

JPSA Announces Shipments of Automated Cassette-to-Cassette Wafer Processing Systems

Hollis, New Hampshire, USA -- J P Sercel Associates has begun shipping IX-1100 C2C UV 193nm excimer laser wafer processing systems equipped with cassette to cassette automated wafer loading/unloading systems and JPSA advanced factory automation software. These fully automated systems can process more than eighty (80) wafers per hour, and are ideally suited for a wide variety of materials such as: GaAs, silicon, sapphire.

Applications include flash-on-the-fly lithography, thin film patterning, annealing, and doping, micromachining, microvia drilling, patterning, and others down to 1 micron resolution. Features include fully automated machine vision alignment and inspection, sub-micron accuracy air bearing stages, and large Field of View (FOV) homogenized beam delivery systems.

The IX-1100 is an industrial excimer workstation, a compact integrated UV processing system with a built-in high- power excimer laser. It features automated mask control, step and scan and high-resolution imaging and workpiece viewing using the JPSA Chromacel line of advanced beam delivery equipment. Optional modules include beam attenuators and homogenizers and dielectric laser masks.



The New IX-1100 C2C includes an industrial robot manufactured by JPSA. It can interface with a variety of cassette modules per customer requirements. The system also includes JPSA advanced factory automation software supporting; machine vision for fully automatic wafer alignment, as well as automated laser calorimetry of multiple power and energy meters, plus multiple beam profilometers for laser beam size and shape, data archiving, and QC.

The system is available with optional SQL database connectivity; this feature can be customized to the specific application's requirements. Typical applications include tracking of process data by part number. More advanced implementations have involved database-driven, automatic configuration of the system on a part-by-part basis.

JPSA products and services include UV excimer and DPSS laser micromachining systems, UV and VUV laser beam delivery systems, UV laser materials processing development, optical damage testing, and excimer laser refurbishment services. JPSA operates a high-performance UV laser job shop as well as a systems engineering and manufacturing business. For more information, visit www.jpsalaser.com, or contact the company at 220 Hackett Hill Road, Manchester, NH 03102 USA, Tel. 603.595.7048, fax 603.598.3835.