

## Nitride Strip Chemical Bench

*Operating Procedures LINK*



### **Process Description:**

Etching is a process of removing material from the surface of a wafer. Various methods of etching include: wet chemical, electrochemical, plasma etching, reactive ion etching, ion beam milling, sputtering and vapor etching. Wet etching is a completely chemical process in which the etchant solution can be highly selective to material. The reactive species in the solution creates a soluble byproduct that moves away from the exposed surface of the wafer. The etch process is controlled by time, bath time and solution composition.

### **Equipment Description:**

The nitride strip chemical bench has one process tank containing phosphoric acid. The bench is equipped with two wafer holders and one holder for wafer pieces and one quick dump rinse tank (QDR). The process tank bath consists of a Fluoropolymer tank, an immersion heater, and a condensing head with coils. When the system achieves 170°C the condensing coils and make-up DI drip are activated to maintain the proper water concentration in the phosphoric acid. A level sensor monitors the solution level in the tank and will alarm when a low liquid level is detected.

<b><i>Materials Allowed</i></b>	<b><i>Materials Not Allowed</i></b>
Silicon	Metals
Silicon dioxide	III-V semiconductors
Silicon nitride	Glass
Quartz	Photoresists
	Polymers