Record Productivity Achieved with Lam Research Self-Maintaining Equipment

Customer Collaboration sets new industry benchmark for etch system uptime

FREMONT, Calif., April 24, 2019 (GLOBE NEWSWIRE) -- Lam Research Corp. (Nasdaq: LRCX) today announced a new industry benchmark has been set for productivity in semiconductor processing using its self-maintaining equipment. Partnering with a leading semiconductor manufacturer, Lam's etch processing platform has successfully demonstrated one full year of uninterrupted production.

In today's semiconductor processing environment, mean time between cleans is a major limiter of etch system productivity. Etch process modules are typically cleaned monthly – or sometimes weekly – to maintain stable performance and replace parts eroded by plasma processing. In April 2019, Lam and its customer accomplished an ambitious goal and reached the milestone of going 365 days without the need for a maintenance cleaning operation.

"This groundbreaking achievement demonstrates Lam's dedication to working collaboratively with customers to help solve some of their most challenging technology and productivity issues," said Vahid Vahedi, senior vice president and general manager of the Etch product group at Lam Research. "Lam is committed to delivering Industry 4.0 technologies that allow chipmakers to be faster, more accurate, and more productive with less effort. As demonstrated by this new industry benchmark, self-maintaining equipment enables enhanced efficiency with less human intervention."

Etch process modules require maintenance and replacement of consumable parts, which can be both time and labor intensive because the chamber has to be opened, the part replaced, cleaned, and then the chamber needs to be requalified. This affects output and requires complicated scheduling. With self-maintaining solutions, the equipment knows when the part has to be replaced and will replace it autonomously without opening the chamber. This reduces tool downtime and enhances overall fab productivity.

This innovative solution includes Lam's Kiyo® process module, Corvus® R replaceable edge ring with vacuum transfer, long-life chamber components, and optimized waferless autoclean technology. The key enabler of this unparalleled productivity is the Corvus R system, the industry's first automated consumable part replacement system. Erosion of edge rings has long been a fundamental challenge in etch processing, requiring frequent chamber opens to replace parts. Corvus R automatically exchanges used edge rings with new edge rings without requiring the chamber to be opened.

This technology is part of Lam's Equipment Intelligence™ suite of solutions, which integrates key elements to create self-aware, self-maintained, and adaptive tools and processes. The utilization of Equipment Intelligence solutions holds the promise of improved productivity, increased performance, and accelerated innovation through the integration of machine learning, artificial intelligence initiatives, and automated self-aware hardware and processes.

About Lam Research
Lam Research Corporation is a global supplier of innovative wafer fabrication equipment and services to the semiconductor industry. As a trusted, collaborative partner to the world's leading semiconductor companies, we combine superior systems engineering capability, technology leadership, and unwavering commitment to customer success to accelerate innovation through enhanced device performance. In fact, today, nearly every advanced chip is built with Lam technology. Lam Research (Nasdaq: LRCX) is a FORTUNE 500® company headquartered in Fremont, Calif., with operations around the globe. Learn more at www.lamresearch.com. (LRCX-P)

Caution Regarding Forward-Looking Statements:
Statements made in this press release that are not of historical fact are forward-looking statements and are subject to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements relate to, but are not limited to, etch process module clean frequencies; our ability to achieve, the impact of and commitment to Industry 4.0 technologies; the impact of self-maintaining equipment; self-maintaining solutions and their impact; equipment intelligence solutions; our engineering capabilities; our technology leadership; our commitment to customer success; and our continued ability to accelerate innovation and enhance device performance. These forward-looking statements are based on current expectations and are subject to uncertainties and changes in condition, significance, value and effect, our continued financial health and ability to pay dividends, and other risks detailed in documents filed by us with the Securities and Exchange Commission, including specifically our annual report on Form 10-K for the fiscal year ended June 24, 2018 and Form 10-Q for the quarters ended December 23, 2018 and September 23, 2018. These uncertainties and changes could cause actual results to vary from expectations. Lam undertakes no obligation to update the information or statements made in this press release.

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