexible, high performance solution for programmable motion requiring high speed registration features. It can be used in applications such as printing, packaging and cutting machinery.

SM-Register is much lower cost and yet provides significant advantages over standalone motion and registration controllers:

- Flexiblity to cover virtually any application from simple to complex
- Simple integration with the complete automation system
- Higher performance through eliminating delays between the registration device and the drive
- Reduced wiring through a single connection point for operator panels, position capture, feedback and advance/ retard adjustment
- Extremely compact as the option module fits within the drive footprint and requires no external control devices or power supplies
- Connectivity to standard Fieldbus and Ethernet protocols including EtherCAT, Profibus and CANopen
- Simplified machine design, programming and commissioning
- Connectivity with virtually any feedback device including resolvers, incremental, sin/cos, and SSI encoders

N1652

Certificate No. EMS 54446 003

Certificate No. Q 05176 003

2 YEAR Digital Drive Warranty

RoHS Compliant

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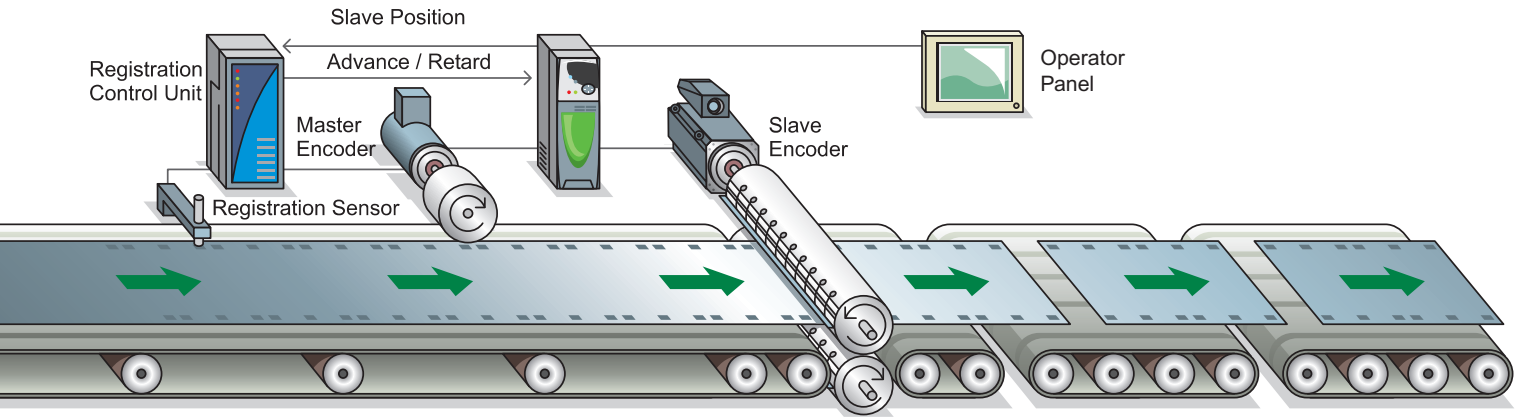
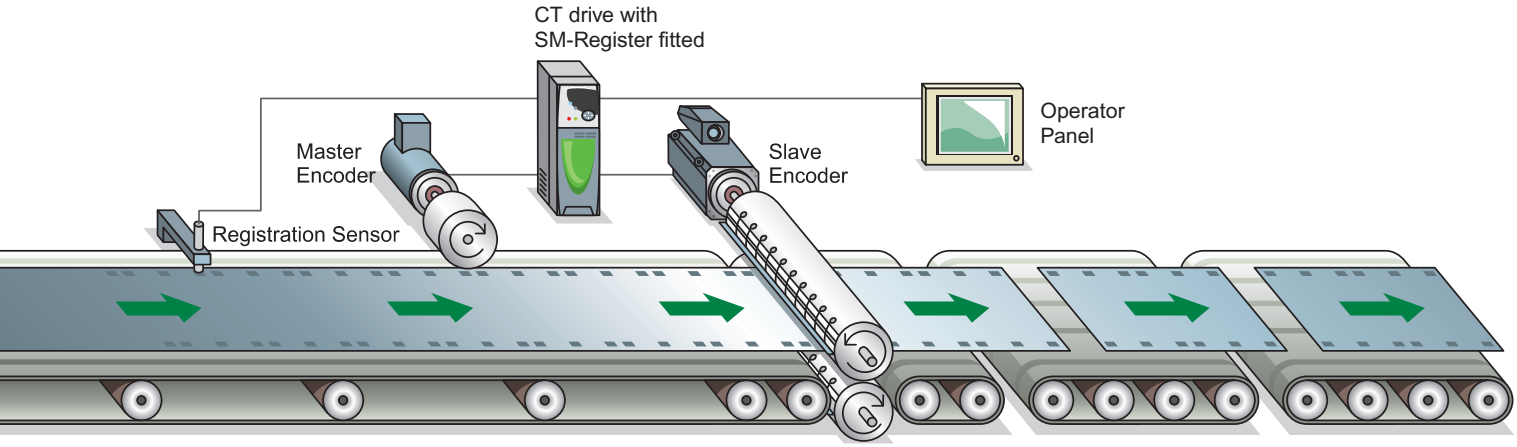
Traditional registration system



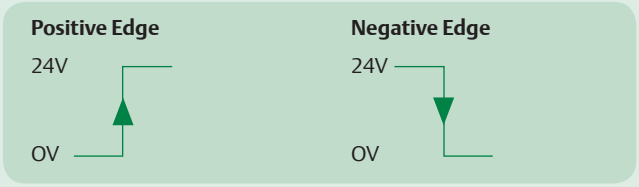
System using SM-Register

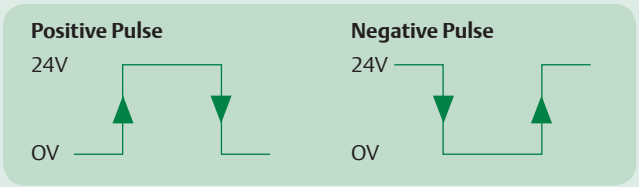


Features & Functions

- Motion programming using PLCopen or Control Techniques' Advanced Position Controller (APC)
- Programmable in user defined units
- Two fully independent registration capture channels
- Storage for 256 events per channel, microseconds apart
- Pattern recognition
- Speeds in excess of 1000m/min can be handled
- Ability to filter unwanted marks (i.e. splashes, dirt, text etc)
- Filtering capability:
  - ➔ Minimum and/or maximum pulse width
  - ➔ Distance from previous edge
- Compensation for registration sensor throughput delay
- A windowing feature saves processor resource by ignoring marks outside of the registration window. This feature adds another level of data filtering
- Position capture:
  - ➔ Edge or pulse; 7 modes in total:

    Positive edge, negative edge, both edges, positive pulse, negative pulse, patterns of positive pulses and patterns negative pulses





  - ➔ Any encoder position including virtual / software generated encoder can be captured (synchronising to electronic line shaft)

For more information visit www.controltechniques.com

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