



ChemFlex™ 3000 CMP Slurry Blend & Dispense Unit

The ChemFlex name represents a flexible and highly configurable chemical and slurry platform that offers high performance & reliability.

The ChemFlex 3000 CMP is a slurry unload, blend and dispense system packaged in a single cabinet.



Product Overview

The ChemFlex 3000 CMP provides slurry supply container unloading, blending and dispense as a one-cabinet solution. The design is based on weight-based blending and Levitronix dispense pumps. Both filtration and metrology are integral to the cabinet.

The ChemFlex 3000 CMP is paired with dual blend/day tanks. Metrology options are configurable. The unit can be built with no metrology, a single metrology package shared between blend and dispense, or dual metrology packages. Conductivity, refractive index, specific gravity and pH are typical metrology options.

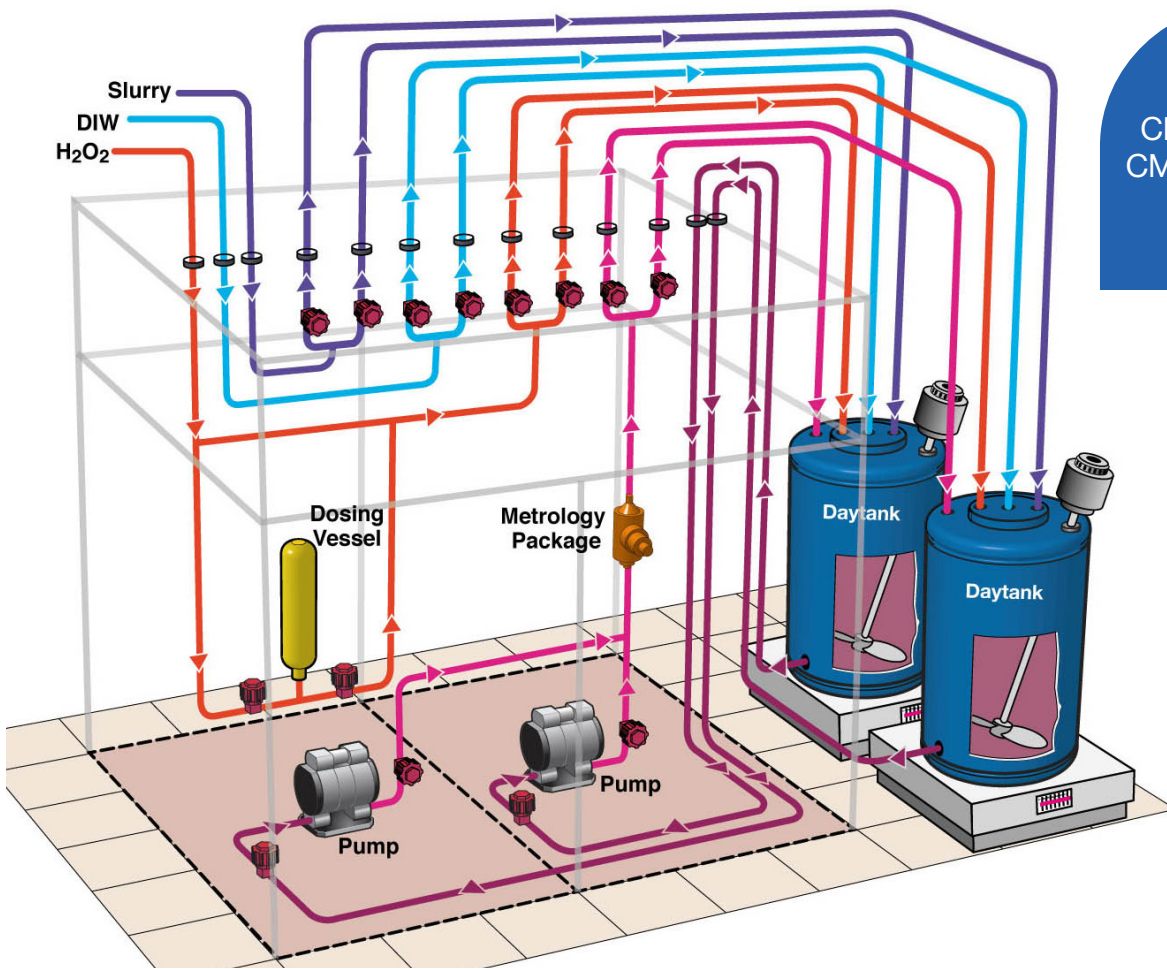
Features and Benefits

- Single cabinet rather than separate unloading, blend and dispense units
- Configurable based on application needs
 - Tank sizes between 200-1000L
 - Multiple metrology configurations and device types
- Reliable performance for high-volume manufacturing settings
 - Design and component selection based on 25+ years of chemical experience
- Built in a center of manufacturing excellence
 - ISO9001 certified
 - Formal QA/QC procedures, documentation standards, and final test procedures

Performance and Reliability

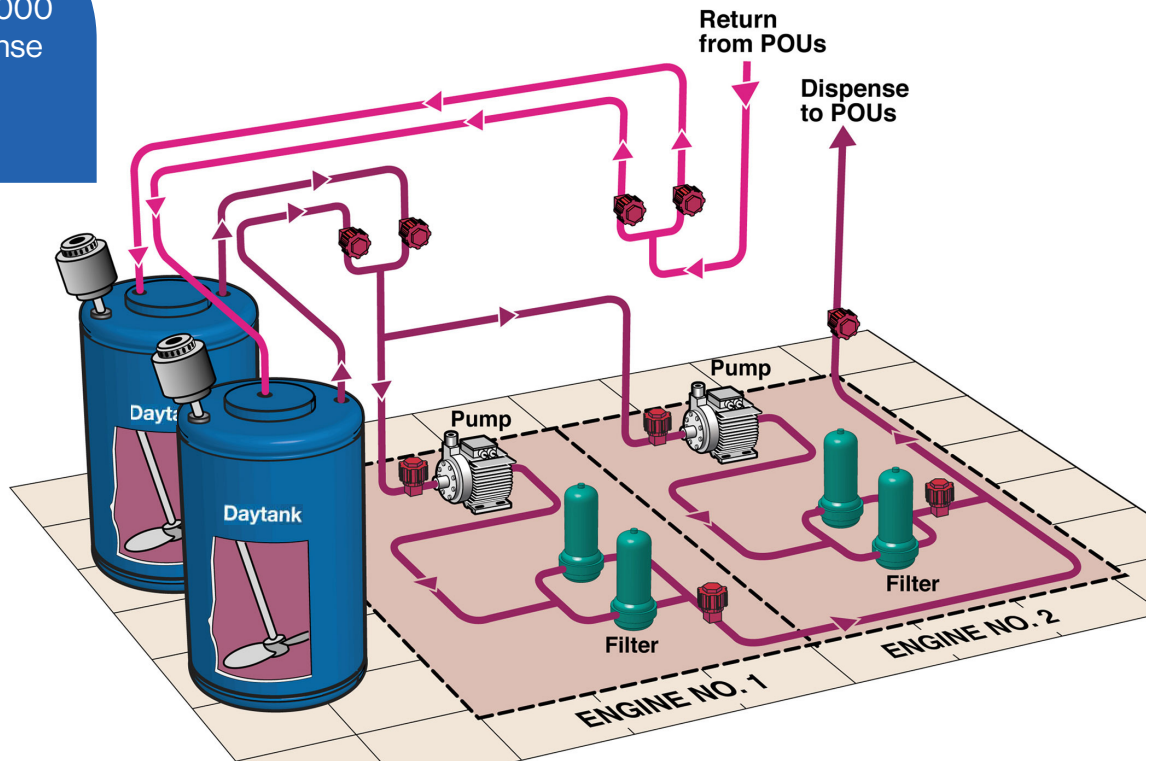
- Uptime >99.98%
- MTBF >8000 hours
- MTTR <2 hours

Example Flow Paths



ChemFlex 3000
CMP Blend Engine

ChemFlex 3000
CMP Dispense
Engine



Configuration Options

- Constituent Options
 - Single or dual drums or totes
 - Pressurized supply (such as H₂O₂)
 - Up to 3 constituents plus UPW
 - Drum stirrers or circulation-based agitation
- Metrology Configurations
 - No metrology
 - Single metrology package shared between blend and dispense functions
 - Separate blend and dispense metrology
- Metrology Devices
 - Conductivity
 - Refractive Index
 - Specific Gravity
 - pH
 - Liquid Particle Counter
- Tank Options
 - Dual 200L tanks in a cabinet
 - Remote tanks of any size
 - Agitation via recirculation or mechanical stirrer

Safety Features

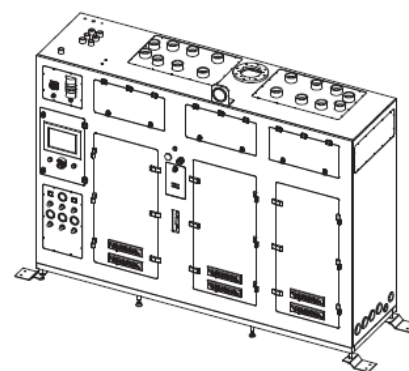
- Segregated cabinet compartments with 110% volume containment
- Dual-level cabinet leak detection
- Door interlocks
- DIW spray-guns
- CDA-purged electrical compartment
- Audible and visual warnings and alarms
- Local and remote EMO
- Transparent door panels for viewing and troubleshooting
- Options for exhaust sensor type, high-flow sensor and other instrumentation
- Designed for compliance with SEMI guidelines for Semiconductor Manufacturing Equipment, and CE Machinery, Low-Voltage, and EMC directives

Typical Utility Requirements

Utility	Connection Type	Flow/Pressure
Electrical	N/A	208V, 3-Ph, 30A
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	360 SCFM typical

Cabinet Layout & Dimensions

Cabinet Type	W x D x H in Inches (mm)
ChemFlex 3000	112" x 30" x 86" (2845 x 762 x 2185)



ChemFlex 3000 CMP

Contact Us

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