

The Coupling Transfer Station (CTS) combines two distinct functions into a single unit. It provides an interface between a tanker supply truck and the fab, and transfers chemical from the bulk storage tank to the system daytank.



Product Overview

The Coupling Transfer Station is a bulk chemical management system that combines the functionality of a clean coupling booth tanker interface and transfer station into a single unit. Chemical is transferred from the tanker truck to the bulk storage tank(s) using pressurized N₂. The bulk-tank transfer circuit utilizes redundant pumps and a filter bank to polish the chemical in the bulk storage tank(s) as well as provide a reliable transfer mechanism to the main system daytank.

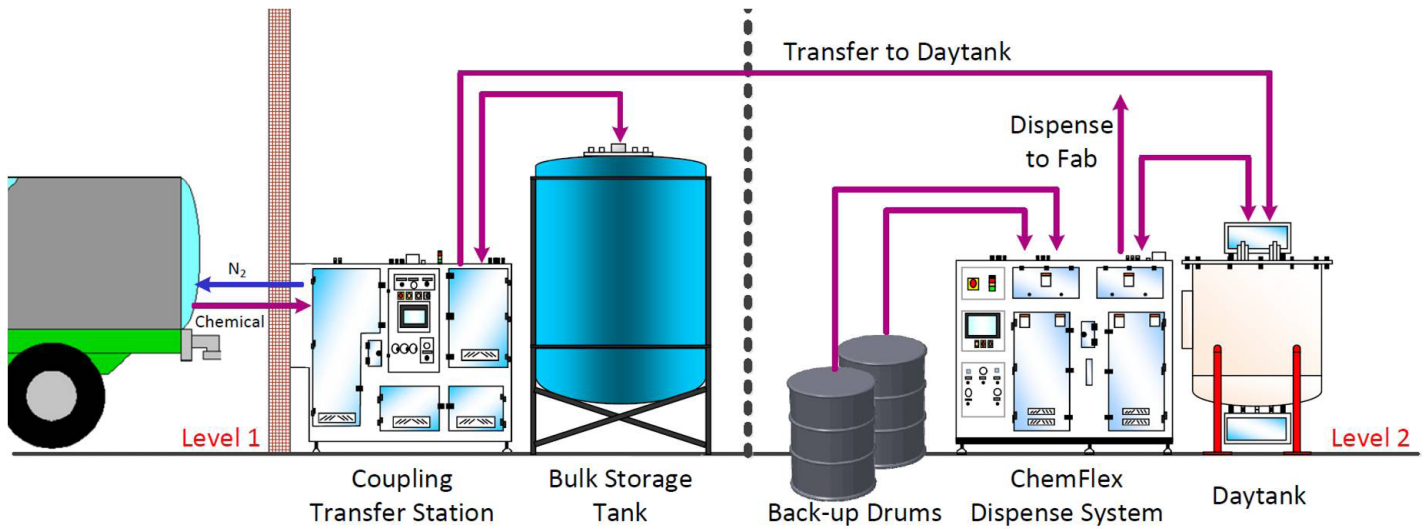
Features and Benefits

- Numerous features designed for operator safety and chemical purity
 - Keyed couplers to prevent transfer of the wrong chemical
 - Coupling purge prior to transfer to ensure clean connections
 - Sample port to enable sampling prior to transfer
- Low-cost, small-footprint bulk supply option
 - Combined Clean Coupling Booth and Transfer Station functionality saves capital costs, fab space, hook-up and utility costs
- 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

Example System Layout



Safety Features

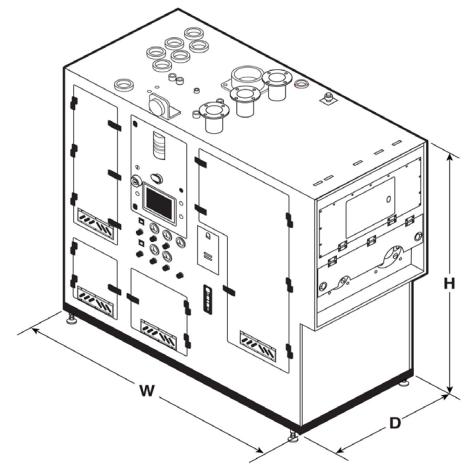
- Chemical-specific, key-coded couplers to prevent cross-contamination
- Two checks for coupler engagement: capacitive sensor for open and closed positions and automated pressure test of transfer circuit
- Pressure relief valve and transducers for N₂ to prevent tanker over-pressurization
- Cabinet rated for 110% volume containment
- Dual-level cabinet leak detection
- Door interlocks
- CDA or N₂-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 CO₂ fire suppression for solvent systems

Typical Utility Requirements

Utility	Connection Type	Flow/Pressure
Electrical	N/A	24 VDC, 7.5A
CDA	½" SST compression	100-125 psi
Process N ₂	¾" SST compression	100-125 psi
Exhaust	6" connection	0.5" WC minimum

Typical Cabinet Layout & Dimension

Cabinet Type	W x D x H in Inches (mm)
CCB	80" x 36" x 77" (2032 x 915 x 1956)



Coupling Transfer Station

Contact Us

Air Liquide Electronics
 Advanced Equipment Systems Division (AES)
 Phone: 952-937-6340
 ww-sales-equipment@airliquide.com



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.