

Automated Alternatives for Liquid Products Blending



Helping Companies Increase Profits While Protecting the Environment



GEN3 Mass/Blend®

Continuous Stream Digital Blending Systems

The MASS/BLEND ® Continuous Stream Digital Blending System represents a quantum leap forward in blending system design, eliminating many of the problems associated with large liquid batch preparation and providing more compounding flexibility, faster product turnarounds, shorter practical run capabilities, and superior product quality.



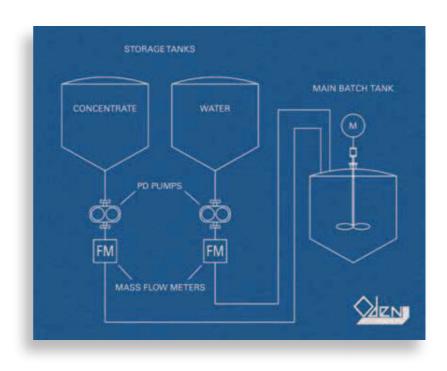


- Maximize plant capacity
- · No start/stop problems or penalties assure accuracy, and ease of use, while reducing waste
- · Reduce cleaning effluents
- Reduce labor costs
- · System operates only on demand reducing utility costs
- Reduce component waste
- Reduce inventory
- Achieves steady state immediately
- Expandable by design for future growth requirements or ingredient stream recipe changes



Automated Batch Addition Systems

- Reduce batch cycle times and associated operating costs
- · Boost accuracy of bulk additions
- Enhance bulk product repeatability
- Improve adherence to established specifications
- Fully and semi-automatic single or multiple channel precision liquid product metering – pretested, performance guaranteed
- Mass meter and loss in weight scalebased systems for net weight applications or SPC requirements.
- Simultaneous bulk raw ingredient addition
- Precision metering and dosing of color, fragrance, vitamins, actives and claim ingredients
- · Concentrate dilution
- Your choice of factory standard OEM component brands
- · Full installation, integration and commissioning support



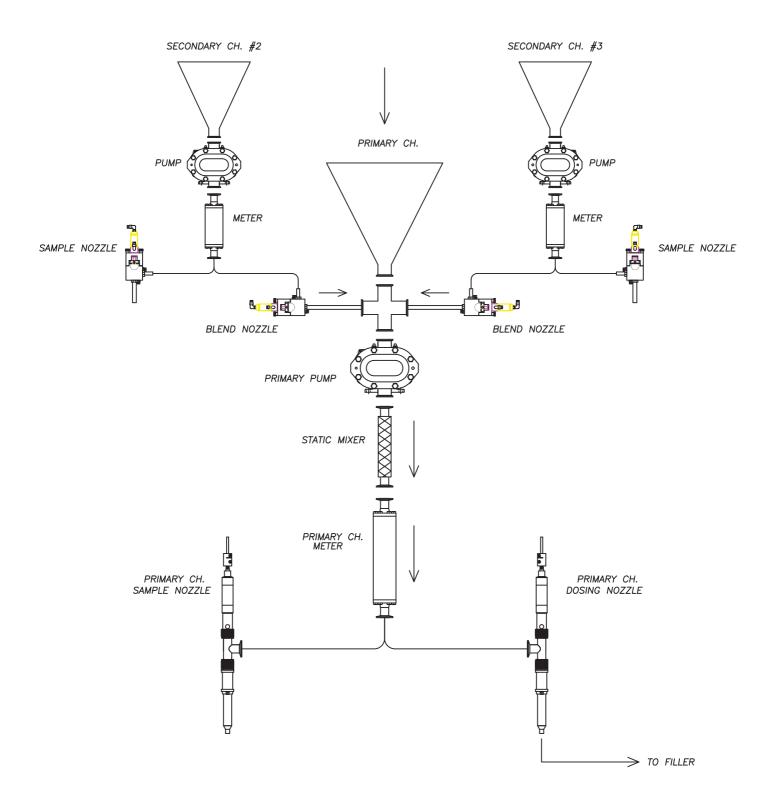
ODEN PROCESS EQUIPMEN

Turnkey Liquid Product Transfer Systems

- Oden Process Equipment Group supplies turnkey transfer systems from raw material bulk supply to blending equipment and batching vessels and on to your packaging lines
- Systems are available for flow rates ranging from microliters to 300 gallons per minute without sacrificing accuracy
- Rugged, durable and flexible designs are available for a wide range of viscosities, temperatures, particulated products and are engineered for your unique chemical compatibility requirements
- Systems equipped with your choice of servo, PMDC motor, or AC variable frequency pump drives and fully integrated volumetric or mass flow meters
- Solutions include micro pump, CleanGear [®] sanitary gear pump, rotary lobe, progressive cavity and air operated diaphragm pump configurations
- Available with stainless steel bases, NEMA 4 washdown enclosures, and Class 1, Division 1, Group D explosion proof construction
- Electronic controls and software, level control integration and actuated valves to complete turnkey installations
- · Highly proven state of the art systems prevent "re-inventing the wheel"







Some of the favorable attributes of the Oden Mass/Blend system:

- -Precisely synchronized flow with servo-pump technology.
- -Digital flow delivers exact mass ratios in synchronized on/off mode.
- -Flow at low back presssue gives outstanding ratio dose performance.
- -No cumulative error from ratio dose cycle to ratio dose cycle.
- -No stop-start problems.