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Release of Next-generation Single Wafer Cleaning System **— Simultaneous Achievement of World's Best Productivity and Clean Level —**

Kyoto, Japan -- November 24, 2010 -- Dainippon Screen Mfg. Co., Ltd., today announced that it has developed the SU-3200, a single wafer cleaning system* that delivers the world's highest throughput** of a maximum 800 wafers per hour and the world's best clean level** in cleaning chambers for silicon semiconductor wafers. The new system will go on sale from December 2010.



SU-3200

Please download the photo from
<http://www.screen.co.jp/press/nr-photo/indexE.html>

Recently, some semiconductor industry manufacturers have already begun full-scale mass production of devices with a circuit line width of 32 nanometers, and steady progress is being made in the development of device technology for the 22 nanometer process and beyond. As a result, in cleaning processes, which account for the majority of pattern formation processes, there is a rapidly growing need for single wafer cleaning systems capable of higher levels of throughput and miniaturization.

In order to respond to this industry trend, Screen has developed the SU-3200, a new single wafer cleaner with a more advanced cleaning system than previous models. The SU-3200 features compact chambers that are approximately half the size of those of earlier cleaners, making it possible to use up to 12 chambers per system. It also provides faster wafer transfer and the world's best throughput with a maximum processing speed of 800 wafers per hour. The new system also incorporates Screen's proprietary clean technology, APAC***—which delivers the world's best clean level—and supports semiconductor devices with ultrafine circuit patterns such as the 22 nanometer process. Furthermore, easy maintenance is ensured thanks to various enhancements including a chemical supply system featuring easy chemical changeover and new unit construction that reduces downtime.

Screen aims to contribute even further to the semiconductor industry by proposing the various technologies employed by the new SU-3200 as industry standards for next-generation single wafer cleaning.

* Single wafer cleaning system

A wafer cleaning system that cleans wafers one at a time. Such systems provide better cleaning performance than batch cleaning systems, which process 50 wafers at a time. Recent industry demands call for single wafer cleaning systems to provide throughput of an equivalent level to batch cleaning systems.

** As of November 2010. Dainippon Screen findings.

*** APAC (Advanced Process Atmosphere Control)

Screen's proprietary, ultra-clean chamber technology. APAC has the following six features:

AMC (Advanced Mini Chamber)

Chamber volume has been reduced to approximately one-third the size of earlier Screen models for improved ventilation performance.

ABG (Air Balance Guide)

Prevents air from stagnating inside the chamber by controlling the flow of air blown from the ceiling.

ASB (Air Stopper Board)

Reduces the volume of the processing unit.

AER (Air Exhaust Ring)

Improves exhaust balance within the chamber.

ASP (Advanced Splash Protection)

Minimizes chemical splash during operation to ensure a clean wafer processing environment.

APN (Air Protection Nozzle)

Proprietary air protection technology that prevents the adhesion of contaminants and watermarks.

Note: This system will be exhibited at SEMICON Japan 2010, held from Wednesday, December 1 to Friday, December 3 at the Makuhari Messe convention complex in Chiba, Japan.