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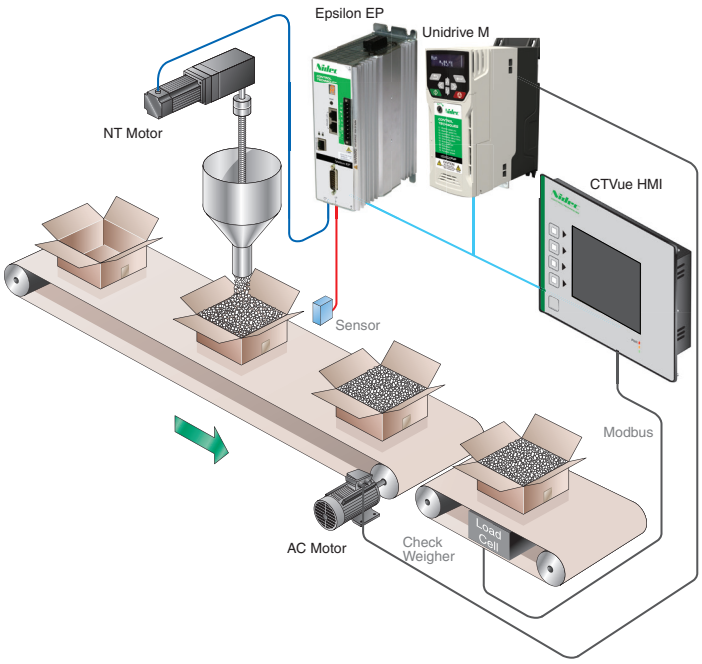
Auger Filling

Application Overview

There are several different type of dry filling machines used in manufacturing today. Dry fillers are designed to measure and dispense the exact amount of product into a container quickly and efficiently. Auger fillers do this by rotating an auger to meter out the appropriate amount of material into the package.

As material costs rise, manufacturers are increasingly paying more attention to minimizing product waste, however overfilling packages is often used as a safe guard against under filling. To prevent over or under filling, in-line check weighers and advanced move profiles can be used. Flexible acceleration profiles also give the added benefits of decreased product degradation and lower mechanical stress.



Application Requirements

Control & Connectivity

- Accurate and repeatable fill levels
- Minimize product degradation
- Quick product change over to fill different size packages
- Reduction in product voids; consistent product transfer
- High quality products to reduce machine down time
- Connectivity to both I/O and supervisory control networks

Control Techniques Solutions

Servo Drives and Motors, VFD's, and HMIs

- Analog and fieldbus communications allows for easy connections to check weighers and SCADA equipment.
- Jerk free acceleration and deceleration ramps
- Multiple drive networking for distributed control reducing PLC requirements.
- CT-Vue HMI enables trending, logging, and alarming of critical weight data.

Auger Filling Solutions

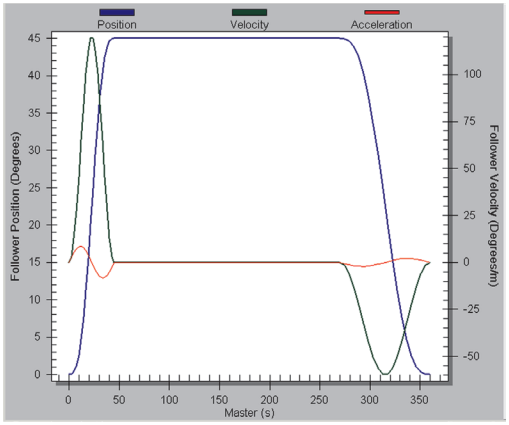
Control Techniques Performance Advantages

Analog or Fieldbus Communications

- Built-in communications and analog controls make setup quick and easy
- Direct mapping of fieldbus or analog signals to product dispense ratios for quick product fill level adjustments
- Wide range of communication options: DeviceNet, ProfiBus, Modbus TCP/IP, EtherNet/IP, and Modbus RTU
- Real-time programs for fast data transfers

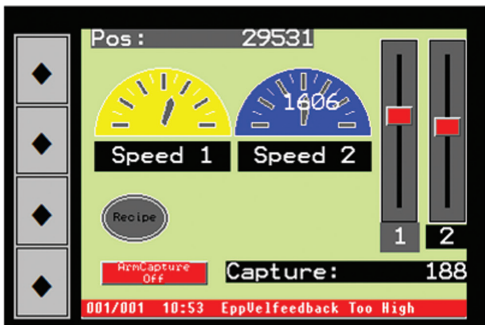
Jerk Free Acceleration

- User defined acceleration curves provide unlimited profile flexibility
- Standard acceleration types include linear, and four variations of S-Curve
- Cubic Spline CAMS guarantee jerk free movements



CTVue Sequential Control and Data Acquisition

- Trending screens allow visual monitoring of weights
- CTVue alarming alerts users to over or under weight conditions
- Data-logging features can store machine trend data to simple CSV files, easy transferred to SCADA systems



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