

EMERSON'S SIMULTANEOUS METERED BLENDERS

Consistently Meet Production Targets, Improve Asset Availability, and Increase Throughput

Emerson's Simultaneous Metered Blenders (SMBs) are a turnkey blending system that has multiple flow loops equipped with our best-in-class, automatic flow control valves and flow meters. Components are simultaneously dosed into a header before discharging to tank for final mixing.

How It Works

A typical SMB process includes three basic steps: (1) bulk raw material pre-flush, (2) bulk fluid and minor raw material transfer, and (3) bulk fluid post-flush. The first step, pre-flush, is transferring a preset quantity of fluid into the header line to wet and coat the pipeline before the second step of minor raw material transfer. The pre-flush transfers a preset quantity of fluid into the header line to wet and coat the pipeline before the minor raw material is transferred, while the post-flush applies a preset quantity of fluid to remove most residual raw materials from the pipeline into the holding tank. A pigging system is then typically used to clear all residual fluid from the pipeline into the holding tank. The final mixing will happen in the holding tank by a tank mixing system such as recirculation.

Applications

High accuracy blending for mid-range volume batches of 5-50 metric tons (1,500 - 6,000 gallons) in industrial applications such as:

- Lubricant Blending
- Specialty Chemical Blending

Features and Benefits

- Increase Blend capacity and efficiency compared to traditional batch blending method by simultaneous component addition method
- Leverage Emerson's market leading technology including Micro Motion® ELITE® Coriolis flow meters for high accuracy measurement and control
- Generate zero slop or waste fluid due to Emerson's operational design for incorporating pre-flush and post-flush fluid into the formulation
- Decrease overall mixing time with an optional in-line heater for viscous components
- Reduce cross-contamination between batches with an optional piggable header design
- Improve operational flexibility due to adaptability of system to changing formulations
- Accommodate small volume additives from drums or totes through a pre-mix inlet
- Easily integrate and retrofit blending systems with turnkey system design
- Verify system performance with Emerson's performance guarantees

Emerson's Simultaneous Blenders are an engineered solution. Consult your Emerson representative for more details.

www.emerson.com/integratedblendingsolutions



Turnkey Simultaneous Metered Blender undergoing Factory Acceptance Testing.



Emerson's Simultaneous Metered Blenders are equipped with our Micro Motion ELITE® Coriolis flow meters to ensure high accuracy blending. Photo courtesy of Copton.



A 4-Loop Simultaneous Metered Blender with piggable discharge header installed in China. Photo courtesy of Copton.