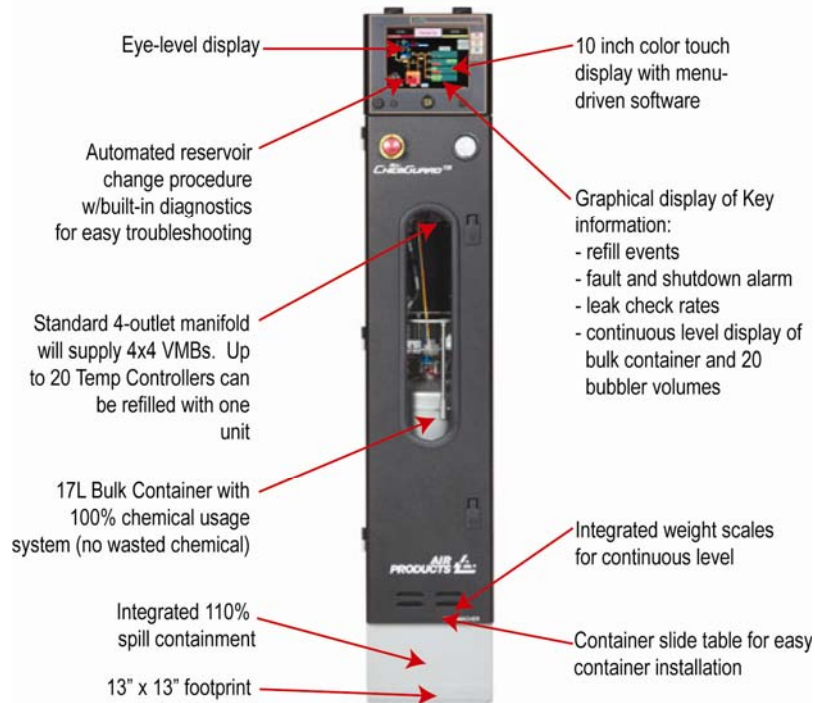


**Drive to Grid Parity with CHEMGUARD® Technology**  
**CG1000 POCl<sub>3</sub> Delivery System**  
**Reduce POCl<sub>3</sub> bubbler refill costs by more than 45%**



**Minimize Cost of Operation**

- Eliminate tool downtime due to host container replacements
- Each system save up to 460 hours per year of production critical down time
- Eliminate chemical waste (typically 15% or up to 77.6kg per year)
- Production labor, logistics, shipping and handling costs can be reduced by more than 20 times

**Minimize Risk of Contamination**

- Opening of wetted-surface connections where PPE is required will be reduced by up to 20 times
- System ensures clean connections by implementing proven purge sequences and h/w designs
- Reduce atmospheric exposure events to wetted surfaces by 184 to 230 times per year

**Improve Delivery System Safety and Reliability**

- Risk of exposure to highly-toxic chemical is virtually eliminated
- Decrease cost of managing safety by up to 20 times (Reduce Training, PPE and ERT costs)
- All production functions are fully automatic, including refill of host containers, replacement of bulk and host containers
- Leak checking is automatic and interlocked to protect operators and equipment
- Full menu of alarms, events and diagnostic functions to prevent exposure and equipment damage

**Improve Equipment Protection**

- Robust system has been proven to work in mass-production of PV cells
- Multiple redundant sensors are in place to prevent liquid and vapor flow to wrong end-points
- Event and alarm log easily accessible to monitor production activities

*For More Information*

If you would like additional information or technical assistance, write or call:

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