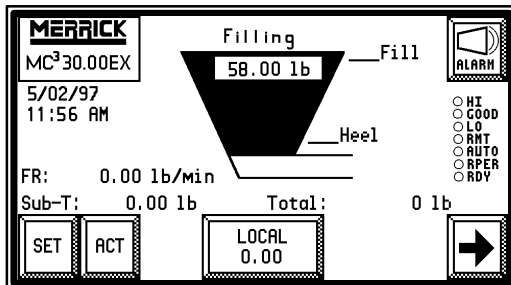


Loss-In-Weight Application

The MC³ 3000 Controller is designed to deliver material into a downstream process at a designated feedrate.

Main Screen Description



Theory Of Operation

An analog signal is used by the MC³ Controller to control the speed of a feeding device. The analog signal is varied by the controller to maintain a set feedrate.

A Load Cell signal is monitored by the controller and is used as feedback for maintaining feedrate and totalizing the material fed from the feeder.

The Load Cell signal is also used to determine when the feeder hopper requires more material. An output from the MC³ Controller can control a refill device or can be used to signal another intelligent device that a refill is required. When the weight of material in the hopper reaches the correct level, the controller will remove the requirement for refill. This automatic function can be disabled for manual refill.

Process Values displayed include:

- Feedrate
- Net Weight
- Feedrate Setpoint
- Master Total
- Sub-Total

Status Indicators include:

- Controller State
- Run Permission
- Stability
- Feedrate State
- Date
- Time

Operator settable parameters include but are not limited to:

- Feedrate Setpoint
- Hopper (Refill) Parameters
- Feedrate Limits
- Setpoint Mode

Communication Interfaces:

- Merrick Serial Communications Protocol
- Modbus ASCII, Modbus +
- DeviceNET, ControlNET
- DF1, Data Highway +
- ProfiBus
- EtherNet

Physical Inputs and Outputs

Standard Inputs and Outputs include:

- Seven (7) Digital Outputs
- Four (4) Digital Inputs
- Two (2) Analog Outputs
- One (1) Analog Input
- DC Pulse Output for Totalizer
- AC Pulse Output for Totalizer

Maximum Inputs and Outputs available:

- Fourteen (14) Digital Outputs
- Eight (8) Digital Inputs
- Four (4) Analog Outputs
- One (1) Analog Input

Logical Digital Inputs and Outputs

Each physical Digital Input and Digital Output can be assigned (mapped to) a Logical I/O Function. In addition, the normal state of the input or output can be assigned such as normally open/closed, inverted or forced on/off.

Commonly used Logical Digital Inputs include but are not limited to:

- Run Permission
- Feeder Block
- Start Refill
- Stop Refill
- Request Print

Commonly used Logical Digital Output include but are not limited to:

- Refill Required
- Feeder Running
- General Alarm
- High Weight
- Low Weight
- Empty Hopper
- High Feedrate
- Low Feedrate
- In Control