

The ChemPrep Batch blend system can be configured for weight-based or volumetric blending of slurries and high-purity chemicals.



Product Overview

The ChemPrep Batch blend system creates discrete “batches” of chemical rather than operating as an inline blender. Constituents are added sequentially, typically by weight as measured by a scale under the blend tank. Low-volume constituents may be measured in a volumetric or weight-based dosing vessel. After all of the constituents have been added, the blend tank is circulated to homogenize the batch. Optional metrology may be used to validate the completed batch.

Features and Benefits

- Configurable product platform
 - Volumetric or weight-based blending
 - Various metrology options with the ability to dose and correct blends that are out-of-specification
- Single platform for chemical and slurry
 - Common components, software, training, spares and operation
 - Minor modifications to the slurry flow path to ensure slurry health
- Built in a center of manufacturing excellence
 - ISO9001 certified
 - Formal QA/QC procedures, documentation standards, and final test procedures

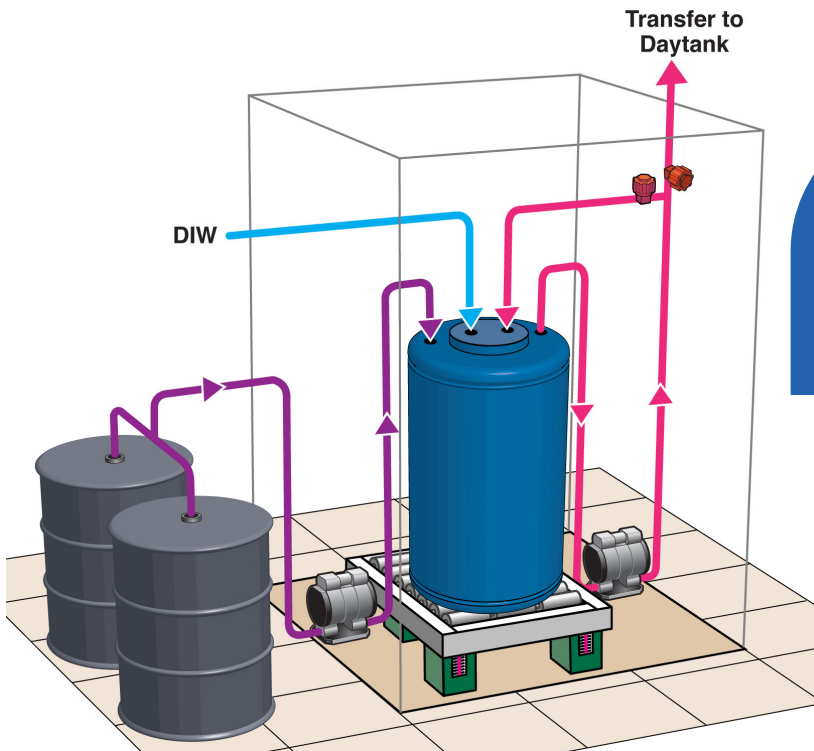
Performance and Reliability

- Typical Blend Capacity: 4-8 LPM
- Blend Accuracy: Up to 1% relative error
- Uptime >99.95%

Configuration Options

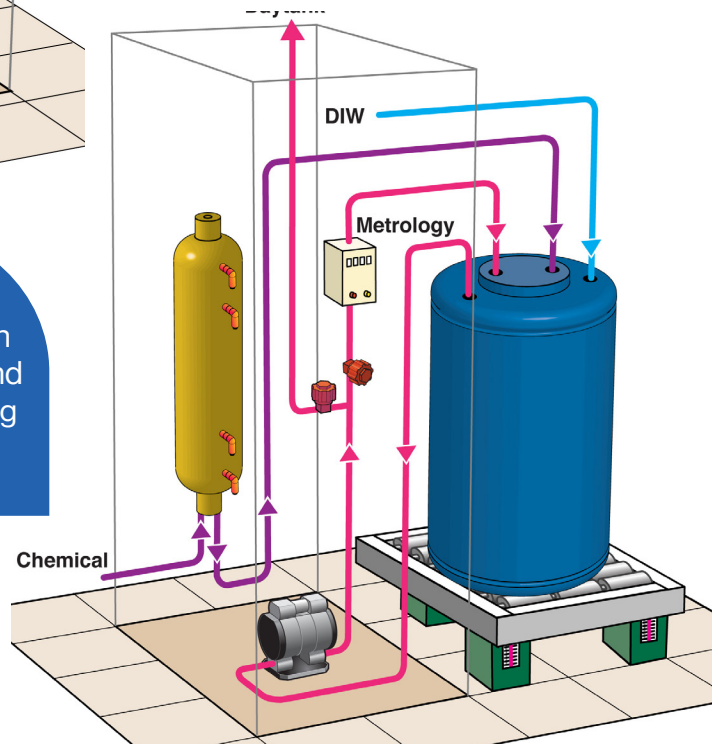
- Blend Technologies
 - Weight-based blending
 - Volumetric blending
 - Combination of blend technologies
- Metrology Options
 - Conductivity standard
 - Single or redundant probes
 - pH, index of refraction, specific gravity or other devices available as options
 - Volumetric, weight-based or flow-based batch correction when metrology is included
- Blend Configurations
 - Batch blend and transfer to daytank
 - Batch blend in alternating blend/day tanks
 - Batch blend with metrology validation and dosing/correction prior to transfer
- Other Options
 - 1 or 2 blend tanks
 - Integrated drum/tote unloading
 - Redundant drum/tote unloading pumps
 - Redundant circulation/transfer pumps
 - Concentrate filtration

Example Flow Paths



ChemPrep Batch Weight-Based Blender with no Metrology

ChemPrep Batch with Metrology and Volumetric Dosing



Safety Features

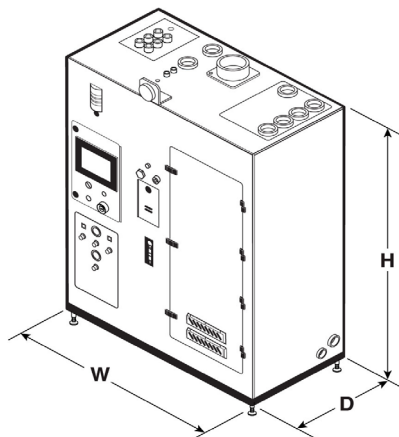
- Cabinet rated for 110% volume containment
- Dual-level cabinet leak detection
- Door interlocks
- DIW spray-guns
- CDA-purged electrical compartment
- Audible and visual warnings and alarms
- Local and remote EMO
- Transparent door panels for safe viewing and trouble-shooting
- Configurable alarms for blending performance
- Designed for compliance with SEMI S2, S8 and S14 guidelines, and CE low-voltage, Machinery and EMC directives

Typical Utility Requirements

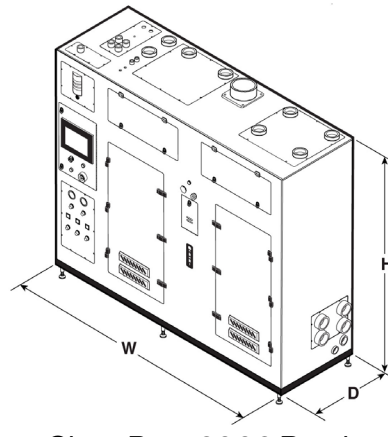
Utility	Connection Type	Flow/Pressure
Electrical	N/A	Configuration-specific
UPW Supply	¾" Flaretek	40-60 psi
UPW Return	½" Flaretek	<25 psi
CDA	½" SST compression	100-125 psi
Process N ₂	½" SST compression	100-125 psi
Exhaust	6" connection	0.5" WC minimum

Cabinet Layouts & Dimensions

Cabinet Type	Description	W x D x H in Inches (mm)
ChemPrep 1000 Batch	Single-bay cabinet	60" x 30" x 86" (1524 x 762 x 2185)
ChemFlex 2000 Batch	Two-bay cabinet	95" x 30" x 86" (2413 x 762 x 2185)



ChemPrep 1000 Batch



ChemPrep 2000 Batch

Contact Us

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