

**Description:**

The equipment is designed to etch Si plates in manufacture of semiconductors. It is designed as a stand-alone chemical box. The materials used are chemically resistant and they meet the requirements of FM 4910 standard for the use in clean rooms.

The box has two tubs and is equipped with a manipulator for two six-inch baskets or for one eight-inch basket. The cycle of etching and rinsing of the Si plates takes place automatically in the equipment according to the selected technological receipt.

The etching tub (rear) is designed for a chemical mixture. Chemicals pass through the circulation loop. The pump sucks the bath from the overflow gutter into the tub and returns it back to the bottom part of the tub through a flow heater and a filter of solid particles.

The rinse tub (in front) is filled with deionized water by means of bottom filling. Nitrogen which assists circulation of the bath is conducted into the tub from the bottom in order to achieve more efficient rinsing of Si plates .

**Options and Features:**

- Etching is done by means of chemicals based on hydrofluoric acid. All process rooms of the equipment are safeguarded with safety guards.
- Ergonomic structure of the box provides operators with an easy operation and with a good overview of the ongoing process.
- The process is managed by a PLC with a touch screen which displays the scheme and the parameters of the working process.
- The chemicals are pumped with pneumatically operated membrane pumps.
- Quick discharge of the rinsing bath is performed by a pair of pneumatically operated Quick Dump valves.
- The level of the bath is checked by a *bubbler*, i.e. a sensor working on the principle of pressure difference in the pneumatic line when the required level is reached.
- The washing tub and the arm of the manipulator are equipped with built-in showers with adjustable nozzles to rinse with DI water.
- The equipment is connected to the electric network, pressure air and nitrogen, distribution network of chemicals and external exhaust of the air.

**Basic technical data:**

Length:	880	mm
Width:	1290	mm
Height:	2115	mm
Weight:	310	kg
Power supply:	3 NPE 400/230V AC 50 Hz TN-S	

