JST’s “CLV” Dryer utilizes an environmentally friendly, ultra clean technology for precision drying of Silicon Wafers, Glass Substrates, Disc Drives, Optic Lenses and many other products.

Precision drying is critical for maintaining the cleaning process. JST’s CLV is a hybrid of two proven technologies, vacuum and IPA (isopropyl alcohol) drying, utilizing the best features of both in an effective closed loop process. Ultra clean vapor is remotely generated and then introduced into a sealed drying chamber. The closed loop system allows fresh IPA vapor to envelop the tank volume and condense on the surfaces to be dried, penetrating the smallest areas. Residual water droplets clinging to the product absorb the IPA, reducing the surface tension of these droplets causing them to flow off the product. No vapor is emitted into the atmosphere during this closed loop cycle. A low pressure vacuum pulls any remaining moisture from the sealed chamber and away from the product being dried. At the end of the drying cycle the chamber is backfilled with inert gas so that the clean, dry product is removed from a virtually inert atmosphere.

**Drying Applications**

- Silicon Wafer
- Glass Substrates
- Disc Drives
- Optics and more

**Options**

- Charcoal Filter
- Bulk Chemical Dispense

**Safety**

- No Vapor Present during Load/Unload
- Sealed Vessel with Closed Loop Process
- Low Emissions (less than 1 lb per day)
- Indirect Heating of IPA
- CO2 Fire Suppression System
- Automated Lid with Safety Interlocks

*Can be incorporated into JST Automated Station*
Controls

- Industrial Grade PLC
- Modular design for quick replacements and minimal down time
- Interactive Touch Screen Interface
- Alarm Indicator Screens for easy troubleshooting
- Multi-level Menu Design
- Flexible process adjustment
- Visual process flow during recipe operation
- Multi level security structure
- Independent CO2 Fire Controller interlocked to master PLC control

Proven Process

- Particle neutral drying to 0.16m size.

Efficient process for wafers in quartz cassette or glass panels up to 550mm x 650 mm.

- 10 minute dry cycle
- 60 cc IPA per cycle

Facility Requirements

- CDA: 80 psi, < 10 cfh
- Argon or Nitrogen: 20 psig @ 2 cfm, < 1.5 cft per cycle
- Exhaust: ~ 80 scfm, 4” collar
- Electrical: 208 VAC, 3f, 5 wire, 30 amp