SGC SERIES

Continuous Loss-in-Weight Blenders

CONTINUOUS BLENDING AND FEEDING SYSTEMS FOR EXTRUSION

The SGC Series is designed for continuous blending applications. The SGC Series offers the most homogeneous blend available versus common batch-type blenders or mixers. Only the material weigh hoppers are mounted on precision load cells, eliminating the weight and vibration of the metering auger and motor assemblies.

The Sterling Control System automatically adjusts individual ingredient feeders to match the learned extruder rate at the exact ratio required. The SGC Series lower mass flow weigh hopper learns the exact extruder rate, continuously sending the information to the control system, and automatically adjusts the upper material feed rates to match the learned extruder rate to maintain a consistent ingredient ratio.

The mass flow weigh hopper design eliminates funneling and assures consistent, accurate flow of all free-flowing materials.

Standard Features of the SGC Series Continuous Loss-In-Weight Blenders include:

Mechanical Features

- Precision 1/10% of span accurate cantilevered load cells for a very accurate weighing system
- Variable frequency drive (VFD) system with inverter duty (brushless) AC motors; provide precision auger metering with greater recipe ranges compared to traditional DC drives
- Control system automatically adjusts individual ingredient feeders to match learned extruder rate at the exact ratio required
- Upper material supply hoppers include conical reload valves,which allow loading system to operate independently of the blender
- Cast aluminum feeder housings with drains

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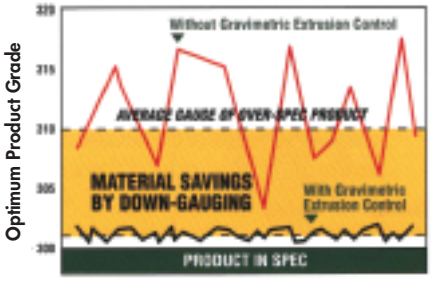
The SGC Series Continuous Gravimetric Blender allows metering on a continuous basis from two to seven materials at a metered rate that provides a consistent blend that follows the extruder rate.

Benefits of SGC Series Blenders

- More consistent product quality:
  - Ingredients are homogeneously dispersed throughout the blend mixture, assuring a more consistent product cross section
  - Continuous blending eliminates surge or starvation of material at the extruder screw
- Reduced resin consumption:
  - Elimination of overfeeding to maintain minimum product specification reduces resin consumption, which results in higher line yields and increased profitability
- Continuous gravimetric blenders respond quickly to changes in the recipe or extruder speed "on-the-fly"
- Most homogeneous blend available



Control Features

- Closed loop control
- LCD display with touch pad control and interface with menu-driven format
- NEMA-rated motor drive panel with window
- RS-485 communications port and parallel printer port
- Recipe storage book for easy retrieval (up to 999 recipes)
- Complete inventory and material usage information

GH, GH-M SERIES

Extrusion Control Weigh Hoppers

GH-M Series Extruder Monitor Unit

The GH extrusion control and GH-M extruder rate monitor units match the extruder throughput, track material usage, and can control extruder output with the optional control system

Features

- Surge hopper with refill valve
- Mass flow weigh hopper design for first in/first out material flow eliminates segregation
- Weigh hopper with sight glass for visual check
- High accuracy, precision cantilever load cell
- Allen-Bradley remote control system with monochrome touch-screen
- Material inventory
- Line footage inventory
- Line and screw speed pickup
- DF-1 communications port (Ethernet optional)
- Haul-off or extruder speed control software included;specify at time of order
- Weight per length control to ±1/2% of maximum extruder rate
- Serial printer port connection
- Hopper lid arranged for Sterling receivers and loaders
- 115/1/60 supply voltage
- Weight per area control available

Options

- Additional speed potentiometer
- Speed adjust module
- Lid for non-Sterling loader/receiver

GH-F SERIES

Gravimetric Feeder for Extrusion

GH-F Series Gravimetric Feeder

The GH-F Series gravimetric feeder adds colorant or other free-flowing material to your process, based on a self-calibrating controller that makes recalibration unnecessary and eliminates the overfeeding that typically accompanies volumetric feeders.

Features

- Precision 0.02% span accurate weighing system
- Serial printer port
- Aluminum and mild steel contact surfaces
- DF-1 communications port (Ethernet optional)
- Field-mounted proximity switch for extruder speed pick-up
- Surge hopper with reload valve
- Square mounting flange for machine-mount
- Allen-Bradley remote control system with monochrome touch-screen
- 3" (76mm) OD discharge opening
- Extruder following circuit
- Hopper lid arranged for Sterling receivers and loaders
- 115/1/60 supply voltage

Options

- Customer-specified mounting flange
- Special voltage (transformer)
- Supply hopper lids cut for other vacuum receivers or loaders; cut-out pattern only[1]

1 Allow additional delivery lead times

Sterling
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