

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 10-Q**

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended: March 31, 2013

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number: 0-11412

**AMTECH SYSTEMS, INC.**

(Exact name of registrant as specified in its charter)

Arizona	86-0411215
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
131 South Clark Drive, Tempe, Arizona	85281
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: 480-967-5146

Indicate by a check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.  Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).  Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer  (Do not check if a smaller reporting company)

Smaller Reporting Company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

Shares of Common Stock outstanding as of May 1, 2013: 9,539,234

AMTECH SYSTEMS, INC. AND SUBSIDIARIES  
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**PART I. FINANCIAL INFORMATION****Item 1. Condensed Consolidated Financial Statements****AMTECH SYSTEMS, INC. AND SUBSIDIARIES**  
**Condensed Consolidated Balance Sheets**  
**(in thousands except share data)**

	<b>March 31, 2013</b>	<b>September 30, 2012</b>
	(Unaudited)	
<b>Assets</b>		
<b>Current Assets</b>		
Cash and cash equivalents	\$ 38,807	\$ 46,726
Restricted cash	6,710	4,644
Accounts receivable		
Trade (less allowance for doubtful accounts of \$516 and \$517 at March 31, 2013 and September 30, 2012, respectively)	7,213	7,486
Unbilled and other	5,169	10,807
Inventories	24,929	25,670
Deferred income taxes	3,460	3,460
Prepaid income taxes	1,400	1,400
Other	1,954	2,650
Total current assets	89,642	102,843
<b>Property, Plant and Equipment - Net</b>	11,517	12,387
<b>Deferred Income Taxes -Long Term</b>	480	470
<b>Intangible Assets - Net</b>	3,747	4,096
<b>Goodwill</b>	8,348	8,355
<b>Other Assets - Long Term</b>	1,084	871
<b>Total Assets</b>	<b>\$ 114,818</b>	<b>\$ 129,022</b>

The accompanying notes are an integral part of these condensed consolidated financial statements.

**AMTECH SYSTEMS, INC. AND SUBSIDIARIES**  
**Condensed Consolidated Balance Sheets**  
**(in thousands except share data)**

	<b>March 31, 2013</b>	<b>September 30, 2012</b>
	(Unaudited)	
<b>Liabilities and Stockholders' Equity</b>		
<b>Current Liabilities</b>		
Accounts payable	\$ 3,044	\$ 5,780
Accrued compensation and related taxes	4,600	5,311
Accrued warranty expense	2,065	2,687
Deferred profit	5,054	10,236
Customer deposits	3,190	3,958
Other accrued liabilities	10,781	7,499
Income taxes payable	5,880	7,140
<b>Total current liabilities</b>	<b>34,614</b>	<b>42,611</b>
<b>Income Taxes Payable Long-term</b>	<b>2,360</b>	<b>2,360</b>
<b>Total liabilities</b>	<b>36,974</b>	<b>44,971</b>
<b>Commitments and Contingencies</b>		
<b>Stockholders' Equity</b>		
Preferred stock; 100,000,000 shares authorized; none issued	—	—
Common stock; \$0.01 par value; 100,000,000 shares authorized; shares issued and outstanding: 9,539,234 and 9,483,588 at March 31, 2013 and September 30, 2012, respectively	95	95
Additional paid-in capital	78,136	77,377
Accumulated other comprehensive loss	(6,877)	(6,817)
Retained Earnings	5,780	12,065
<b>Total stockholders' equity</b>	<b>77,134</b>	<b>82,720</b>
Noncontrolling interest	710	1,331
<b>Total Equity</b>	<b>77,844</b>	<b>84,051</b>
<b>Total Liabilities and Stockholders' Equity</b>	<b>\$ 114,818</b>	<b>\$ 129,022</b>

The accompanying notes are an integral part of these condensed consolidated financial statements.

**AMTECH SYSTEMS, INC. AND SUBSIDIARIES**  
**Condensed Consolidated Statements of Operations**  
(Unaudited)  
(in thousands, except per share data)

	Three Months Ended March 31,		Six Months Ended March 31,	
	2013	2012	2013	2012
Revenues, net of returns and allowances	\$ 8,118	\$ 21,566	\$ 17,475	\$ 46,294
Cost of sales	5,665	17,518	13,644	35,045
Gross profit	2,453	4,048	3,831	11,249
Selling, general and administrative	3,968	6,046	8,238	12,338
Restructuring and impairment charges	—	688	697	688
Research and development	1,946	3,299	3,108	6,052
Operating loss	(3,461)	(5,985)	(8,212)	(7,829)
Interest and other income, net	39	39	44	126
Loss before income taxes	(3,422)	(5,946)	(8,168)	(7,703)
Income tax benefit	(800)	(220)	(1,280)	(540)
<b>Net loss</b>	<b>(2,622)</b>	<b>(5,726)</b>	<b>(6,888)</b>	<b>(7,163)</b>
Add: Net loss attributable to noncontrolling interest	530	647	603	1,208
<b>Net loss attributable to Amtech Systems, Inc.</b>	<b>\$ (2,092)</b>	<b>\$ (5,079)</b>	<b>\$ (6,285)</b>	<b>\$ (5,955)</b>

**Loss Per Share:**

Basic loss per share attributable to Amtech shareholders	\$ (0.22)	\$ (0.54)	\$ (0.66)	\$ (0.63)
Weighted average shares outstanding	9,539	9,479	9,516	9,462
Diluted loss per share attributable to Amtech shareholders	\$ (0.22)	\$ (0.54)	\$ (0.66)	\$ (0.63)
Weighted average shares outstanding	9,539	9,479	9,516	9,462

The accompanying notes are an integral part of these condensed consolidated financial statements.

**AMTECH SYSTEMS, INC. AND SUBSIDIARIES**  
**Condensed Consolidated Statements Of Comprehensive Income (Loss)**  
**(Unaudited)**  
**(in thousands)**

	<b>Three Months Ended March 31,</b>		<b>Six Months Ended March 31,</b>	
	<b>2013</b>	<b>2012</b>	<b>2013</b>	<b>2012</b>
Net loss	\$ (2,622)	\$ (5,726)	\$ (6,888)	\$ (7,163)
Foreign currency translation adjustment	(1,468)	2,202	(77)	(1,529)
Comprehensive loss	(4,090)	(3,524)	(6,965)	(8,692)
Comprehensive loss attributable to noncontrolling interest	535	647	620	1,208
Comprehensive loss attributable to Amtech Systems, Inc.	<u>\$ (3,555)</u>	<u>\$ (2,877)</u>	<u>\$ (6,345)</u>	<u>\$ (7,484)</u>

The accompanying notes are an integral part of these condensed consolidated financial statements.

**AMTECH SYSTEMS, INC. AND SUBSIDIARIES**  
**Condensed Consolidated Statements Of Cash Flows**  
**(Unaudited)**  
**(in thousands)**

	<b>Six Months Ended March 31,</b>	
	<b>2013</b>	<b>2012</b>
<b>Operating Activities</b>		
Net loss	\$ (6,888)	\$ (7,163)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,382	1,528
Write-down of inventory	392	1,330
Deferred income taxes	(12)	—
Impairment of long-lived assets	—	688
Non-cash stock based compensation expense	758	903
Provision for allowance for doubtful accounts	63	133
Changes in operating assets and liabilities:		
Restricted cash	48	2,878
Accounts receivable	5,901	12,009
Inventories	60	(2,487)
Accrued income taxes	(1,262)	(4,105)
Prepaid expenses and other assets	493	198
Accounts payable	(2,762)	(2,073)
Accrued liabilities and customer deposits	(689)	(8,379)
Deferred profit	(5,255)	(8,115)
Net cash used in operating activities	<u>(7,771)</u>	<u>(12,655)</u>
<b>Investing Activities</b>		
Purchases of property, plant and equipment	(162)	(1,062)
Net cash used in investing activities	<u>(162)</u>	<u>(1,062)</u>
<b>Financing Activities</b>		
Repurchase of common stock	—	(4,080)
Payments on long-term obligations	—	(22)
Payment for licensing fee	—	(44)
Net cash used in financing activities	<u>—</u>	<u>(4,146)</u>
<b>Effect of Exchange Rate Changes on Cash</b>	14	(750)
<b>Net Decrease in Cash and Cash Equivalents</b>	(7,919)	(18,613)
<b>Cash and Cash Equivalents, Beginning of Period</b>	46,726	67,382
<b>Cash and Cash Equivalents, End of Period</b>	<u>\$ 38,807</u>	<u>\$ 48,769</u>
<b>Supplemental Cash Flow Information:</b>		
Income tax payments	\$ 7	\$ 3,596
<b>Supplemental Non-cash Financing Activities:</b>		
Transfer of inventory to capital equipment	\$ —	\$ 838

The accompanying notes are an integral part of these condensed consolidated financial statements.

**AMTECH SYSTEMS, INC. AND SUBSIDIARIES**  
**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**  
**THREE AND SIX MONTHS ENDED MARCH 31, 2013 AND 2012**  
**(UNAUDITED)**

**1. Basis of Presentation**

**Nature of Operations and Basis of Presentation** – Amtech Systems, Inc. (the “Company”) designs, assembles, sells and installs capital equipment and related consumables used in the manufacture of solar cells, semiconductors and wafers of various materials, primarily for the solar and semiconductor industries. We are developing an ion implanter to provide our customers with a more complete solution for their next-generation high-efficiency solar cell production. The Company sells these products worldwide, primarily in Asia, the United States and Europe. The Company serves markets in industries that are experiencing rapid technological advances, and which historically have been cyclical. Therefore, future profitability and growth depend on the Company’s ability to develop or acquire and market profitable new products, and on its ability to adapt to cyclical trends.

The accompanying unaudited condensed consolidated financial statements have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission (the “SEC”), and consequently do not include all disclosures normally required by U.S. generally accepted accounting principles. In the opinion of management, the accompanying unaudited interim condensed consolidated financial statements contain all adjustments necessary, all of which are of a normal and recurring nature, to present fairly our financial position, results of operations and cash flows. Certain information and note disclosures normally included in financial statements have been condensed or omitted pursuant to the rules and regulations of the SEC. These condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto included in our Annual Report on Form 10-K for the fiscal year ended September 30, 2012.

The consolidated results of operations for the three and six months ended March 31, 2013, are not necessarily indicative of the results to be expected for the full fiscal year.

**Principles of Consolidation** – The consolidated financial statements include the accounts of the Company, its wholly-owned subsidiaries and subsidiaries in which it has a controlling interest. The Company reports noncontrolling interests in consolidated entities as a component of equity separate from the Company’s equity. All material intercompany accounts and transactions have been eliminated in consolidation.

**Use of Estimates** – The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

**Revenue Recognition** – Revenue is recognized upon shipment of the Company’s proven technology equal to the sales price less the greater of (i) the fair value of undelivered services or (ii) the contingent portion of the sales price, which is generally 10-20% of the total contract price. The entire cost of the equipment relating to proven technology is recorded upon shipment. The remaining contractual revenue, deferred costs and installation costs are recorded upon the completion of installation at the customers’ premises and acceptance of the product by the customer.

For purposes of revenue recognition, proven technology means the Company has a history of at least two successful installations. New technology systems are those systems with respect to which the Company cannot demonstrate that it can meet the provisions of customer acceptance at the time of shipment. The full amount of revenue and costs of new technology shipments is recognized upon the completion of installation at the customers’ premises and acceptance of the product by the customer.

Revenue from services is recognized as the services are performed. Revenue from prepaid service contracts is recognized ratably over the life of the contract. Revenue from spare parts is recorded upon shipment.



**Deferred Profit** – Revenue deferred pursuant to the Company’s revenue recognition policy, net of the related deferred costs, if any, is recorded as deferred profit in current liabilities. The components of deferred profit are as follows:

	<b>March 31, 2013</b>	<b>September 30, 2012</b>
	<b>(dollars in thousands)</b>	
Deferred revenues	\$ 5,635	\$ 11,200
Deferred costs	581	964
Deferred profit	<u>\$ 5,054</u>	<u>\$ 10,236</u>

**Concentrations of Credit Risk** – Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of trade accounts receivable and cash. The Company’s customers, located throughout the world, consist of manufacturers of solar cells, semiconductors, semiconductor wafers, LEDs and MEMS. Credit risk is managed by performing ongoing credit evaluations of the customers’ financial condition, by requiring significant deposits where appropriate, and by actively monitoring collections. Letters of credit are required of certain customers depending on the size of the order, type of customer or its creditworthiness, and its country of domicile. Reserves for potentially uncollectible receivables are maintained based on an assessment of collectability.

The Company maintains its cash, cash equivalents and restricted cash in multiple financial institutions. Balances in the United States (approximately 50% of total cash balances) are primarily invested in US Treasuries or are in financial institutions insured by the Federal Deposit Insurance Corporation (FDIC). The remainder of the Company’s cash is maintained in banks in The Netherlands, France and China that are uninsured.

As of March 31, 2013, three customers, individually, accounted for 13%, 13% and 12% of accounts receivable.

**Restricted Cash** – Restricted cash is \$6.7 million and \$4.6 million as of March 31, 2013 and September 30, 2012, respectively. The balance includes collateral for bank guarantees required by certain customers from whom deposits have been received in advance of shipment of \$3.1 million and \$3.8 million as of March 31, 2013 and September 30, 2012, respectively. Additionally, restricted cash includes cash received from research and development grants related to our ion implant technology to be used for research and development projects of \$1.4 million and \$0.8 million as of March 31, 2013 and September 30, 2012, respectively. Restricted cash also includes cash of \$2.2 million as of March 31, 2013 received from research and development grants to be passed through to our research and development partners.

**Accounts Receivable - Unbilled and Other** – Unbilled and other accounts receivable consist mainly of the contingent portion of the sales price that is not collectible until successful installation of the product. These amounts are generally billed upon final customer acceptance. For the majority of these amounts, a liability has been accrued in deferred profit.

**Inventories** – Inventories are stated at the lower of cost or net realizable value. Approximately 90% of inventory is valued on an average cost basis with the remainder determined on a first-in, first-out (FIFO) basis. The components of inventories are as follows:

	<b>March 31, 2013</b>	<b>September 30, 2012</b>
	<b>(dollars in thousands)</b>	
Purchased parts and raw materials	\$ 16,747	\$ 19,644
Work-in-process	4,528	2,328
Finished goods	3,654	3,698
	<u>\$ 24,929</u>	<u>\$ 25,670</u>

**Property, Plant and Equipment** – Property, plant and equipment are recorded at cost. Maintenance and repairs are charged to expense as incurred. The cost of property retired or sold and the related accumulated depreciation are removed from the applicable accounts when disposition occurs and any gain or loss is recognized. Depreciation is computed using the straight-line method. Useful lives for equipment, machinery and leasehold improvements range from three to seven years; for furniture and fixtures from five to ten years; and for buildings twenty years.

The following is a summary of property, plant and equipment:

	March 31, 2013	September 30, 2012
(dollars in thousands)		
Land, building and leasehold improvements	\$ 10,465	\$ 10,476
Equipment and machinery	7,383	7,272
Furniture and fixtures	5,455	5,458
	23,303	23,206
Accumulated depreciation and amortization	(11,786)	(10,819)
	<u>\$ 11,517</u>	<u>\$ 12,387</u>

**Goodwill** - Goodwill is not subject to amortization and is reviewed for impairment on an annual basis, typically at the end of the fiscal year, or more frequently if circumstances dictate.

The following is a summary of activity in goodwill:

	Six Months Ended March 31,	
	2013	2012
(dollars in thousands)		
Beginning balance	\$ 8,355	\$ 13,313
Change in foreign exchange rates	(7)	(77)
Ending balance	<u>\$ 8,348</u>	<u>\$ 13,236</u>

**Intangibles** – Intangible assets are capitalized and amortized over their useful life if the life is determinable. If the life is not determinable, amortization is not recorded.

The following is a summary of intangibles:

	Useful Life	March 31, 2013	September 30, 2012
(dollars in thousands)			
Non-compete agreements	4-8 years	\$ 1,056	\$ 1,057
Customer lists	10 years	825	828
Technology	5-10 years	2,336	2,341
In-process research and development	(1)	1,600	1,600
Other	2-10 years	324	325
		6,141	6,151
Accumulated amortization		(2,394)	(2,055)
		<u>\$ 3,747</u>	<u>\$ 4,096</u>

- (1) The in-process research and development will be amortized over its useful life when it has reached technological feasibility.

**Long-lived assets** - Long-lived assets are reviewed for impairment when events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable.

**Warranty** – A limited warranty is provided free of charge, generally for periods of 12 to 24 months, for all purchases of the Company’s new products and systems. Accruals are recorded for estimated warranty costs at the time the system is accepted by the customer.

The following is a summary of activity in accrued warranty expense:

	<b>Six Months Ended March 31,</b>	
	<b>2013</b>	<b>2012</b>
	<b>(dollars in thousands)</b>	
Beginning balance	\$ 2,687	\$ 2,265
Warranty expenditures	(791)	(658)
Warranty expense	169	1,079
Ending balance	<u>\$ 2,065</u>	<u>\$ 2,686</u>

**Stock-Based Compensation** - The Company measures compensation costs relating to share-based payment transactions based upon the grant-date fair value of the award. Those costs are recognized as expense over the requisite service period, which is generally the vesting period. The benefits of tax deductions in excess of recognized compensation cost are credited to additional paid-in capital and reported as cash flow from financing activities rather than as cash flow from operating activities.

Share-based compensation expense reduced the Company’s results of operations by the following amounts:

	<b>Three Months Ended March 31,</b>		<b>Six Months Ended March 31,</b>	
	<b>2013</b>	<b>2012</b>	<b>2013</b>	<b>2012</b>
	<b>(dollars in thousands)</b>		<b>(dollars in thousands)</b>	
Effect on income before income taxes (1)	\$ (327)	\$ (437)	\$ (758)	\$ (903)
Effect on income taxes	41	63	100	138
Effect on net income	<u>\$ (286)</u>	<u>\$ (374)</u>	<u>\$ (658)</u>	<u>\$ (765)</u>

(1) Stock-based compensation expense is included in selling, general and administrative expenses.

Stock options issued under the terms of the plans have, or will have, an exercise price equal to or greater than the fair market value of the common stock at the date of the option grant and expire no later than 10 years from the date of grant, with the most recent grant expiring in 2022. Options issued by the Company vest over 2 to 4 years.

Stock option transactions and the options outstanding are summarized as follows:

	Six Months Ended March 31,			
	2013		2012	
	Options	Weighted Average Exercise Price	Options	Weighted Average Exercise Price
Outstanding at beginning of period	891,293	\$ 9.37	611,384	\$ 10.02
Granted	312,850	2.95	285,400	7.98
Exercised	—	—	(600)	5.33
Forfeited	(2,255)	7.77	—	—
Outstanding at end of period	<u>1,201,888</u>	<u>\$ 7.71</u>	<u>896,184</u>	<u>\$ 9.38</u>
Exercisable at end of period	<u>597,245</u>	<u>\$ 9.19</u>	<u>370,664</u>	<u>\$ 9.10</u>
Weighted average fair value of options granted during the period	\$ 1.82		\$ 4.95	

The fair value of options was estimated at the grant date using the Black-Scholes option pricing model with the following assumptions:

	Six Months Ended March 31,	
	2013	2012
Risk free interest rate	1%	1%
Expected life	6 years	6 years
Dividend rate	0%	0%
Volatility	70%	70%

To estimate expected lives for this valuation, it was assumed that options will be exercised at varying schedules after becoming fully vested. Forfeitures have been estimated at the time of grant and will be revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Forfeitures were estimated based upon historical experience. Fair value computations are highly sensitive to the volatility factor assumed; the greater the volatility, the higher the computed fair value of the options granted. The Company uses historical stock prices to determine the volatility factor.

The Company awards restricted shares under the existing share-based compensation plans. Our restricted share awards vest in equal annual installments over a two to four-year period. The total value of these awards is expensed on a ratable basis over the service period of the employees receiving the grants. The “service period” is the time during which the employees receiving grants must remain employees for the shares granted to fully vest.

Restricted stock transactions and awards outstanding are summarized as follows:

	Six Months Ended March 31,			
	2013		2012	
	Awards	Weighted Average Grant Date Fair Value	Awards	Weighted Average Grant Date Fair Value
Beginning Outstanding	127,975	\$ 9.06	120,970	\$ 9.42
Awarded	—	—	60,600	7.98
Released	(55,646)	7.65	(47,014)	8.53
Forfeited	(50)	7.98	—	—
Ending Outstanding	72,279	\$ 10.15	134,556	\$ 9.09

### Fair Value of Financial Instruments

In accordance with the requirements of the Fair Value Measurements and Disclosures Topic of the FASB Accounting Standards Codification (ASC), the Company groups its financial assets and liabilities measured at fair value on a recurring basis in three levels, based on the markets in which the assets and liabilities are traded and the reliability of the assumptions used to determine fair value. These levels are:

Level 1 - Valuation is based upon quoted market price for identical instruments traded in active markets.

Level 2 - Valuation is based on quoted market prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-based valuation techniques for which all significant assumptions are observable in the market.

Level 3 - Valuation is generated from model-based techniques that use significant assumptions not observable in the market. Valuation techniques include use of discounted cash flow models and similar techniques.

In accordance with the requirements of the Fair Value Measurements and Disclosures Topic of the FASB ASC, it is the Company's policy to use observable inputs whenever reasonably practicable in order to minimize the use of unobservable inputs when developing fair value measurements. When available, the Company uses quoted market prices to measure fair value. If market prices are not available, the fair value measurement is based on models that use primarily market based parameters including interest rate yield curves, option volatilities and currency rates. In certain cases, where market rate assumptions are not available, the Company is required to make judgments about assumptions market participants would use to estimate the fair value of a financial instrument. Changes in the underlying assumptions used, including discount rates and estimates of future cash flows, could significantly affect the results of current or future values.

*Cash Equivalents*- Included in Cash and Cash Equivalents in the Condensed Consolidated Balance Sheet is \$19.4 million and \$15.4 million as of March 31, 2013 and September 30, 2012, respectively, of money market funds invested in treasury bills, notes and other direct obligations of the U.S. Treasury. The fair value of this cash equivalent is based on Level 1 inputs in the fair value hierarchy.

*Receivables, Payables and Accruals*—The recorded amounts of these financial instruments, including accounts receivable, accounts payable, and accrued liabilities, approximate their fair value because of the short maturities of these instruments. If measured at fair value in the financial statements, these financial instruments would be classified as Level 3 in the fair value hierarchy.

**Pensions**—The Company has retirement plans covering substantially all employees. The principal plans are the multiemployer defined benefit pension plans of the Company's operations in The Netherlands and France and the plan for hourly union employees in Pennsylvania. The multiemployer plans in the United States and France are insignificant. The Company's defined contribution

plans cover substantially all of the employees in the United States. The Company matches employee funds on a discretionary basis.

**Shipping expense** – Shipping expenses of \$0.1 million and \$0.4 million for the three months ended March 31, 2013 and 2012, respectively, are included in selling, general and administrative expenses. Shipping expenses of \$0.4 million and \$1.0 million for the six months ended March 31, 2013 and 2012, respectively, are included in selling, general and administrative expenses.

**Research and development expense** – Research and development expenses consist of the cost of employees, consultants and contractors who design, engineer and develop new products and processes; materials and supplies used in those activities; and product prototyping. The Company receives reimbursements through governmental research and development grants which are netted against these expenses. The table below shows gross research and development expenses and grants earned:

	Three Months Ended		Six Months Ended	
	March 31, 2013	March 31, 2012	March 31, 2013	March 31, 2012
	(dollars in thousands)		(dollars in thousands)	
Research and development	\$ 2,184	\$ 3,408	\$ 4,643	\$ 6,246
Grants earned	(238)	(109)	(1,535)	(194)
Net research and development	\$ 1,946	\$ 3,299	\$ 3,108	\$ 6,052

### Impact of Recently Issued Accounting Pronouncements

In March 2013, the FASB issued ASU No. 2013-05 "Foreign Currency Matters (Topic 830)." The objective of the amendments in this Update is to resolve the diversity in practice about which codification subtopic applies to the release of the cumulative translation adjustment into net income when a parent either sells a part or all of its investment in a foreign entity or no longer holds a controlling financial interest in a subsidiary or group of assets that is a business within a foreign entity.

The amendments in this Update are effective prospectively for fiscal years (and interim reporting periods within those years) beginning after December 15, 2013. The Company will evaluate the impact of the Update as future transactions occur.

In February 2013, The FASB issued ASU No. 2013-04 "*Liabilities (Topic 405)*," The guidance in this Update requires an entity to measure obligations resulting from joint and several liability arrangements for which the total amount of the obligation within the scope of this guidance is fixed at the reporting date, as the sum of the following:

- The amount the reporting entity agreed to pay on the basis of its arrangement among its co-obligors.
- Any additional amount the reporting entity expects to pay on behalf of its co-obligors.

The guidance in this Update also requires an entity to disclose the nature and amount of the obligation as well as other information about those obligations. The amendments in this Update are effective for fiscal years, and interim periods within those years, beginning after December 15, 2013. The Company does not expect this Update to have a material impact on the Company's consolidated financial statements.

## 2. Income Taxes

The quarterly income tax provision is calculated using an estimated annual effective tax rate, based upon expected annual income, permanent items, statutory rates and planned tax strategies in the various jurisdictions in which the Company operates. However, losses in certain jurisdictions and discrete items, such as the resolution of uncertain tax positions, are treated separately.

Deferred tax assets and liabilities reflect the tax effects of temporary differences between the carrying value of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The Company records a valuation allowance if, based on the weight of available evidence, it is more likely than not that some portion or all of a deferred tax asset will not be realized. Our expectations regarding realization of our deferred tax assets is based upon the weight of all available evidence, including such factors as our recent earnings history, expected future taxable income and available tax planning strategies. The Company maintains a valuation allowance with respect to certain state and foreign net operating losses that may not be recovered. Each quarter the valuation allowance is re-evaluated. The only significant change in the valuation allowance during the six months

ended March 31, 2013, was increasing a valuation allowance on the deferred tax assets in China for the current period net operating loss.

The Company classifies uncertain tax positions as non-current income taxes payable unless expected to be paid within one year. At March 31, 2013 and September 30, 2012, the total amount of unrecognized tax benefits was approximately \$1.8 million. If recognized, these amounts would favorably impact the effective tax rate.

The Company classifies interest and penalties related to unrecognized tax benefits in income tax expense. As of March 31, 2013, and September 20, 2012, the Company has an accrual for potential interest and penalties of approximately \$0.7 million.

The Company and one or more of its subsidiaries file income tax returns in The Netherlands, Germany, France, China and Hong Kong, as well as the U.S. and various states in the U.S. The Company and its subsidiaries have a number of open tax years dictated by statute in each of the respective taxing jurisdictions, but generally from 3 to 5 years.

### 3. Earnings Per Share

Basic earnings per share (EPS) is computed by dividing net income by the weighted average number of common shares outstanding for the period. Diluted EPS is computed similarly to basic EPS except that the denominator is increased to include the number of additional common shares that would have been outstanding if potentially dilutive common shares had been issued. In the case of a net loss, diluted earnings per share is calculated in the same manner as basic EPS.

For the three months ended March 31, 2013, options for 1,200,000 shares and 72,000 restricted stock awards are excluded from the diluted EPS calculations because they are anti-dilutive. For the three months ended March 31, 2012, options for 896,000 shares and 135,000 restricted stock award shares were excluded from the diluted EPS calculations because they were anti-dilutive. For the six months ended March 31, 2013, options for 1,200,000 shares and 72,000 restricted stock awards are excluded from the diluted EPS calculations because they are anti-dilutive. For the six months ended March 31, 2012 options for 896,000 shares and 135,000 restricted stock award shares were excluded from the diluted EPS calculations because they were anti-dilutive.

	Three Months Ended March 31,		Six Months Ended March 31,	
	2013	2012	2013	2012
	(in thousands, except per share amounts)		(in thousands, except per share amounts)	
<b>Basic Loss Per Share Computation</b>				
Net loss attributable to Amtech Systems, Inc.	\$ (2,092)	\$ (5,079)	\$ (6,285)	\$ (5,955)
Weighted Average Shares Outstanding:				
Common stock	9,539	9,479	9,516	9,462
Basic loss per share attributable to Amtech shareholders	\$ (0.22)	\$ (0.54)	\$ (0.66)	\$ (0.63)
<b>Diluted Loss Per Share Computation</b>				
Net loss attributable to Amtech Systems, Inc.	\$ (2,092)	\$ (5,079)	\$ (6,285)	\$ (5,955)
Weighted Average Shares Outstanding:				
Common stock	9,539	9,479	9,516	9,462
Common stock equivalents (1)	—	—	—	—
Diluted shares	9,539	9,479	9,516	9,462
Diluted loss per share attributable to Amtech shareholders	\$ (0.22)	\$ (0.54)	\$ (0.66)	\$ (0.63)

(1) The number of common stock equivalents is calculated using the treasury stock method and the average market price during the period.

### 4. Business Segment Information

The Company's products are classified into two core business segments. The solar and semiconductor equipment segment designs, manufactures and markets semiconductor wafer processing and handling equipment used in the fabrication of integrated circuits, solar cells and MEMS. Also included in the solar and semiconductor equipment segment are the manufacturing support service operations and corporate expenses, except for a small portion that is allocated to the polishing supplies segment. The polishing

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equipment and supplies segment designs, manufactures and markets carriers, templates and equipment used in the lapping and polishing of wafer-thin materials, including silicon wafers used in the production of semiconductors.

Information concerning our business segments is as follows:

	Three Months Ended		Six Months Ended	
	March 31, 2013	March 31, 2012	March 31, 2013	March 31, 2012
(dollars in thousands)				
<b>Net Revenues:</b>				
Solar and semiconductor equipment	\$ 6,187	\$ 19,682	\$ 13,222	\$ 42,559
Polishing supplies and equipment	1,931	1,884	4,253	3,735
	<u>\$ 8,118</u>	<u>\$ 21,566</u>	<u>\$ 17,475</u>	<u>\$ 46,294</u>
<b>Operating loss:</b>				
Solar and semiconductor equipment	\$ (3,604)	\$ (6,052)	\$ (8,276)	\$ (8,042)
Polishing supplies and equipment	143	67	64	213
	<u>\$ (3,461)</u>	<u>\$ (5,985)</u>	<u>\$ (8,212)</u>	<u>\$ (7,829)</u>

	March 31,	September 30,
	2013	2012
(dollars in thousands)		
<b>Identifiable Assets:</b>		
Solar and semiconductor equipment	\$ 110,451	\$ 123,923
Polishing supplies and equipment	4,367	5,099
	<u>\$ 114,818</u>	<u>\$ 129,022</u>
<b>Goodwill:</b>		
Solar and semiconductor equipment	\$ 7,620	\$ 7,627
Polishing supplies and equipment	728	728
	<u>\$ 8,348</u>	<u>\$ 8,355</u>

**5. Major Customers and Foreign Sales**

During the three months ended March 31, 2013, two customers represented 13% and 10% of net revenues. During the three months ended March 31, 2012, two customers represented 17% and 11% of net revenues. During the six months ended March 31, 2013, no customers represented more than 10% of net revenues. During the six months ended March 31, 2012, two customers represented 16% and 11% of net revenues.

Our net revenues were to customers in the following geographic regions:

	Six Months Ended March 31,	
	2013	2012
United States	24 %	7 %
China	29 %	44 %
Taiwan	17 %	7 %
Other	11 %	19 %
<b>Total Asia</b>	<b>57 %</b>	<b>70 %</b>
Germany	6 %	6 %
Other	13 %	17 %
<b>Total Europe</b>	<b>19 %</b>	<b>23 %</b>
	<u>100 %</u>	<u>100 %</u>

**6. Commitments and Contingencies**

**Purchase Obligations** – As of March 31, 2013 we had purchase obligations in the amount of \$7.6 million compared to \$12.1 million as of September 30, 2012. These purchase obligations consist of outstanding purchase orders for goods and services. While the amount represents purchase agreements, the actual amounts to be paid may be less if any agreements are renegotiated, canceled or terminated.

**Litigation** – The Company is a party to various claims arising in the normal course of business. Management believes the resolution of these matters will not have a material impact on the Company's results of operations or financial condition.

**7. Restructuring and Impairment Charges**



Restructuring charges for the six months ended March 31, 2013 were\$0.7 million. The restructuring charges in fiscal 2013 relate primarily to severance costs incurred as a result of the reductions-in-force at certain operations. In fiscal 2012, an impairment charge was recorded for assets related to a product development project.

## Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our condensed consolidated financial statements and the related notes included in Item 1, "Condensed Consolidated Financial Statements" in this quarterly report on Form 10-Q and our consolidated financial statements and related notes included in Item 8, "Financial Statements and Supplementary Data" in our Annual Report on Form 10-K for the fiscal year ended September 30, 2012.

### Cautionary Statement Regarding Forward-Looking Statements

Certain information contained or incorporated by reference in this Quarterly Report on Form 10-Q is forward-looking in nature. All statements included or incorporated by reference in this Quarterly Report on Form 10-Q, or made by management of Amtech Systems, Inc. and its subsidiaries ("the Company" or "Amtech"), other than statements of historical fact, are hereby identified as "forward-looking statements" (as such term is defined in Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended). In some cases, forward-looking statements can be identified by terminology such as "may," "will," "should," "would," "expects," "plans," "anticipates," "intends," "believes," "estimates," "predicts," "potential," "continue," or the negative of these terms or other comparable terminology. Examples of forward-looking statements include statements regarding Amtech's future financial results, operating results, business strategies, projected costs, products under development, competitive positions and plans and objectives of the Company and its management for future operations.

We cannot guarantee that any forward-looking statement will be realized, although we believe that the expectations reflected in the forward-looking statements are reasonable. Achievement of future results is subject to risks, uncertainties and potentially inaccurate assumptions. The Form 10-K that we filed with the Securities and Exchange Commission for the year-ended September 30, 2012 listed various important factors that could affect Amtech's future operating results and financial condition and could cause actual results to differ materially from historical results and expectations based on forward-looking statements made in this document or elsewhere by Amtech or on its behalf. These factors can be found under the heading "Risk Factors" in the Form 10-K and investors should refer to them. Because it is not possible to predict or identify all such factors, any such list cannot be considered a complete set of all potential risks or uncertainties. Except as required by law, we undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events, or otherwise.

### Introduction

Management's Discussion and Analysis ("MD&A") is intended to facilitate an understanding of our business and results of operations. MD&A consists of the following sections:

- Overview
- Results of Operations
- Liquidity and Capital Resources
- Off – Balance Sheet Arrangements
- Contractual Obligations
- Critical Accounting Policies
- Recently Issued Accounting Pronouncements

### Overview

We are a leading supplier of thermal processing systems, including related automation, parts and services, to the solar/photovoltaic, semiconductor, silicon wafer and MEMS industries and also offer PECVD (plasma-enhanced chemical vapor deposition) equipment. We also manufacture polishing templates, steel carriers and double-sided polishing and lapping machines for fabricators of LED's, optics, quartz, ceramics and metal parts, and for manufacturers of medical equipment components. Since the 2011 acquisition of Kingstone, we have advanced the development of an ion implanter to provide our solar customers with a more complete solution for their next-generation high-efficiency solar cell production.

Our customers are primarily manufacturers of solar cells and integrated circuits. The solar cell and semiconductor industries are cyclical and historically have experienced significant fluctuations. Our revenue is impacted by these broad industry trends. In 2012, the solar cell industry experienced a structural imbalance between supply and demand and we expect this structural imbalance to continue into at least fiscal 2014. This imbalance has negatively impacted our results of operations and is expected to do so in the future.

Our strategy has been, and continues to be, to grow the Company through strategic product development and acquisitions. In addition to internal product development, we have acquired companies with complementary products or products that serve adjacent process steps. In October 2007, we acquired R2D Automation SAS, which allowed us to provide our diffusion furnaces with integrated automation that is also sold as a stand-alone product. In February 2011, we acquired a 55% ownership interest in Kingstone Technology Hong Kong, Limited ("Kingstone"), a holding company that owns 100% of Kingstone Semiconductor Company Ltd., a Shanghai-based technology company specializing in ion implant solutions for the solar industry.

### Results of Operations

The following table sets forth certain operational data as a percentage of net revenue for the periods indicated:

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Three Months Ended

Six Months Ended

	March 31, 2013	March 31, 2012	March 31, 2013	March 31, 2012
Net revenue	100 %	100 %	100 %	100 %
Cost of goods sold	70 %	81 %	78 %	76 %
Gross margin	30 %	19 %	22 %	24 %
Operating expenses:				
Selling, general and administrative	50 %	28 %	47 %	27 %
Restructuring and impairment charges	0 %	3 %	4 %	1 %
Research and Development	24 %	16 %	18 %	13 %
Total operating expenses	74 %	47 %	69 %	41 %
Loss from operations	(44)%	(28)%	(47)%	(17)%
Interest income (expense), net	0 %	0 %	0 %	0 %
Loss before income taxes	(44)%	(28)%	(47)%	(17)%
Income taxes benefit	(10)%	(1)%	(7)%	(1)%
Net loss	(34)%	(27)%	(40)%	(16)%
Add: net loss attributable to noncontrolling interest	7 %	3 %	3 %	3 %
Net loss attributable to Amtech Systems, Inc.	(27)%	(24)%	(37)%	(13)%

### ***Net Revenue***

Net revenue consists of revenue recognized upon shipment or installation of products using proven technology and upon acceptance of products using new technology. In addition, spare parts sales are recognized upon shipment. Service revenue is recognized upon completion of the service activity or ratably over the term of the service contract. Since the majority of our revenue is generated from large thermal system sales, revenue and operating income can be significantly impacted by the timing of system shipments, the net impact of revenue deferral on those shipments and recognition of revenue based on customer acceptances.

Net revenue for the quarters ended March 31, 2013 and 2012 was \$8.1 million and \$21.6 million, respectively, a decrease of \$13.4 million or 62%. Revenue decreased primarily due to significantly lower shipments of our equipment to the solar and semiconductor industries. Net revenue from the solar market was \$3.9 million and \$10.6 million for the three months ended March 31, 2013 and 2012, respectively. The current supply / demand imbalance and global economic conditions have negatively impacted sales in the solar equipment market and have caused our customers to significantly slow or push out their capacity expansion plans. It is difficult to predict when the market will improve, but we expect this downturn to continue into at least fiscal 2014. Lower revenues from the semiconductor industry are a result of the current cyclical downturn affecting the semiconductor equipment market.

Net revenue for the six months ended March 31, 2013 and 2012 was \$17.5 million and \$46.3 million, respectively, a decrease of \$28.8 million or 62%. Revenue decreased primarily due to significantly lower shipments of our equipment to the solar and semiconductor industries, as well as decreased recognition of previously-deferred revenue. Net revenue from the solar market was \$8.2 million and \$26.2 million for the six months ended March 31, 2013 and 2012, respectively. The year-to-date results were negatively impacted by the supply / demand imbalance and global economic conditions discussed above.

### ***Backlog and Orders***

Our order backlog as of March 31, 2013 and 2012 was \$14.1 million and \$67.4 million, respectively. Our backlog as of March 31, 2013 includes approximately \$10.5 million of orders and deferred revenue from our solar industry customers, compared to \$54.1 million at March 31, 2012. New orders booked in the quarter ended March 31, 2013 were \$9.6 million compared to \$18.0 million in the quarter ended March 31, 2012. As the majority of the backlog is denominated in Euros, the weakening of the Euro during the second quarter of fiscal 2013 resulted in a decrease in backlog of approximately \$0.4 million. As of March 31, 2013, two customers individually accounted for 38% and 13% of our order backlog. Our order pipeline is slow, due to the worldwide overcapacity of solar cell production as well as a slowdown in orders from our customers serving the semiconductor industry. The pipeline is also negatively influenced by slower growth in demand for solar modules caused by the frequently-fluctuating government subsidies for solar energy installations.

The orders included in our backlog are generally credit approved customer purchase orders expected to ship within the next twelve months. Because our orders are typically subject to cancellation or delay by the customer, our backlog at any particular point in time is not necessarily representative of actual sales for succeeding periods, nor is backlog any assurance that we will realize profit from completing these orders. Our backlog also includes revenue deferred pursuant to our revenue recognition policy, derived from orders that have already been shipped, but which have not met the criteria for revenue recognition.

### ***Gross Profit and Gross Margin***

Gross profit is the difference between net revenue and cost of goods sold. Cost of goods sold consists of purchased material, labor and overhead to manufacture equipment and spare parts and the cost of service and support to customers for installation, warranty and paid service calls. Gross margin is gross profit as a percent of net revenue.

Gross profit for the three months ended March 31, 2013 and 2012 was \$2.5 million and \$4.0 million, respectively; a decrease of \$1.6 million or 39%. Gross margin was 30% in the quarter ended March 31, 2013 compared to 19% in the quarter ended March 31, 2012. In the fiscal 2013 second quarter, recognition of previously-deferred revenue was a larger portion of total net revenue compared to fiscal 2012. This had a favorable impact on the gross margin as did lower spending resulting from company-wide cost-control initiatives, partially offset by lower capacity utilization. In the quarters ended March 31, 2013 and 2012, we had a net recognition of deferred profit of \$2.8 million and \$3.1 million, respectively. In the first half of fiscal 2013, deferred profit decreased from \$10.2 million at September 30, 2012 to \$5.1 million at March 31, 2013. We expect future recognition of previously-deferred profit to be lower than in the second quarter of fiscal 2013. This is expected to have a negative impact on gross margins.

Gross profit for the six months ended March 31, 2013 and 2012 was \$3.8 million and \$11.2 million, respectively, a decrease of \$7.4 million or 66%. Gross margin was 22% in the six months ended March 31, 2013 compared to 24% in the six months ended March 31, 2012. Gross margins were negatively impacted by lower sales volumes and the related lower capacity utilization, partially offset by lower spending resulting from company-wide cost-control initiatives and proportionally higher recognition of previously-deferred revenues. In the six months ended March 31, 2013 and 2012, we had a net recognition of deferred profit of \$5.3 million and \$8.0 million, respectively. For reasons discussed above, we expect future recognition of previously-deferred profit to be lower than in the first half of fiscal 2013. This is expected to have a negative impact on gross margins.

### ***Selling, General and Administrative***

Selling, general and administrative expenses consist of the cost of employees, consultants and contractors, facility costs, sales commissions, shipping costs, promotional marketing expenses, legal and accounting expenses.

Selling, general and administrative (SG&A) expenses for the three months ended March 31, 2013 and 2012 were \$4.0 million and \$6.0 million, respectively. SG&A expenses include \$0.3 million and \$0.4 million of stock-based compensation expense for the

quarters ended March 31, 2013 and 2012, respectively. The decrease in SG&A expenses was due primarily to lower commissions and shipping expenses related to lower revenues and also reflects company-wide cost-control initiatives.

SG&A expenses for the six months ended March 31, 2013 and 2012 were \$8.2 million and \$12.3 million, respectively. SG&A expenses include \$0.8 million and \$0.9 million of stock-based compensation expense for the six months ended March 31, 2013 and 2012, respectively. The decrease in SG&A expenses was due primarily to lower commissions and shipping expenses related to lower revenues and also reflects company-wide cost-control initiatives.

#### ***Impairment and Restructuring Charges***

Impairment and restructuring charges for the six months ended March 31, 2013 and 2012 were each \$0.7 million. The company's cost-cutting efforts in the first quarter of fiscal 2013 included reductions-in-force which resulted in restructuring charges related primarily to severance costs at certain operations. In fiscal 2012, an impairment charge was recorded for assets related to a product development project.

#### ***Research and Development***

Research and development expenses consist of the cost of employees, consultants and contractors who design, engineer and develop new products and processes as well as materials and supplies used in producing prototypes. Reimbursement of research and development costs in the form of governmental research and development grants are netted against these expenses.

	Three Months Ended				Six Months Ended			
	March 31, 2013	March 31, 2012	Incr. (Decr.)	% change	March 31, 2013	March 31, 2012	Incr. (Decr.)	% change
	(dollars in thousands)				(dollars in thousands)			
Research and development	\$ 2,184	\$ 3,408	\$ (1,224)	(36)%	\$ 4,643	\$ 6,246	\$ (1,603)	(26)%
Grants earned	(238)	(109)	(129)	(118)%	(1,535)	(194)	(1,341)	691 %
Net research and development	\$ 1,946	\$ 3,299	\$ (1,353)	(41)%	\$ 3,108	\$ 6,052	\$ (2,944)	(49)%

Research and development costs (net of grants earned) for the three months ended March 31, 2013 decreased \$1.4 million compared to the three months ended March 31, 2012. Research and development costs (net of grants earned) for the six months ended March 31, 2013 decreased \$2.9 million compared to the six months ended March 31, 2012. Decreased research and development spending relates to reduced activity in solar research and development. We receive reimbursements through governmental research and development grants which are netted against these expenses. The increase in the year-to-date amount of government grants earned resulted primarily from grant funding for development of the solar ion implanter.

#### ***Income Taxes***

For the three months ended March 31, 2013 and 2012, we recorded an income tax benefit of \$0.8 million and \$0.2 million for effective tax rates of 23% and 4%, respectively. For the six months ended March 31, 2013 and 2012, we recorded an income tax benefit of \$1.3 million and \$0.5 million for effective tax rates of 16% and 7%, respectively. The effective tax rate is the ratio of total income tax expense (benefit) to pre-tax income (loss). The tax benefit for the first six months of fiscal 2012 includes the benefit realized from the favorable resolution of an uncertain tax position. The income tax provisions are based upon estimates of annual income, annual permanent differences and statutory tax rates in the various jurisdictions in which we operate, except that certain loss jurisdictions and discrete items, such as the resolution of uncertain tax positions, are treated separately. No tax benefit has been recognized for losses related to Kingstone's ion implant development project, because it does not have a sufficient history of earnings to support a determination that realization of the tax benefit is more likely than not.

Our future effective income tax rate depends on various factors, such as the geographic composition of worldwide earnings, tax regulations governing each region, non-tax deductible expenses as a percent of pre-tax income and the effectiveness of our tax planning strategies. At the end of 2011, we restructured our European operations to lower the tax rate on The Netherlands operations from 35% to a marginal rate of 25%, as we intend to permanently reinvest future Dutch earnings in our foreign operations. The effect of the restructuring on our tax rate depends on the amount of income or loss realized in The Netherlands, as well as the portion of such income that can be demonstrated to have been derived from qualified new technologies, as well as the factors mentioned above.

## **Liquidity and Capital Resources**

At March 31, 2013 and September 30, 2012, cash and cash equivalents were \$38.8 million and \$46.7 million, respectively. At March 31, 2013 and September 30, 2011, restricted cash was \$6.7 million and \$4.6 million, respectively. Restricted cash increased in the first half of fiscal 2013 primarily due to the receipt of research and development grants which are to be passed through to our development partners, as well as the receipt of other grant funds subject to restrictions. Our working capital was \$55.0 million as of March 31, 2013 and \$60.2 million as of September 30, 2012.

The decrease in cash for the first six months of fiscal 2013 was due to cash used in operating activities of \$7.8 million discussed below. We maintain a portion of our cash and cash equivalents in Euros at our Dutch and French operations, therefore, changes in the exchange rate have an impact on our cash balances. Our ratio of current assets to current liabilities was 2.6:1 as of March 31, 2013 and 2.4:1 at September 30, 2012.

We expect to pay approximately \$8.8 million of Dutch income tax and interest payments during the remainder of fiscal year 2013, and receive a refund of those taxes of approximately \$7.3 million by December 31, 2013, for a net \$1.5 million of Dutch tax payments. In fiscal year 2014, we expect to make U.S. income tax and interest payments of approximately \$6.9 million. See information below regarding other contractual obligations. We have never paid dividends on our Common Stock.

The success of our growth strategy is dependent upon the availability of additional capital resources on terms satisfactory to management. Our sources of capital in the past have included the sale of equity securities, which include common and preferred stock sold in private transactions and public offerings, capital leases and long-term debt. There can be no assurance that we can raise such additional capital resources on satisfactory terms. We believe that our principal sources of liquidity discussed above are sufficient to support operations for at least the next twelve months.

### ***Cash Flows from Operating Activities***

Cash used in our operating activities was \$7.8 million for the six months ended March 31, 2013, compared to \$12.7 million used by such activities for the six months ended March 31, 2012. During the six months ended March 31, 2013, \$4.3 million of cash was used as a result of the net loss from operations, adjusted for non-cash charges. Additional cash was used by the payment of accounts payable, income taxes and accrued compensation. Cash was generated by reductions in inventory and from collections of accounts receivable in excess of the reductions in deferred profit and customer deposits.

### ***Cash Flows from Investing Activities***

Our investing activities for the six months ended March 31, 2013 and 2012 consisted of purchases of property, plant and equipment of \$0.2 million and \$1.1 million, respectively.

### ***Cash Flows from Financing Activities***

There were no cash flows from financing activities in the six months ended March 31, 2013. For the six months ended March 31, 2012 \$4.1 million was used to reacquire shares issued in connection with the Kingstone acquisition.

## **Off-Balance Sheet Arrangements**

As of March 31, 2013, Amtech had no off-balance sheet arrangements as defined in Item 303(a)(4) of Regulation S-K promulgated by the Securities and Exchange Commission.

## **Contractual Obligations**

Purchase obligations were \$7.6 million as of March 31, 2013 compared to \$12.1 million as of September 30, 2012, a decrease of \$4.5 million. Refer to Amtech's annual report on Form 10-K for the year ended September 30, 2012, for information on the Company's other contractual obligations.

## **Critical Accounting Policies**

"Management's Discussion and Analysis of Financial Condition and Results of Operations" discusses our condensed consolidated financial statements that have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amount of assets and liabilities at the date of the condensed consolidated financial statements, the disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenue and expenses during the reporting period.

On an ongoing basis, we evaluate our estimates and judgments, including those related to revenue recognition, inventory valuation, accounts and notes receivable collectability, warranty and impairment of long-lived assets. We base our estimates and judgments on historical experience and on various other factors that we believe to be reasonable under the circumstances. The results of these estimates and judgments form the basis for making conclusions about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

A critical accounting policy is one that is both important to the presentation of our financial position and results of operations, and requires management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. These uncertainties are discussed in Part I, Item 1A of our Annual Report on Form 10-K for the year ended September 30, 2012. We believe our critical accounting policies relate to the more significant judgments and estimates used in the preparation of our consolidated financial statements.

We believe the critical accounting policies discussed in the section entitled "Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies" in our Annual Report on Form 10-K for the fiscal year ended September 30, 2012 represent the most significant judgments and estimates used in the preparation of our consolidated financial statements. There have been no significant changes in our critical accounting policies during the six months ended March 31, 2013.

## **Impact of Recently Issued Accounting Pronouncements**

For discussion of the impact of recently issued accounting pronouncements, see "Item 1: Financial Information" under "Impact of Recently Issued Accounting Pronouncements".

**Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

We are exposed to foreign currency exchange rates to the extent sales contracts, purchase contracts, assets or liabilities of our operations are denominated in currencies other than their functional currency. Our operations in the United States are conducted in their functional currency, the U.S. dollar. Our operations in Europe and China conduct business primarily in their functional currencies, the Euro and Renminbi, but occasionally enter into transactions in the U.S. dollar. It is highly uncertain how currency exchange rates will fluctuate in the future. Actual changes in foreign exchange rates could adversely affect our operating results or financial condition.

During fiscal 2012 and in the first half of fiscal 2013, we did not hold any stand-alone or separate derivative instruments. We incurred net foreign currency transaction gains or losses of less than \$0.1 million during the six months ended March 31, 2013 and 2012. As of March 31, 2013, our foreign subsidiaries had \$1.3 million of assets (cash and accounts receivable) denominated in currencies other than their functional currency. A 10% change in the value of the functional currency relative to the non-functional currency would result in a gain or loss of \$0.1 million. As of March 31, 2013, we had \$1.2 million of accounts payable, consisting primarily of amounts owed by our foreign subsidiaries to our U.S. companies, denominated in U.S. dollars. Although the intercompany accounts are eliminated in consolidation, a 10% change in the value of the Euro relative to the U.S. dollar would result in a gain or loss of \$0.1 million. The risk associated with foreign currency translation gains and losses has increased with our 2011 acquisition in China.

We incurred foreign currency translation losses of less than \$0.1 million and \$1.5 million during the six months ended March 31, 2013 and 2012, respectively, a type of other comprehensive income (loss), which is a direct adjustment to stockholders' equity. Our net investment in and advances to our foreign operations totaled \$50.0 million as of March 31, 2013. A 10% change in the value of the foreign currencies relative to the U.S. dollar would cause approximately \$5.0 million of other comprehensive income (loss). The risk associated with foreign currency translation adjustments has increased with our 2011 acquisition in China.

During the six months ended March 31, 2013 and 2012, U.S. dollar denominated sales of our European operations were \$1.0 million and less than \$0.1 million, respectively. As of March 31, 2013, sales commitments denominated in a currency other than

the functional currency of our transacting operation totaled \$0.6 million. Our lead-times to fulfill these commitments generally range between 13 and 26 weeks. A 10% change in the relevant exchange rates between the time the order was taken and the time of shipment would not cause our gross profit on such orders to be significantly greater or less than expected on the date the order was taken. As of March 31, 2013, purchase commitments denominated in a currency other than the functional currency of our transacting operation totaled \$0.3 million. A 10% change in the relevant exchange rates between the time the purchase order was placed and the time the order is received would not cause our cost of such items to be significantly greater or less than expected on the date the purchase order was placed.

**Item 4. CONTROLS AND PROCEDURES**

***Disclosure Controls and Procedures***

Our management, including the Chief Executive Officer (“CEO”) and the Chief Financial Officer (“CFO”), has carried out an evaluation of the effectiveness of our disclosure controls and procedures as of March 31, 2013, pursuant to Exchange Act Rules 13a-15(e) and 15(d)-15(e). Based upon that evaluation, our CEO and CFO have concluded that as of such date, our disclosure controls and procedures in place are effective.

***Changes in Internal Control Over Financial Reporting***

There has been no change in Amtech’s internal control over financial reporting during the six months ended March 31, 2013 that has materially affected, or is reasonably likely to materially affect, its internal control over financial reporting.



**PART II. OTHER INFORMATION**

**Item 1A. Risk Factors**

The most significant risk factors applicable to Amtech are described in Part I, Item 1A (Risk Factors) of Amtech's Annual Report on Form 10-K for the fiscal year ended September 30, 2012 (our "2012 Form 10-K"). There have been no material changes to the risk factors previously disclosed on our fiscal 2012 Form 10-K.

**Item 6. Exhibits**

31.1	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as Amended	*
31.2	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as Amended	*
32.1	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	*
32.2	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	*
101.INS	XBRL Instance Document	**
101.SCH	XBRL Taxonomy Extension Schema Document	**
101.PRE	Taxonomy Presentation Linkbase Document	**
101.CAL	XBRL Taxonomy Calculation Linkbase Document	**
101.LAB	XBRL Taxonomy Label Linkbase Document	**
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	**

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\* Filed herewith.

\*\* Pursuant to applicable securities laws and regulations, the Company is deemed to have complied with the reporting obligation relating to the submission of interactive data files in such exhibits and is not subject to liability under any anti-fraud provisions or other liability provisions of the federal securities laws as long as the Company has made a good faith attempt to comply with the submission requirements and promptly amends the interactive data files after becoming aware that the interactive data files fail to comply with the submission requirements. In addition, users of this data are advised that, pursuant to Rule 406T of Regulation S-T, these interactive data files are deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933 or Section 18 of the Securities Exchange Act of 1934 and otherwise are not subject to liability under these sections.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

AMTECH SYSTEMS, INC.

By /s/ Robert T. Hass

Dated: May 9, 2013

Robert T. Hass

Vice President and Chief Accounting Officer

(Principal Accounting Officer)

**EXHIBIT INDEX**

<b>Exhibit Number</b>	<b>Description</b>	<b>Page of Method of Filing</b>
31.1	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as Amended	*
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Exhibit 31.1

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES  
CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a)  
OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Fokko Pentinga, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Amtech Systems, Inc. (the “registrant”),
2. Based on my knowledge, this quarterly report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this quarterly report;
4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and
5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

By /s/ Fokko Pentinga

Fokko Pentinga

President and Chief Executive Officer

Amtech Systems, Inc.

Date: May 9, 2013

Exhibit 31.2

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES  
CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a)  
OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

I, Bradley C. Anderson, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Amtech Systems, Inc. (the “registrant”),
2. Based on my knowledge, this quarterly report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this quarterly report;
4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and
5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

By /s/ Bradley C. Anderson

Bradley C. Anderson

Executive Vice President – Finance and Chief Financial Officer

Amtech Systems, Inc.

Date: May 9, 2013

Exhibit 32.1

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES

CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Amtech Systems, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2013, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Fokko Pentinga, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934;  
and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By /s/ Fokko Pentinga

Fokko Pentinga

President and Chief Executive Officer

Amtech Systems, Inc.

Date: May 9, 2013

The foregoing certification is being furnished pursuant to 18 U.S.C. Section 1350. It is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and it is not to be incorporated by reference into any filing of the Company, regardless of any general incorporation language in such filing.

Exhibit 32.2

AMTECH SYSTEMS, INC. AND ITS SUBSIDIARIES

CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Amtech Systems, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2013, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Bradley C. Anderson, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. sections 1350, as adopted pursuant to sections 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934;  
and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By /s/ Bradley C. Anderson

Bradley C. Anderson

Executive Vice President-Finance and Chief Financial Officer

Amtech Systems, Inc.

Date: May 9, 2013

The foregoing certification is being furnished pursuant to 18 U.S.C. Section 1350. It is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and it is not to be incorporated by reference into any filing of the Company, regardless of any general incorporation language in such filing.