

Press Release

For Release December 2, 2006

Press Contact: Michael L. Martel
Tel. 603-595-7048 x110
E-mail: mmartel@jpsalaser.com

JPSA Introduces High-Precision Z-theta Motorized Rotary Stage

Hollis, New Hampshire, USA, december 2, 2006 – A new integrated Z-theta motorized stage from J. P. Sercel Associates (JPSA) offers high precision operation for wafer processing and positioning. Its non-contact operation – as opposed to typical worm and wheel rotary designs - reduces maintenance requirements, is less susceptible to wear, and is not affected by torque variations because there's no gear interface. The new Z-theta stage provides 360 degrees of rotational capability, and its Z-axis capability makes it applicable to a wide range of applications, with the ability to accommodate wafers of varying thicknesses and diameters.



Integrated Z-theta Stage

Advantages of the new rotary stage include continuous or limited travel, excellent accuracy and repeatability, a cog-free motor for smooth motion; zero gear backlash; low wobble and bearing run-out; and no accuracy changes over time due to gear wear.

The stage is ideal for laser micromachining applications and wafer processing, among others. Resolution (microns/arc seconds) is 0.25 μ m in the Z axis, and 0.72 arc seconds in the Theta axis; Repeatability of ± 2 μ m in the Z axis, and ± 1 arc second for Theta.

JPSA products and services include UV excimer, DPSS and ultra-fast 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 17D Clinton Drive, Hollis, NH 03049 USA, Tel. 603.595.7048, fax 603.598.3835.

#####