Air Liquide

ChemStar™ Waste Collection System

The ChemStar waste collection system can safely collect virtually any aqueous or solvent chemical in dual drums or totes.

Product Overview

The ChemStar waste collection system collects spent process chemicals and directs the flow into drums or totes located within the cabinet. Highly accurate digital scales determine the status of the drums, alerting operators to 'drum full' conditions via the color touch screen display and an audible alarm. In a dual-container configuration, the system automatically redirects the flow from the first to the second collection container and displays a flashing light, signaling that the full container needs to be removed.

Features and Benefits

- Flexibility
  - Can be used for virtually any chemical
- Weight-based level sensing
  - Weight-based level measurement permits features such as early "drum full" notification and configurable "drum full" set-points
- Ease of use and maintenance
  - Option for front-access-only cabinet design
  - Heavy-duty rollers enable easy removal and replacement of drums
- Built-in safeguards
  - Dual "high" level sensors
  - >110% volume containment
- Built in a center of manufacturing excellence
  - ISO9001 certified
 - Formal QA/QC procedures, documentation standards, and final test procedures

Performance and Reliability

- Uptime >99.9%
- MTBF >2500 hours
- MTTR <2 hours

Configuration Options

ChemStar waste collection systems can be built for single or dual-container collection in drums or totes. Both aqueous and solvent configurations are available.

In each case, the collection container is mounted on a scale platform to determine when the container is full and needs to be replaced. Dual-container configurations automatically divert chemical to the stand-by container when the online container is full. The ChemStar software includes all of the necessary safety precautions to prevent overfilling.
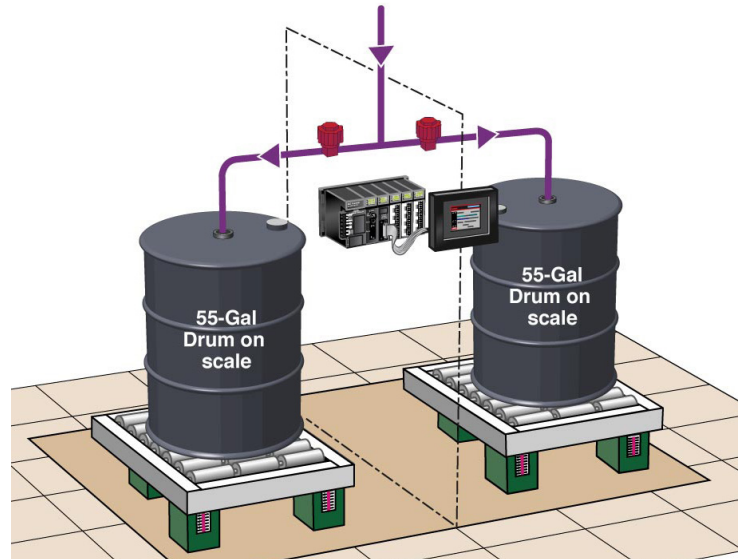
Safety Features

- Cabinet rated for 110% volume containment
- Dual-level cabinet leak detection
- Door interlocks
- CDA or N_2-purged electrical compartment
- Audible and visual warnings and alarms
- Local and remote EMO

- Transparent door panels for safe viewing and trouble-shooting
- Designed for compliance with SEMI S2, S8 and S14 guidelines, and CE low-voltage, Machinery and EMC directives
- Optional UV/IR fire detection and CO_2 fire suppression for solvent systems

Typical Utility Requirements

Utility	Connection Type	Flow/Pressure
Electrical	N/A	24 VDC, 5A or 120 VAC, 2A
CDA	½" SST compression	100-125 psi
Process N_2	½" SST compression	100-125 psi
Exhaust	4" connection	0.5" WC minimum

Typical Cabinet Layouts & Dimensions

Cabinet Type	W x D x H in Inches (mm)
Dual Drum	78" x 38" x 79" (1981 x 965 x 2007)
Dual Tote	119" x 56" x 85" (3023 x 1423 x 2159)
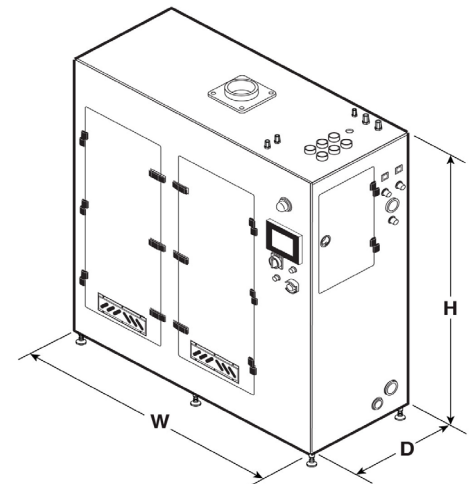
ChemStar Dual-Drum
Collection System

Air Liquide
creative oxygen

The world leader in gases, technologies and services for Industry and Health, Air Liquide is present in 80 countries with approximately 68,000 employees and serves more than 3 million customers and patients.