Conveyors

Application Overview
Conveyors are widely used across several industries to transport products or bulk material. While higher productivity and reducing transportation costs are the main requirements, machine protection, reliability of operation, configuration flexibility and ease of use are highly critical for conveyor control. Emerson Control Techniques offers a wide range of AC Variable Frequency Drives (VFDs), Soft Starters, DC Drives and options to meet the control needs of different conveyor types.

Application Requirements

Control & Connectivity
- Smooth motion / precise speed control
- High starting torque
- Master-follower configuration
  (Electronic gearing / load sharing)
- Flexible multiple accel / decel profiles
- Low inspection speeds
- Regeneration & common DC bus
- Dynamic braking
- Connectivity to PLC & operator interface

Protection
- Operator, motor, machine & system protection
- Minimize mechanical stress
- Intuitive diagnostics

Minimize Operating Costs
- Increase efficiency & energy conservation
- Maximize uptime / high reliability
- Ease of setup / flexible control

Control Techniques’ Solutions

VFDs, Soft Starters, DC Drives & Packaged Drives
- Available up to 29 00 hp
- Global voltage ratings (115 / 230 / 480 / 575 / 690 VAC)
- Global standards (UL / cUL / CE / C-Tick / ISO9002)
- NEMA 1 / UL Type 1 / NEMA 4X drive options
- NEMA 12 & NEMA 3R packaged drives
- On-board PLC functionality
- Wide range of I/O option modules
- All major fieldbus connectivity options
- RS485 Modbus RTU standard
- Free commissioning software
- Industry leading warranties
  (2 years standard - 5 years optional)
Conveyor Solutions

Control Techniques’ Performance Advantages

AC Drives

Control
- Excellent frequency accuracy (0.01%)
- Very high frequency / speed resolution
  - Open Loop – 0.1Hz
  - Closed Loop – 0.1 rpm
- 60:1 constant torque speed range
- Speed / torque control
- 8 preset speeds; 8 sets of accel / decel rates
- Jog with independent accel / decel rates
- Volt/current / pulse speed reference options
- Motorized potentiometer
- Brake control
- On-board PLC options for custom solutions

Total System Protection
- S-ramp soft start for reduced mechanical stress
- Built-in motor & drive diagnostics
- Intelligent thermal motor protection
- Safe torque off user interlock option
- Threshold detection

Maximum Uptime
- Very high quality / product reliability
- Supply loss ride through
- Automatic reset
- Easy Setup
- Auto tune - static and rotational
- Last 10 trips logged

World Class Products & Support
- Worldwide Application & Field Service Network
- 24/7 support line 1-800-893-2321