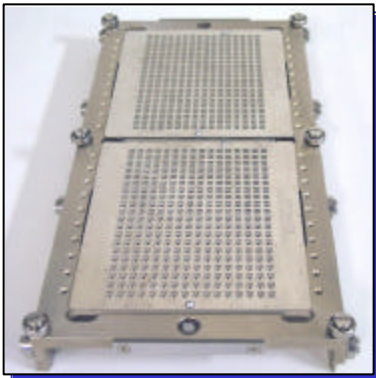




W-5910ie QUARTZ CRYSTAL ETCHING SYSTEM

US PATENT 6,273,991 B1

- Quartz Crystal SMD devices are adjusted to target frequency by Ion Beam Etching of the electrode material
- The motional parameters of the crystal remain virtually unchanged
- Up to thirty-two (32) parts are processed simultaneously for high system throughput
- Small crystal electrodes are as easy to precisely adjust as large electrodes
- High Drive capability
- Measured parameters are checked against easy to define Q.C. limits
- SMD devices are continuously loaded, unloaded and adjusted to frequency with optional elevator system
- Two magazines each hold 5 transport boats



Transport Boat

- Supports small SMD sizes including 3.2x5.0, 3.2x2.5, 2.5x2.0, 2.0x1.6, 1.6x1.25
- Transport boats carry SMD devices in S&A flip pallets
- Many pallet matrix configurations available including 16x40, 8x60, 8x30

SPECIFICATIONS

250B-1 Frequency Range:
250C Frequency Range:
Etching Performance:

15 KHz to 220 MHz
15 KHz to 500 MHz
± 1 ppm typical final frequency

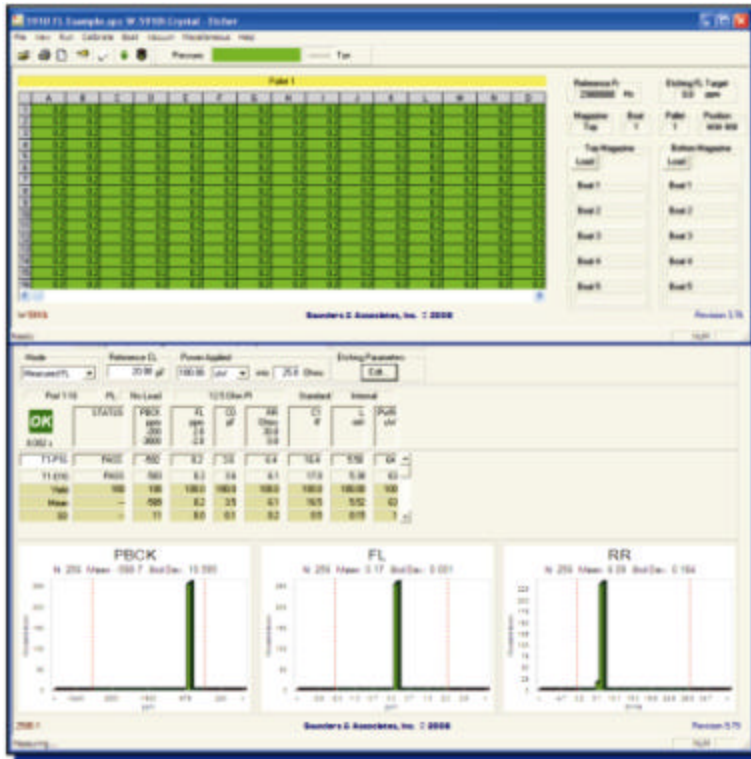
SAUNDERS & ASSOCIATES, LLC

2520 E. Rose Garden Lane - Phoenix, Arizona 85050 USA (602) 971-9977 FAX (602) 971-5522
E-Mail sales@saunders-assoc.com - World Wide Web <http://www.saunders-assoc.com>

SYSTEM CONFIGURATION

- Two S&A 250B-1 or 250C Network Analyzers
- Direct Drive Roughing Pump
- Cryo Pump
- S&A Dual Channel High Drive
- S&A Ion Gun
- S&A 690B Elevator System
- Computer
- *Windows*[®] based System Software

SCREEN FORMAT



FACILITY REQUIREMENTS

- **Power:** 380VAC/208VAC
3-Phase, 7KVA, 50/60 Hz
- **Inlet Pressure:** 90 - 100 PSIG
 Air: 90 - 100 PSIG
 Nitrogen: 70 - 100 PSIG
 Process Gas: 20 PSIG
- **Dimensions:** W 53" x D 59" x H 88"

SAUNDERS & ASSOCIATES, LLC