

// SPECIFICATIONS

MODEL	7G495
PROCESS STATIONS	4
DISKS/CYCLE	100
PROCESS TYPE	Gravity Drain
FLUID VOLUME (GALLONS/LITERS)	22.0 / 83.3
DIMENSIONS (D X W X H)	37.5" x 92.5" x 54.47"
WEIGHT	1290 lbs (as shipped), 1600 lbs (fully loaded)
METERED DRAIN RATE	160 mm/minute (maximum)
ELECTRICAL	40A, 110V AC, 50/60 Hz; AIC Rating - 10,000 A

DLS 100

// GRAVITY DRAIN DISK LUBRICATION SYSTEM



INTEVAC is the market leader in hard disk deposition, equipping leading disk manufacturers worldwide with state-of-the-art sputtering and lubrication systems. The DLS 100 is Intevac's latest gravity drain disk lubrication system that allows manufacturers to uniformly lubricate disks in a temperature controlled, low vibration, contamination free environment with minimal solvent loss. The system is ergonomically designed, process efficient and is compliant with industry safety standards.

// FEATURES & BENEFITS

1. LUBE UNIFORMITY

Patented parabolic upper tank design allows for a constant departure velocity of the solution across the disk surface, ensuring lubricant uniformity to +/-1 angstrom. An anti-vibration cradle further ensures that the disks remain motionless during deposition and vibration sensors alert operators of fluctuations.

2. MINIMAL SOLVENT LOSS

The DLS 100 uses several mechanisms to prevent evaporative loss of expensive solvent. The solvent is never exposed to the atmosphere and process chambers have dual lids secured with a process interlock. A nitrogen gas purge creates a vapor free zone in the upper process chamber during deposition. The system uses cold coils above vapor zones, a cold-water shell and a tube condenser to condense solvent vapors back into the lower reservoir tank; effectively reclaiming vaporized solvent.

3. LUBE THICKNESS CONTROL

Metered dual drain control valves allow users to preset drain rates enabling them to achieve different lube thickness easily.

4. REDUCED CONTAMINATION

Electro-polished stainless steel construction and Teflon seals reduce contamination by external sources. Dual filter systems remove particulate contaminants from the solvent.

5. CLEANER PROCESS

Nozzles within the upper tanks spray the disks with solvent to remove particulate surface contaminants before lubrication. Water is separated from the solvent by a water separator and is collected in an optional buffer drain. Level sensors alert operators of water levels in the buffer drain.



6. TEMPERATURE CONTROL

Upper tank nozzles bring the disks to a suitable temperature by spraying them with the solvent before lubrication. A total of three temperature sensor probes are provided for temperature monitoring. Customer can also opt for the Chiller, a stand-alone dual temperature control unit to facilitate system cooling.

7. SAFETY

The DLS 100 is equipped with a safety interlock system that is compliant with SEMI S2 standards. Gross fluid leak detection by a fluid containment pan helps prevent catastrophic leaks.

8. EASE OF USE

Touchscreen interface and PLC control make operating the system easy and intuitive. A gas spring for the lower tank lid makes it much easier to open during refills requiring less than a 5lb force.

9. IMPROVED THROUGHPUT

Bellow shut-off valves and drain valves result in shorter cycle times and better throughput.

10. PROCESS MONITORING

Vibration sensors, temperature sensors and buffer drain sensors send automatic system alerts to operators making process monitoring a lot easier. Process timers are also available to facilitate process monitoring.

