Genetix® MasterSet® Control

The Genetix® MasterSet® provides a central point of operation and control for weigh feeders in a Recipe Blending System. MasterSet® can accept a System Setpoint and, based on the current recipe, calculate the Setpoints for each weigh feeder in the system. Setpoints are then transmitted to each weigh feeder using a digital network.
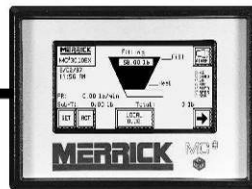
MasterSet® monitors the weigh feeders and provides material and recipe totals as well as Alarms generated by any feeder in the system.

In order to maintain the integrity and correct ratio of ingredients in a Recipe Blend, MasterSet® also provides an enhanced capability called Pacing. Pacing ensures that if a feeder in a blending system can not achieve the Setpoint as required by Recipe, the system throughput will be reduced to enable the ratio of materials in the blend are preserved. This means that good product containing the correct ratio of ingredients can still be produced even though a feeder may be experiencing problems.

MasterSet

MC³ or Genetix

4 – WIRE RS485

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16

- ✓ **Supports a Maximum of 16 Ingredients**

- ✓ **Stores up to 100 Recipes**

- ✓ **Supports Weigh Belt and Loss-in-Weight Feeders**

- ✓ **Modbus RTU Communication Protocol via 4-Wire RS485**

- ✓ **Graphical Touch Screen Interface**

- ✓ **Master Start/Stop Capabilities**

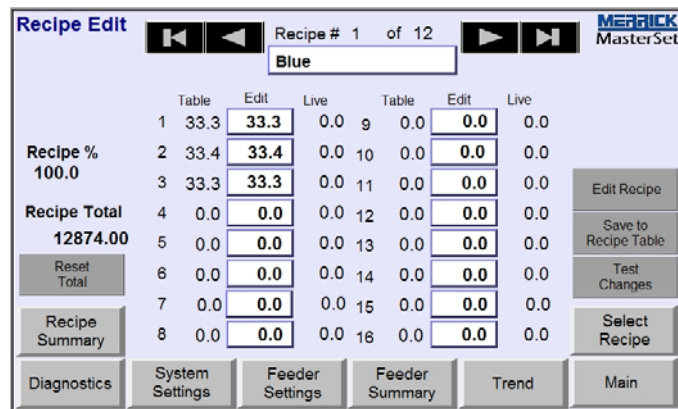- ✓ **Ethernet /IP Network**

System Information

Main Screen:

- Main Screen - Overview
- System Set-Point
- Recipe Name and Number
- Stop/Run Control
- Recipe Total
- System Total

Recipe Information

Recipe Screen Contains:

- Recipe Name
- Recipe Number
- Ratio Percentages
- Recipe Total

Feeder Information

Controller Screen:

- Material Name
- Process Values
- Totals
- Feeder Warnings and Faults
- Direct Feeder Control

How Does Pacing Work?

Pacing is a unique function in a MasterSet® Recipe Blending System. When Pacing is enabled, MasterSet® monitors the performance of each feeder. If a low deviation from the recipe setpoint occurs, MasterSet will override the System Setpoint and lower the Setpoint for each feeder until the recipe balance has been restored. When this "Pacing Condition" occurs, the system will output less of the recipe blend, but the blended product will contain the correct ratio of ingredients. Once the problem with the offending feeder is corrected, the system can recover from the Pacing Condition and resume normal operation.