

# CTS Bubbler Vessels For Vapor Delivery Systems

## DATA SHEET

CollabraTech's stainless steel bubbler vessels are designed to support a variety of vapor delivery systems used in manufacturing processes for semiconductor, solar, and related industries. The vessels deliver ultra-high-purity (UHP) precursors used in:

- Atomic layer deposition
- Plasma-enhanced atomic layer deposition
- Chemical vapor deposition
- Plasma-enhanced chemical layer deposition
- Epitaxy



*20L vol. Bubbler Vessel*



*10L vol. Bubbler Vessel*

Available in standard 5-, 10-, and 20-liter volumes, CTS bubbler vessels can also be customized to support proprietary sparger diffusion configurations. Options include:

- Inlet for automatic refill
- Level sensing
- Thermal conditioning
- Precursor monitoring

## How Bubbler Vessels Work

As part of vapor delivery, bubbler vessels are essential for converting liquid chemical into vapor. After being filled with the liquid precursor, gas is bubbled through the vessel using a sparge diffuser to maximize the vapor saturation. Feedback from an active linear level sensor maintains the vessel at the configurable set point level.



## Features & Benefits:

- Welded vessel construction
- Electropolish wetted surfaces
- Meets SEMI S2 standards
- Standard connection hardware
- Fits most vapor delivery systems
- 5-, 10-, or 20-liter sizes
- Helium leak tested to  $1.0 \times 10^{-9}$  atm-cc/s
- High-purity inlet/outlet valves