

September 2, 2010



Amtech Announces \$37 Million in New Solar Orders

Fiscal 2010 YTD Solar Orders Reach a Record \$157 Million

TEMPE, Ariz.--(BUSINESS WIRE)-- Amtech Systems, Inc. (NASDAQ:ASYS), a global supplier of production and automation systems and related supplies for the manufacture of solar cells, semiconductors, and silicon wafers, today announced that its solar subsidiary, Tempres Systems, Inc., has received approximately \$37 million in new solar orders for its diffusion processing systems from several new and existing customers in Asia. Including these most recent orders, Amtech's total solar orders to-date in fiscal 2010 has reached approximately \$157 million. Amtech's fiscal 2010 began October 1, 2009.

J.S. Whang, Chief Executive Officer of Amtech, commented, "These latest orders further demonstrate the quality and depth of our expanding solar customer base, and our ability to provide excellent product and service to the industry. We believe the intense effort by our customers and the solar industry to increase cell efficiency will continue to drive demand for our superior diffusion technology. We continue to see excellent quotation activity and remain focused on continued successful execution of our solar growth strategy."

About Amtech Systems, Inc.

Amtech Systems, Inc. manufactures capital equipment, including silicon wafer handling automation, thermal processing equipment and related consumables used in fabricating solar cells and semiconductor devices. Semiconductors, or semiconductor chips, are fabricated on silicon wafer substrates, sliced from ingots, and are part of the circuitry, or electronic components, of many products including solar cells, computers, telecommunications devices, automotive products, consumer goods, and industrial automation and control systems. The Company's wafer handling, thermal processing and consumable products currently address the diffusion, oxidation, deposition, PECVD, and PSG removal steps used in the fabrication of solar cells, semiconductors, MEMS and the polishing of newly sliced silicon wafers.

Statements contained in this press release that are not historical facts may be forward looking statements within the meaning of the Private Litigation Reform Act. Such statements may use words such as "proposed," "anticipate," "believe," "estimate," "expect," "intend," "predict," "project" and similar expressions as they relate to Amtech Systems, Inc. or our management. When we make forward-looking statements, we are basing them on our management's beliefs and assumptions, using information currently available to us. Although we believe that the expectations reflected in the forward looking statements are reasonable, these forward-looking statements are subject to risks, uncertainties and assumptions including the risks discussed in our filings with the Securities and Exchange Commission. If one or more of these risks materialize, or if our underlying assumptions prove to be incorrect, actual results may vary materially from what we projected. Any forward

looking statements contained in this press release reflect our current views with respect to future events and are subject to these and other risks, uncertainties and assumptions relating to our operations, results of operations, growth strategy and liquidity. We have no intention, and disclaim any obligation, to update or revise any forward-looking statements, whether as a result of new information, future results or otherwise.

Source: Amtech Systems, Inc.