

Launch of Next-Generation SS-3100 Single Wafer Cleaning System - Highly compact 8 chamber unit delivers industry-leading productivity -

The Semiconductor Equipment Company (president: Eiji Kakiuchi) of Dainippon Screen Mfg. Co., Ltd. (headquarters: Kyoto, Japan) has developed the SS-3100 single wafer cleaning system. The SS-3100 features both high productivity and space savings, and also meets the requirement for increasing miniaturization of semiconductor devices. Initial release of the SS-3100 is scheduled for July 2007.

With the current transition from 65 to 45 nm (nanometers), the semiconductor industry continues its movement toward ever smaller circuit line widths in semiconductor devices. Capital investment targeting the large-scale production of ultra-miniaturized devices is also predicted to grow strongly in the future. These changes are likewise expected to spur demand in the semiconductor production equipment industry for the development of devices that are able to provide superior cleaning performance for ultra-miniaturized manufacturing processes. These devices will also be expected to combine compact designs with high productivity while delivering excellent cost performance.

It is against this background of international industry trends that SCREEN has developed the SS-3100, a 300-millimeter single wafer cleaning system. This unit inherits the basic performance of one of Dainippon Screen's current top sellers, the SS-3000 scrubber, while featuring an approximately 15% smaller footprint. The SS-3100 also incorporates a newly developed high-speed wafer transfer system, which allows it to achieve industry-leading high-speed processing of 300 wafers per hour. In addition, this model is equipped with 8 cleaning units (chambers), helping to prevent decreases in overall production capacity, even when extended cleaning times are necessary.

Each of the SS-3100's 8 chambers can be equipped with bevel cleaning and 'Nanospray2' functions, to supplement conventional scrubbing techniques. Bevel cleaning is highly effective in removing minute particles adhered to the edges of wafers, while Nanospray2 helps to minimize the damage to circuit patterns caused by ultra-fine particles. The SS-3100 is also loaded with a variety of feedback functions for process data as standard features. These and the SS-3100's many other advantages are expected to make a significant contribution to enhancing the quality and productivity of next-generation semiconductor devices.

The introduction of the new SS-3100 marks an important addition to SCREEN's existing lineup of next-generation wafer cleaning equipment. The launch will enable SCREEN to meet customer needs for increasing product sophistication and diversity in a wide range of areas. SCREEN is currently focused on expanding its share of the single wafer cleaning equipment segment, in which strong growth is anticipated, and also on reinforcing its already well-established top position in the overall cleaning equipment market.

* The SS-3100 will be on display in its own area in the SCREEN booth at SEMICON West 2007, being held in San Francisco from July 17 to 19, 2007.



SS-310

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