



News Release

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FOR IMMEDIATE RELEASE

MATTSON TECHNOLOGY, INC. APPOINTS NIGEL WENDEN SR. VICE PRESIDENT & GENERAL MANAGER GLOBAL BUSINESS OPERATIONS

FREMONT, Calif. — July 28, 2008 — Mattson Technology, Inc. (Nasdaq: MTSN), a leading supplier of advanced process equipment used to manufacture semiconductors, today announced the appointment of Nigel E. Wenden to Sr. Vice President and General Manager, Global Business Operations. Mr. Wenden will report to President and CEO David L. Dutton.

"I am very pleased to announce the appointment of Nigel to Mattson Technology's Executive Staff," commented Dutton. "In filling this critical position, we sought a transformational Business Leader with the requisite experience to build a world-class customer channel to optimize the return on emerging leading edge product portfolio. Nigel brings over 20 years of results oriented industry experience spanning various sized corporations and diverse leadership responsibilities, with a proven track record leading and implementing global business strategies and programs that will enable him to motivate and strengthen the Company's worldwide sales and service team."

Dutton continued, "In his new role, Nigel will plan and direct worldwide business operations, including building Mattson's selling channels, delivering world class service and support, delivering results into new markets, and developing strategic partnerships that will drive Mattson's continued growth. We expect that he will play a pivotal role in the development of new businesses and technologies to help Mattson successfully expand into new markets and drive further growth, and we look forward to his future contributions to the Company."

Mr. Wenden has over twenty years of broad experience in corporate operations. From April 2002 to the present, he held steadily increasing roles of responsibility with Edwards, Inc., culminating in his appointment as Executive Vice President & Director. Edwards is a privately held billion-dollar leading supplier of integrated solutions and subsystems with a broad portfolio including vacuum pumps and exhaust management systems. In this role he has helped develop the organization to support the companies' solar strategy. Prior, he was the president and founder of NWC Consulting (Plano, TX), focused predominantly on the global semiconductor marketplace.

His previous experience includes nearly 20 years with Mykrolis Corporation, a leading supplier of fluid purification, photoresist dispense, pressure measurement, flow, and vacuum control technologies for semiconductor manufacturing. He held steadily increasing roles of responsibility, culminating in his appointment in January 2001 as Vice President, Gas Products Business Unit, based in Allen, TX. Mr. Wenden holds a Degree in Electronic and Electrical Engineering from Lanchester University, England, where he graduated with Commendation (top 3 in year); and received a Diploma in Manufacturing and Production Engineering from the Chelmer Institute of Technology, Chelmsford, England (Graduated with Commendation). He attended the Harvard Business School, where he studied Strategic Marketing. Mr. Wenden currently serves as Chair of SEMI's Sales and Marketing Executive Council (capital equipment trade association).

"Safe Harbor" Statement Under the Private Securities Litigation Reform Act of 1995: This news release contains forward-looking statements regarding the Company's future prospects. Forward-looking statements address matters that are subject to a number of risks and uncertainties that can cause actual results to differ materially. Such risks and uncertainties include, but are not limited to: end-user demand for semiconductors; customer demand for semiconductor manufacturing equipment; the timing of significant customer orders for the Company's products; customer acceptance of delivered products and the Company's ability to collect amounts due upon shipment and upon acceptance; the Company's ability to timely manufacture, deliver and support ordered products; the Company's ability to bring new products to market and to gain market share with such products; customer rate of adoption of new technologies; risks inherent in the development of complex technology; the timing and competitiveness of new product releases by the Company's competitors; the Company's ability to align its cost structure with market conditions; and other risks and uncertainties described in the Company's Forms 10-K, 10-Q and other filings with the Securities and Exchange Commission. Results for the current quarter are preliminary and subject to adjustment. The Company assumes no obligation to update the information provided in this news release.

About Mattson Technology, Inc.

Mattson Technology, Inc. designs, manufactures, and markets semiconductor wafer processing equipment used in the fabrication of integrated circuits. The Company is a leading supplier of dry strip and rapid thermal processing equipment to the global semiconductor industry. Its strip and RTP equipment utilize innovative technology to deliver advanced processing

performance and productivity gains to semiconductor manufacturers worldwide for the fabrication of current- and next-generation devices. Mattson is expanding into the etch market with innovative products targeting high volume dielectric etch applications, and is also expanding into the millisecond annealing and thermal oxidation markets. The Company expects that entry into these new markets will enhance its technical leadership and deliver revenue and profitability gains. Mattson was founded in 1988 and is headquartered in Fremont, California. For more information, please contact Mattson Technology, Inc., 47131 Bayside Parkway, Fremont, Calif. 94538. Telephone: (800) MATTSON/(510) 657-5900. Fax: (510) 492-5911. Internet: www.mattson.com.

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