

P-Type Amorphous Oxide Semiconductor Atomic Layer Deposition System

Important Notes

- 1. This equipment is not available for use by external users. Use of this equipment is restricted to members of resident academic and research teams and TSRI-designated personnel who have successfully completed the required assessment and are registered as authorized users.**
- 2. Prior to operating the equipment, users shall verify that the system status, temperature, and pressure are within normal operating conditions.**
- 3. Users are required to complete the equipment usage logbook accurately and in full.**
- 4. This equipment is designed to accommodate 6-inch wafers, 8-inch wafers, and broken silicon wafer pieces. Any special circumstances shall be discussed with the equipment engineer in advance.**
- 5. The process temperature shall not be adjusted without prior authorization. Any special circumstances shall be discussed with the equipment engineer in advance.**
- 6. The film deposition thickness for each single run shall not exceed 20 nm.**
- 7. Each application form may include no more than three wafers for entrusted processing.**

Laboratory Equipment Safety Declaration

1. During equipment operation, in the event of a noticeable earthquake, power outage, toxic gas alarm, or fire alarm, all personnel shall immediately evacuate the laboratory via the designated emergency evacuation route.
2. In the event of an emergency, including but not limited to gas leakage, fire, or personnel injury, personnel shall immediately notify the **Emergency Response Command Center** for assistance (**Ext. 7761 & 7762**).
3. Users shall confirm the proper use and locations of all protective equipment that may be required for operating this system, including emergency showers, air respirators, fire extinguishers, and ointments.
4. This system shall be operated only by approved users and **only with silicon substrates**.
5. Experimental conditions shall not exceed the originally specified operating ranges, including gas flow rate, process temperature, process pressure, and other relevant parameters.
6. Users shall comply with engineer announcements regarding suspended processes or unavailable service functions for this equipment. If any user is found to be operating the equipment in violation of applicable regulations, including failure to register usage records, failure to follow the SOP, use of unauthorized materials, or any other conduct that may damage the equipment, the equipment engineer (**7510**) or safety personnel (**Ext. 7737**) shall be notified immediately.
7. If the equipment does not operate properly, users shall first review the previous records and clearly describe the issue in the logbook. A message shall be left for the equipment engineer, who will diagnose the cause and respond as soon as practicable.
8. Before leaving the laboratory, users shall reconfirm that all equipment components and modules, process gas flow rates, and temperatures have been returned to standby mode. Users shall also complete the experiment logbook accurately.
9. Any individual who fails to comply with the above instructions shall be subject to disciplinary action in accordance with the **Center's management regulations**.