



## **ASM International Books Repeat Orders for Plasma Enhanced ALD Systems, Broadening its ALD Portfolio with New Applications**

**ALMERE, The Netherlands, April 28, 2010** –ASM International N.V. ([www.asm.com](http://www.asm.com)) (NASDAQ: ASMI and Euronext Amsterdam: ASM) today announced that it has received multiple repeat orders this year for its plasma enhanced atomic layer deposition (PEALD) systems from a leading memory customer in Asia for volume manufacturing at multiple fab lines. All systems will be used for dielectrics in double patterning applications for advanced lithography at the 3X technology node and below.

Additionally, ASM is expanding developments for PEALD dielectrics for logic transistor gate protection applications at the 22 nm node. As part of this development program, PEALD tools have been delivered to multiple advanced logic customers.

“PEALD is increasingly being adopted due to its ability to control deposition one atomic layer at a time on a wide range of device structures,” said Tominori Yoshida, General Manager of ASM’s Plasma Products product group. “We have made very good progress in developing PEALD as an enabling technology for new dielectrics applications. Our patent position in PEALD should enable us to fully benefit from the broad range of new applications in the challenging 2X and 1X nodes.”

The PEALD reactors are optimized to deposit dielectrics including SiO, SiN and SiCN. A major advantage of ASM’s PEALD process is its ability to deliver conformal thin films at low temperatures, which is especially beneficial for double patterning lithography technologies where thin dielectrics are deposited over temperature sensitive photoresists for critical dimension control and pitch reduction.

Each of the systems ordered includes multiple PEALD reactors implemented on ASM’s Eagle<sup>®</sup> XP platform, the company’s production-proven standard platform that can be configured with plasma enhanced chemical vapor deposition (PECVD), Thermal ALD or PEALD reactors.

## **About ASM International**

ASM International N.V., headquartered in Almere, the Netherlands, and its subsidiaries design and manufacture equipment and materials used to produce semiconductor devices. ASM International and its subsidiaries provide production solutions for wafer processing (Front-end segment) as well as assembly and packaging (Back-end segment) through facilities in the United States, Europe, Japan and Asia. ASM International's common stock trades on NASDAQ (symbol ASMI) and the Euronext Amsterdam Stock Exchange (symbol ASM). For more information, visit ASMI's website at [www.asm.com](http://www.asm.com)

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