

**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, 2016

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 April 28, 2016: 13,173,197

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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, 2016</b>	<b>September 30, 2015</b>
	(Unaudited)	
<b>Assets</b>		
<b>Current Assets</b>		
Cash and cash equivalents	\$ 31,818	\$ 25,852
Restricted cash	535	638
Accounts receivable		
Trade (less allowance for doubtful accounts of \$3,537 and \$5,009 at March 31, 2016, and September 30, 2015, respectively)	16,641	14,488
Unbilled and other	6,089	8,494
Inventories	24,054	23,329
Deferred income taxes	2,050	2,050
Notes and other receivable	—	7,079
Other	3,888	3,772
Total current assets	<u>85,075</u>	<u>85,702</u>
<b>Property, Plant and Equipment - Net</b>	<b>16,896</b>	<b>17,761</b>
<b>Deferred income taxes - Long Term</b>	<b>430</b>	<b>430</b>
<b>Other Assets - Long Term</b>	<b>1,167</b>	<b>3,356</b>
<b>Investments</b>	<b>3,404</b>	<b>2,733</b>
<b>Intangible Assets - Net</b>	<b>4,568</b>	<b>4,939</b>
<b>Goodwill</b>	<b>11,188</b>	<b>10,535</b>
<b>Total Assets</b>	<b><u>\$ 122,728</u></b>	<b><u>\$ 125,456</u></b>
<b>Liabilities and Stockholders' Equity</b>		
<b>Current Liabilities</b>		
Accounts payable	\$ 15,021	\$ 15,646
Current maturities of long-term debt	747	919
Accrued compensation and related taxes	5,242	5,605
Accrued warranty expense	859	793
Deferred profit	3,431	4,873
Customer deposits	10,495	7,154
Other accrued liabilities	2,180	3,551
Income taxes payable	2,400	830
Total current liabilities	<u>40,375</u>	<u>39,371</u>
<b>Long-term Debt</b>	<b>9,351</b>	<b>8,448</b>
<b>Income Taxes Payable - Long Term</b>	<b>5,960</b>	<b>4,990</b>
<b>Total liabilities</b>	<b><u>55,686</u></b>	<b><u>52,809</u></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: 13,173,197 and 13,150,469 at March 31, 2016, and September 30, 2015, respectively	132	131
Additional paid-in capital	110,930	110,191
Accumulated other comprehensive loss	(8,611)	(8,666)
Retained deficit	(34,335)	(28,822)
Total stockholders' equity	<u>68,116</u>	<u>72,834</u>
Noncontrolling interest	(1,074)	(187)
Total equity	<u>67,042</u>	<u>72,647</u>
<b>Total Liabilities and Stockholders' Equity</b>	<b><u>\$ 122,728</u></b>	<b><u>\$ 125,456</u></b>

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

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**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,	
	2016	2015	2016	2015
Revenues, net of returns and allowances	\$ 22,483	\$ 24,273	\$ 44,557	36,669
Cost of sales	16,482	17,384	32,601	26,352
Gross profit	6,001	6,889	11,956	10,317
Selling, general and administrative	7,448	8,075	15,044	14,459
Research, development and engineering	2,160	750	4,447	2,586
Operating loss	(3,607)	(1,936)	(7,535)	(6,728)
Gain on sale of other assets	2,576	—	2,576	—
Income from equity method investment	688	—	671	—
Interest expense and other income, net	33	(217)	(169)	(120)
Loss before income taxes	(310)	(2,153)	(4,457)	(6,848)
Income tax provision	1,670	170	1,970	350
<b>Net loss</b>	<b>(1,980)</b>	<b>(2,323)</b>	<b>(6,427)</b>	<b>(7,198)</b>
Add: net loss (income) attributable to noncontrolling interest	481	2	914	(317)
<b>Net loss attributable to Amtech Systems, Inc.</b>	<b>\$ (1,499)</b>	<b>\$ (2,321)</b>	<b>\$ (5,513)</b>	<b>\$ (7,515)</b>

**Loss Per Share:**

Basic loss per share attributable to Amtech shareholders	\$ (0.11)	\$ (0.19)	\$ (0.42)	\$ (0.69)
Weighted average shares outstanding	13,169	11,997	13,161	10,914
Diluted loss per share attributable to Amtech shareholders	\$ (0.11)	\$ (0.19)	\$ (0.42)	\$ (0.69)
Weighted average shares outstanding	13,169	11,997	13,161	10,914

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>2016</b>	<b>2015</b>	<b>2016</b>	<b>2015</b>
Net loss	\$ (1,980)	\$ (2,323)	\$ (6,427)	\$ (7,198)
Foreign currency translation adjustment	617	(2,322)	82	(3,380)
Comprehensive loss	(1,363)	(4,645)	(6,345)	(10,578)
Comprehensive (income) loss attributable to noncontrolling interest	454	175	887	(138)
Comprehensive loss attributable to Amtech Systems, Inc.	<u>\$ (909)</u>	<u>\$ (4,470)</u>	<u>\$ (5,458)</u>	<u>\$ (10,716)</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>2016</b>	<b>2015</b>
<b>Operating Activities</b>		
Net loss	\$ (6,427)	\$ (7,198)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization	1,529	1,641
Write-down of inventory	74	81
Deferred income taxes	(5)	901
Non-cash share based compensation expense	708	568
Gain on sale of other assets	(2,576)	—
Income from equity method investment	(671)	—
Reversal of allowance for doubtful accounts	(122)	(281)
Changes in operating assets and liabilities:		
Restricted cash	97	844
Accounts receivable	475	(1,406)
Inventories	(656)	(7,482)
Accrued income taxes	1,939	(922)
Other assets	(120)	(2,027)
Accounts payable	(707)	7,664
Accrued liabilities and customer deposits	1,515	5,269
Deferred profit	(1,440)	(643)
Net cash used in operating activities	<u>(6,387)</u>	<u>(2,991)</u>
<b>Investing Activities</b>		
Purchases of property, plant and equipment	(192)	(125)
Acquisitions, net of cash acquired	—	8,595
Proceeds from partial sale of subsidiary	7,012	—
Proceeds from sale of other assets	4,884	—
Net cash provided by investing activities	<u>11,704</u>	<u>8,470</u>
<b>Financing Activities</b>		
Proceeds from the exercise of stock options	30	55
Payments on long-term debt	(259)	(121)
Borrowings on long-term debt	830	335
Net cash provided by financing activities	<u>601</u>	<u>269</u>
<b>Effect of Exchange Rate Changes on Cash</b>	<u>48</u>	<u>(508)</u>
<b>Net Increase in Cash and Cash Equivalents</b>	<u>5,966</u>	<u>5,240</u>
<b>Cash and Cash Equivalents, Beginning of Period</b>	<u>25,852</u>	<u>27,367</u>
<b>Cash and Cash Equivalents, End of Period</b>	<u>\$ 31,818</u>	<u>\$ 32,607</u>
<b>Supplemental Cash Flow Information:</b>		
Cash paid for interest	\$ 176	\$ 58
Issuance of common stock for acquisitions	\$ —	\$ 26,625

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, 2016 AND 2015**  
**(UNAUDITED)**

**1. Summary of Significant Accounting Policies**

**Nature of Operations and Basis of Presentation** - Amtech Systems, Inc. (the “Company” or “Amtech”) is a global manufacturer of capital equipment, atomic layer deposition (“ALD”) including thermal processing, silicon wafer handling automation, and related consumables used in fabricating solar cells, LED and semiconductor devices. The Company sells these products to solar cell and semiconductor manufacturers worldwide, particularly in Asia, United States and Europe.

The Company serves niche markets in industries that are experiencing rapid technological advances and which historically have been very 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 accounting principles generally accepted in the United States of America. 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, 2015.

The consolidated results of operations for the three and six months ended March 31, 2016, 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 and 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. The equity method of accounting is used for investments over which the Company has a significant influence but not a controlling financial interest. All material intercompany accounts and transactions have been eliminated in consolidation.

**Use of Estimates** - The preparation of consolidated 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 revenue and expenses during the reporting period. Actual results could differ from those estimates.

**Revenue Recognition** - The Company reviews product and service sales contracts with multiple deliverables to determine if separate units of accounting are present. Where separate units of accounting exist, revenue allocated to delivered items is the lower of the relative selling price of the delivered items in the sales arrangement or the portion of the selling price that is not contingent upon performance of the service.

The Company recognizes revenue when persuasive evidence of an arrangement exists; the product has been delivered and title has transferred, or services have been rendered; and the seller’s price to the buyer is fixed or determinable and collectability is reasonably assured. For us, this policy generally results in revenue recognition at the following points:

1. For the Company's equipment business, transactions where legal title passes to the customer upon shipment, revenue is recognized upon shipment for those products where the customer’s defined specifications have been met with at least two similarly configured systems and processes for a comparably situated customer. Selling prices may include both equipment and services, i.e., installation and start-up services performed by our service technicians. The equipment and services are multiple deliverables. Certain equipment that has a positive track record of successful installation and customer acceptance are considered to be routine systems. Revenue recognition upon delivery of such equipment that has been routinely installed and accepted is equal to the total selling price minus the relative selling price of the undelivered services.

Where there have been installation and acceptance of more than two similarly configured items of equipment, but installation and acceptance have not become routine, recognition of revenue upon delivery of equipment is limited to the

lesser of (i) the total selling price minus the relative selling price of the undelivered services or (ii) the non-contingent amount.

Since the Company only defers those costs directly related to installation, or other unit of accounting not yet delivered, and the contingent portion of the contract price is often considerably greater than the relative selling price of those items, the policy at times will result in deferral of profit that is disproportionate in relation to the deferred revenue. When this is the case, the gross margin recognized in one period will be lower and the gross margin reported in a subsequent period will improve.

- For products where the customer's defined specifications have not been met with at least two similarly configured systems and processes, the revenue and directly related costs are deferred at the time of shipment and later recognized at the time of customer acceptance or when this criterion has been met. On occasion, the Company has experienced longer than expected delays in receiving cash from certain customers pending final installation or system acceptance. If some customers refuse to pay the final payment, or otherwise delay final acceptance or installation, the deferred revenue would not be recognized, adversely affecting future cash flows and operating results.
- Sales of certain equipment, spare parts and consumables are recognized upon shipment, as there are no post shipment obligations other than standard warranties.
- Service revenue is recognized upon performance of the services requested by the customer. Revenue related to service contracts is recognized ratably over the period of the contract or in accordance with the terms of the contract, which generally coincides with the performance of the services requested by the customer.

**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:

	March 31, 2016	September 30, 2015
	(dollars in thousands)	
Deferred revenues	\$ 5,746	\$ 7,280
Deferred costs	2,315	2,407
Deferred profit	\$ 3,431	\$ 4,873

**Cash Equivalents** – The Company considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents. Cash and cash equivalents consist of amounts invested in U.S. money market funds and various U.S. and foreign bank operating and time deposit accounts.

**Restricted Cash** – Restricted cash of \$0.5 million and \$0.6 million as of March 31, 2016, and September 30, 2015, respectively, includes collateral for bank guarantees required by certain customers from whom deposits have been received in advance of shipment. Restricted cash as of March 31, 2016 and September 30, 2015 includes \$0.2 million relating to the Company's proportional responsibility, assumed in connection with the BTU International Inc. ("BTU") acquisition, for clean-up costs at a Superfund site.

**Accounts Receivable and Allowance for Doubtful Accounts** – Accounts receivable are recorded at the gross sales price of products sold to customers on trade credit terms. Accounts receivable are considered past due when payment has not been received from the customer within the normal credit terms extended to that customer. A valuation allowance is established for accounts when collection is no longer probable. Accounts are written off against the allowance when the probability of collection is remote.

**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.

**Concentrations of Credit Risk** – Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of cash and trade accounts receivable. The Company's customers consist of solar cell and semiconductor manufacturers worldwide, as well as the lapping and polishing marketplace. 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

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customer or its creditworthiness, and 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. Approximately 65% of the Company's 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 with financial institutions with reputable credit in The Netherlands, France and China.

As of March 31, 2016 one customer represented 11% of accounts receivable. As of September 30, 2015, no customer individually represented greater than 10% of accounts receivable.

Refer to Note 6 to Condensed Consolidated Financial Statements, Major Customers and Foreign Sales, for information regarding revenue and assets in other countries subject to fluctuation in foreign currency exchange rates.

**Inventories** – Inventories are stated at the lower of cost or net realizable value. Approximately 60% 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, 2016</b>	<b>September 30, 2015</b>
	<b>(dollars in thousands)</b>	
Purchased parts and raw materials	\$ 10,707	\$ 11,587
Work-in-process	6,797	5,089
Finished goods	6,550	6,653
	<u>\$ 24,054</u>	<u>\$ 23,329</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 20-30 years.

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

	<b>March 31, 2016</b>	<b>September 30, 2015</b>
	<b>(dollars in thousands)</b>	
Land, building and leasehold improvements	\$ 18,266	\$ 18,095
Equipment and machinery	9,831	9,709
Furniture and fixtures	5,482	5,465
	<u>33,579</u>	<u>33,269</u>
Accumulated depreciation and amortization	<u>(16,683)</u>	<u>(15,508)</u>
	<u>\$ 16,896</u>	<u>\$ 17,761</u>

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**Goodwill** - Goodwill and intangible assets with indefinite lives are not subject to amortization, but are tested for impairment when it is determined that it is more likely than not that the fair value of a reporting unit or the indefinite-lived intangible asset is less than its carrying amount, typically at the end of the fiscal year, or more frequently if circumstances dictate.

The following is a summary of activity in goodwill:

	Solar	Semiconductor	Polishing	Total
	(dollars in thousands)			
Goodwill	\$ 6,617	\$ 4,463	\$ 728	\$ 11,808
Accumulated impairment losses	(1,273)	—	—	(1,273)
Carrying value at September 30, 2015	5,344	4,463	728	10,535
Goodwill recognized due to acquisitions	—	600	—	600
Net foreign exchange differences	53	—	—	53
Carrying value at March 31, 2016	<u>\$ 5,397</u>	<u>\$ 5,063</u>	<u>\$ 728</u>	<u>\$ 11,188</u>
Goodwill	\$ 6,685	\$ 5,063	\$ 728	\$ 12,476
Accumulated impairment losses	(1,288)	—	—	(1,288)
Carrying value at March 31, 2016	<u>\$ 5,397</u>	<u>\$ 5,063</u>	<u>\$ 728</u>	<u>\$ 11,188</u>

**Intangibles** – Intangible assets are capitalized and amortized on a straight-line basis 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	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
		March 31, 2016			September 30, 2015		
		(dollars in thousands)					
Customer lists	10 years	\$ 2,441	\$ (884)	\$ 1,557	\$ 2,434	\$ (808)	\$ 1,626
Technology	5-10 years	3,255	(1,649)	1,606	3,223	(1,368)	1,855
Trade names	10-15 years	1,458	(125)	1,333	1,456	(72)	1,384
Other	2-10 years	301	(229)	72	278	(204)	74
		<u>\$ 7,455</u>	<u>\$ (2,887)</u>	<u>\$ 4,568</u>	<u>\$ 7,391</u>	<u>\$ (2,452)</u>	<u>\$ 4,939</u>

**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 revenue is recognized. Estimates are based on past experience and take into account the nature of the products under warranty. The following is a summary of activity in accrued warranty expense:

	<b>Six Months Ended March 31,</b>	
	<b>2016</b>	<b>2015</b>
<b>(dollars in thousands)</b>		
Beginning balance	\$ 793	\$ 628
Warranty - merger	—	806
Additions for warranties issued during the period	430	211
Reductions in the liability for payments made under the warranty	(382)	\$ (673)
Changes related to pre-existing warranties	3	180
Currency translation adjustment	15	\$ (102)
Ending balance	<u>\$ 859</u>	<u>\$ 1,050</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.

Stock-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>2016</b>	<b>2015</b>	<b>2016</b>	<b>2015</b>
<b>(dollars in thousands)</b>				
Effect on income before income taxes (1)	\$ (366)	\$ (336)	\$ (708)	\$ (568)
Effect on income taxes	51	58	98	95
Effect on net income	<u>\$ (315)</u>	<u>\$ (278)</u>	<u>\$ (610)</u>	<u>\$ (473)</u>

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

Stock options issued under the terms of the Company's option plans have, or will have, an exercise price equal to the fair market value of the common stock at the close of trading on the NASDAQ the day prior to 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 2026. Options issued by the Company generally vest over six months to four years, subject to the Company's board of directors' (the "Board") discretion.

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

	Six Months Ended March 31,			
	2016		2015	
	Options	Weighted Average Exercise Price	Options	Weighted Average Exercise Price
Outstanding at beginning of period	1,627,477	\$ 9.11	1,063,324	\$ 7.37
Granted	350,075	5.25	327,500	9.74
Assumed - merger	—	—	367,229	14.19
Exercised	(9,188)	3.27	(11,289)	4.91
Forfeited	(62,116)	13.87	(641)	9.08
Outstanding at end of period	1,906,248	\$ 8.29	1,746,123	\$ 9.26
Exercisable at end of period	1,170,018	\$ 9.16	1,102,682	\$ 9.90
Weighted average fair value of options granted during the period	\$ 3.04		\$ 5.91	

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

	Six Months Ended March 31,	
	2016	2015
Risk free interest rate	2%	2%
Expected life	6 years	6 years
Dividend rate	0%	0%
Volatility	63%	67%

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. The Company's 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,			
	2016		2015	
	Awards	Weighted Average Grant Date Fair Value	Awards	Weighted Average Grant Date Fair Value
Beginning Outstanding	13,540	\$ 7.98	35,203	\$ 10.13
Released	(13,540)	7.98	(21,663)	11.47
Ending Outstanding	—	\$ —	13,540	\$ 7.98

## **Fair Value of Financial Instruments**

In accordance with the requirements of the Fair Value Measurements and Disclosures Topic of the Financial Accounting Standards Board ("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 upon 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, Cash Equivalents and Restricted Cash* - Included in Cash and Cash Equivalents in the Condensed Consolidated Balance Sheets are money market funds invested in treasury bills, notes and other direct obligations of the U.S. Treasury or are in financial institutions insured by the Federal Deposit Insurance Corporation (FDIC) and foreign bank operating and time deposit accounts. The fair value of this cash equivalent is based on Level 1 inputs in the fair value hierarchy.

*Receivables and Payables* -The recorded amounts of these financial instruments, including accounts receivable and accounts payable, 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.

*Debt* - The recorded amounts of these financial instruments, including long-term debt and current maturities of long-term debt, approximate fair value and are considered Level 2 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 to the Company's results of operations and financial condition. The Company's defined contribution plans cover substantially all of the employees in the United States. The Company matches certain employee funds on a discretionary basis while certain subsidiaries require a minimum match to maintain their safe harbor status.

**Shipping expense** – Shipping expenses of \$0.3 million and \$0.4 million for the three months ended March 31, 2016 and 2015, respectively, are included in selling, general and administrative expenses. Shipping expenses of \$0.8 million and \$0.7 million for the six months ended March 31, 2016 and 2015, respectively, are included in selling, general and administrative expenses.

**Research, development and engineering expense** – Research, development and engineering 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 when certain conditions have been met. The table below shows gross research and development expenses and grants earned:

	<b>Three Months Ended</b>		<b>Six Months Ended</b>	
	<b>March 31, 2016</b>	<b>March 31, 2015</b>	<b>March 31, 2016</b>	<b>March 31, 2015</b>
	<b>(dollars in thousands)</b>		<b>(dollars in thousands)</b>	
Research, development and engineering	\$ 2,525	\$ 3,540	\$ 5,139	\$ 6,113
Grants earned	(365)	(2,790)	(692)	(3,527)
Net research, development and engineering	<u>\$ 2,160</u>	<u>\$ 750</u>	<u>\$ 4,447</u>	<u>\$ 2,586</u>

## Impact of Recently Issued Accounting Pronouncements

In April 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2016-10, "Identifying Performance Obligations and Licensing." This ASU addresses certain implementation issues that have surfaced since the issuance of ASU No. 2014-09 in May 2014. The ASU provides guidance in identifying performance obligations and determining the appropriate accounting for licensing arrangements. The amendments in this ASU are effective for fiscal years beginning after December 15, 2017, and for interim periods therein. The Company is in the process of assessing the impact the adoption of this ASU will have on its consolidated financial position, results of operations and cash flows.

In March 2016, the FASB issued ASU No. 2016-09, Compensation - Stock Compensation (Topic 718). ASU 2016-09 identifies areas for simplification involving several aspects of accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, an option to recognize gross stock compensation expense with actual forfeitures recognized as they occur, as well as certain classifications on the statement of cash flows. The amendments in this ASU are effective for annual periods beginning after December 15, 2016 and for the interim periods therein. The Company is currently assessing the impact that adopting this new accounting standard will have on its consolidated financial statements and footnote disclosures.

In March 2016, the FASB issued ASU No. 2016-08, Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net). ASU 2016-08 clarifies the implementation guidance on principal versus agent considerations. The guidance includes indicators to assist an entity in determining whether it controls a specified good or service before it is transferred to the customers. The amendments in this ASU are effective for annual periods beginning after December 15, 2017 and for interim periods therein. The Company is currently assessing the impact that adopting this new accounting standard will have on its consolidated financial statements and footnote disclosures.

In March 2016, the FASB issued ASU 2016-07, Equity Method and Joint Ventures affect all entities that have an investment that becomes qualified for the equity method of accounting as a result of an increase in the level of ownership or degree of influence. ASU 2016-07 is effective for the Company beginning on January 1, 2017, early adoption is permitted. The Company is currently evaluating the effect this ASU will have its consolidated financial statements.

In January 2016, the FASB issued ASU No. 2016-01, Financial Instruments - Overall (Subtopic 825-10), Recognition and Measurement of Financial Assets and Financial Liabilities, which addresses certain aspects of recognition, measurement, presentation, and disclosure of financial instruments. This ASU is effective for fiscal years beginning after December 15, 2017 and early adoption is not permitted. The Company is currently evaluating the impact that the standard will have on its consolidated financial statements.

In November 2015, the FASB issued ASU No. 2015-17, Balance Sheet Classification of Deferred Taxes. This ASU requires entities to classify deferred tax liabilities and assets as noncurrent in a classified statement of financial position. This ASU is effective for fiscal years beginning after December 15, 2016, and interim periods within those annual periods. Early adoption is permitted for all entities as of the beginning of an interim or annual reporting period. The adoption of this guidance by the Company is not expected to have a material impact on its consolidated financial statements.

In July 2015, the FASB issued ASU No. 2015-16, Business Combinations (Topic 805): Simplifying the Accounting for Measurement-Period Adjustments, which simplifies the accounting for measurement-period adjustments to provisional amounts recognized in a business combination. ASU 2015-16 is effective for fiscal years (and interim reporting periods within those years) beginning after December 15, 2016. The provisions of ASU 2015-16 are not expected to have a material effect on the Company's financial condition, results of operations, or cash flows.

In July 2015, the FASB issued ASU No. 2015-11, Simplifying the Measurement of Inventory. This ASU simplifies the measurement of inventory by requiring certain inventory to be measured at the lower of cost or net realizable value. The amendments in this ASU are effective for fiscal years beginning after December 15, 2016 and for interim periods therein. The Company does not expect adoption of this ASU to have a material impact on the Company's consolidated financial position and results of operations.

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606), that will supersede most current revenue recognition guidance, including industry-specific guidance. The core principle of the new guidance is that an entity will recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard provides a five-step analysis of transactions to determine when and how revenue is recognized. Other major provisions include the capitalization and

amortization of certain contract costs, ensuring the time value of money is considered in the transaction price, and allowing estimates of variable consideration to be recognized before contingencies are resolved in certain circumstances. Additionally, the guidance requires disclosures related to the nature, amount, timing, and uncertainty of revenue that is recognized. The original effective date for ASU 2014-09 would have required the Company to adopt beginning in its first quarter of 2018. In August 2015, the FASB issued ASU No. 2015-14, Revenue from Contracts with Customers (Topic 606) – Deferral of the Effective Date, which defers the effective date of ASU 2014-09 for one year and permits early adoption as early as the original effective date of ASU 2014-09. Accordingly, the Company may adopt the standard in either its first quarter of 2018 or 2019. The new revenue standard may be applied retrospectively to each prior period presented or retrospectively with the cumulative effect recognized as of the date of adoption. The Company is currently evaluating the timing of its adoption and the impact of adopting the new revenue standard on its 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 are treated separately. The gain on the Kingstone transaction, described in Note 10, was treated as a discrete item and accounted for \$1.7 million of the tax expense in the quarter, with the tax calculated utilizing the effective tax rate and other discrete items nearly offsetting each other.

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, federal and foreign deferred tax assets that may not be recovered. Each quarter, the valuation allowance is re-evaluated. During the six months ended March 31, 2016 the valuation allowance increased by a net of \$1.1 million primarily due to net operating losses in The Netherlands, France and China, partially offset by a decrease in the valuation allowance due to utilization of net operating losses in the United States.

The Company classifies all of our uncertain tax positions as non-current income taxes payable. At March 31, 2016 and September 30, 2015, the total amount of unrecognized tax benefits was approximately \$2.4 million and \$1.8 million, respectively. If recognized, these amounts would favorably impact the effective tax rate. Income taxes payable long-term primarily includes, among other items, withholding taxes that are not due until the related intercompany service fees are paid.

The Company classifies interest and penalties related to unrecognized tax benefits as income tax expense. As of March 31, 2016 and September 30, 2015, the Company had an accrual for potential interest and penalties of approximately \$2.0 million and \$1.8 million, respectively, classified with non-current income taxes payable.

The Company and one or more of its subsidiaries file income tax returns in The Netherlands, France, China, Singapore, Malaysia, Hong Kong, and Germany, 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 their respective taxing jurisdictions, but generally is from 3 to 5 years in the jurisdictions in which the Company files tax returns.

### 3. Earnings Per Share

Basic earnings per share ("EPS") is computed by dividing net income (loss) 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 and six months ended March 31, 2016, options for 1,906,000 shares are excluded from the diluted EPS calculations because they are anti-dilutive. For the three and six months ended March 31, 2015, options for 1,746,000 shares and 14,000 restricted stock awards were excluded from the diluted EPS calculations because they were anti-dilutive.

The following table outlines basic and diluted EPS:

	Three Months Ended March 31,		Six Months Ended March 31,	
	2016	2015	2016	2015
	(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.	\$ (1,499)	\$ (2,321)	\$ (5,513)	\$ (7,515)
Weighted Average Shares Outstanding:				
Common stock	13,169	11,997	13,161	10,914
Basic loss per share attributable to Amtech shareholders	\$ (0.11)	\$ (0.19)	\$ (0.42)	\$ (0.69)
<b>Diluted Loss Per Share Computation</b>				
Net loss attributable to Amtech Systems, Inc.	\$ (1,499)	\$ (2,321)	\$ (5,513)	\$ (7,515)
Weighted Average Shares Outstanding:				
Common stock	13,169	11,997	13,161	10,914
Diluted shares	13,169	11,997	13,161	10,914
Diluted loss per share attributable to Amtech shareholders	\$ (0.11)	\$ (0.19)	\$ (0.42)	\$ (0.69)

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

### 4. Stockholders' Equity

**Shareholder Rights Plan** - On December 15, 2008, the Company and Computershare Trust Company, N.A., as Rights Agent (the "Rights Agent"), entered into an Amended and Restated Rights Agreement (the "Restated Rights Agreement") which amended and restated the terms governing the previously authorized shareholder rights (each a "Right") to purchase fractional shares of the Company's Series A Participating Preferred Stock ("Series A Preferred") currently attached to each of the Company's outstanding Common Shares, par value \$0.01 per share ("Common Shares"). As amended, each Right entitles the registered holder to purchase from the Company one one-thousandth of a share of Series A Preferred at an exercise price of \$51.60 (the "Exercise Price"), subject to adjustment. The Rights will expire 10 years after issuance and will be exercisable if (a) a person or group becomes the beneficial owner of 15% or more of the Company's common stock or (b) a person or group commences a tender or exchange offer that would result in the offeror beneficially owning 15% or more of the Company's common stock. The Final Expiration Date (as defined in the Restated Rights Agreement) is December 14, 2018.

On October 1, 2015, the Company entered into a Second Amended and Restated Rights Agreement (the "Second Restated Rights Agreement") with the Rights Agent, which expands the definition of Exempted Person as defined in the Second Restated Rights Agreement to include any person that the Board, in its sole and absolute discretion, exempts from becoming an Acquiring Person as defined in the Second Restated Rights Agreement. A Person deemed an Exempted Person under the Second Restated Rights Agreement cannot trigger any of the Rights provided therein so long as such Exempted Person complies with the terms and conditions by which the Board approved such exemption from the Restated Rights Agreement.

As previously disclosed, on October 8, 2015, the Company entered into a Letter Agreement (the "Agreement") by and between the Company and certain shareholders of the Company who jointly file (the "Joint Filers") under Section 13 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). One of the Joint Filers has become a member of our Board after it was approved by the Board. The Agreement permits the Joint Filers, pursuant to the Restated Rights Agreement, to individually acquire

shares of common stock of the Company that would, in the aggregate, bring the Joint Filers' collective ownership to no more than 19.9% of the Company's issued and outstanding common stock at any time. In the event the Joint Filers' collective ownership at any time exceeds 19.9% of the Company's issued and outstanding shares of common stock, the Company is entitled to specific performance and all other remedies entitled to the Company at law or equity, among others. The Company's board of directors approved the Agreement and transactions contemplated thereunder, and has the sole authority to terminate the Agreement at any time.

**5. Business Segment Information**

Following the Company's acquisition of BTU, an evaluation was conducted of the Company's organizational structure. Beginning with the second quarter of fiscal 2015, the Company made changes to its reportable segments. Prior period amounts have been revised to conform to the current period segment reporting structure. The Company's three reportable segments are as follows:

**Solar** - The Company is a leading supplier of thermal processing systems, ALD, related automation, parts and services, to the solar/photovoltaic industry and also offers PECVD (plasma-enhanced chemical vapor deposition) equipment to the global solar market. On December 24, 2014, the Company acquired a 51% controlling interest in SoLayTec B.V. ("SoLayTec") and beginning in the second quarter of 2015, its business has been included in the results for this segment.

**Semiconductor** - In the Company's Semiconductor segment, it designs, manufactures, sells and services thermal processing equipment and related controls for use by leading semiconductor manufacturers, and in electronics, automotive and other industries. On January 30, 2015, the Company completed its acquisition of BTU and, since the second quarter of 2015, its business has been included in the results for this segment.

**Polishing** - In the Company's Polishing segment, the Company produces consumables and machinery for lapping (fine abrading) and polishing of materials, such as sapphire substrates, optical components, silicon wafers, numerous types of crystal materials, ceramics and metal components.

Information concerning our business segments is as follows:

	Three Months ended March 31,		Six Months Ended March 31,	
	2016	2015	2016	2015
(dollars in thousands)				
Net Revenues:				
Solar (1)	\$ 9,801	\$ 9,463	\$ 19,344	\$ 17,749
Semiconductor	10,507	12,088	21,206	12,820
Polishing	2,175	2,722	4,007	6,100
	<u>\$ 22,483</u>	<u>\$ 24,273</u>	<u>\$ 44,557</u>	<u>\$ 36,669</u>
Operating income (loss):				
Solar (1)	\$ (2,266)	\$ (724)	\$ (4,130)	\$ (3,219)
Semiconductor	(119)	730	(279)	630
Polishing	386	601	555	1,343
Non-segment related	(1,608)	(2,543)	(3,681)	(5,482)
	<u>\$ (3,607)</u>	<u>\$ (1,936)</u>	<u>\$ (7,535)</u>	<u>\$ (6,728)</u>

(1) The financial statement of business units included in the Solar segment include some sales of equipment and parts to the semiconductor, silicon wafer and MEMS industries, comprising less than 25% of the Solar segment revenue.

	March 31, 2016	September 30, 2015
(dollars in thousands)		
<b>Identifiable Assets:</b>		
Solar	\$ 46,778	\$ 45,717
Semiconductor	46,640	46,912
Polishing	5,714	5,793
Non-segment related	23,596	27,034
	\$ 122,728	\$ 125,456

## 6. Major Customers and Foreign Sales

During the six months ended March 31, 2016, no customers represented more than 10% of net revenues. During the six months ended March 31, 2015, one customer individually represented 19% of net revenues.

The Company has operations in The Netherlands, United States, France, and China. Our net revenues were to customers in the following geographic regions:

	Six Months Ended March 31,	
	2016	2015
United States	23 %	17 %
Other	3 %	3 %
<b>Total North America</b>	<b>26 %</b>	<b>20 %</b>
China	22 %	28 %
Taiwan	12 %	18 %
Other	22 %	16 %
<b>Total Asia</b>	<b>56 %</b>	<b>62 %</b>
<b>Total Europe</b>	<b>18 %</b>	<b>18 %</b>
	<b>100 %</b>	<b>100 %</b>

## 7. Long-term Debt

In January 2015, the Company acquired \$7.2 million of long-term debt as part of the BTU acquisition. The debt is secured by the Company's real property in Billerica, Massachusetts, and has a remaining balance of \$6.7 million as of March 31, 2016. The debt has an interest rate of 4.4% through September 26, 2018, at which time the interest rate will be adjusted to a per annum fixed rate equal to the aggregate of the Federal Home Loan Board Five Year Classic Advance Rate plus two hundred forty basis points. The maturity date of the debt is September 26, 2023.

In December 2014, the Company acquired \$2.0 million of long-term debt as part of the SoLayTec B.V. ("SoLayTec") acquisition. During the six months ended March 31, 2016, SoLayTec borrowed an additional \$0.8 million. As of March 31, 2016 the SoLayTec long-term debt has a remaining balance of \$3.4 million, with interest capitalized per the agreement bearing interest at rates ranging from 5.95% to 10% and maturity dates ranging from fiscal 2017 to fiscal 2021.

## 8. Commitments and Contingencies

**Purchase Obligations** – As of March 31, 2016, the Company had purchase obligations in the amount of \$19.9 million compared to \$9.8 million as of September 30, 2015. 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.

**Development projects** – In fiscal 2014, Tempres Systems, Inc. ("Tempres") entered into an agreement with the Energy Research Centre of the Netherlands ("ECN"), a Netherlands government sponsored research institute, for a joint research and development project. Under the terms of the agreement, Tempres sold an ion implanter ("Equipment") to ECN for \$1.4 million. Both Tempres and ECN are performing research and development projects utilizing the Equipment at the ECN facilities. Each party to the agreement will have 100% rights to the results of the projects developed separately by the individual parties. Any results co-developed will be jointly owned. Over the four-year period of the agreement, Tempres is required to contribute \$1.4 million to the project in the form of installation of the equipment, acceptance testing, project meeting attendance, training, parts, and service, including keeping the equipment in good condition and repair for the first two years of the agreement. As of March 31, 2016, Tempres has contributed \$1.1 million of the required \$1.4 million to the project.

**EPA Accrual** - As a result of the BTU acquisition, the Company assumed BTU's proportional responsibility for clean-up costs at a Superfund site. As an equipment manufacturer, BTU generated and disposed of small quantities of solid waste that were considered hazardous under Environment Protection Agency ("EPA") regulations. Because BTU historically used a waste disposal firm that disposed of the solid waste at a site that the EPA designated as a Superfund site, BTU was named by the EPA as one of the entities responsible for a portion of the expected clean-up costs. Based on the Company's proportional responsibility, as negotiated with and agreed to by the EPA, the Company's liability related to this matter is less than \$0.1 million, which is included in Other Accrued Liabilities on the Condensed Consolidated Balance Sheet as of March 31, 2016. In accordance with the agreement, the Company established a letter of credit for \$0.2 million to the benefit of the EPA for potential cash payments as settlements for the Company's proportional liability.

**Legal Proceedings** – The Company and its subsidiaries are defendants from time to time in actions for matters arising out of their business operations. As previously disclosed in the Company's filings with the SEC, shortly after the Company entered into the merger agreement with BTU, two separate putative stockholder class action complaints (together, the "Stockholder Actions") were filed in the Court of Chancery of the State of Delaware (the "Delaware Court"). The first was filed on November 4, 2014 and the second on November 17, 2014, on behalf of BTU's public stockholders, against BTU, members of the BTU board, Amtech and the special purpose merger subsidiary. The Stockholder Actions were consolidated on December 4, 2014. The complaints generally alleged that, in connection with entering into the merger agreement, the BTU board of directors breached certain fiduciary duties owed to BTU's stockholders. The complaints sought various forms of declaratory and injunctive relief, as well as compensatory damages.

On February 18, 2016, the Delaware Court entered the Order approving the Amended Stipulation of Settlement. As a result, the Released Claims were dismissed with prejudice and without any admission of wrongdoing by any of the parties to the Stockholder Actions. Pursuant to the Amended Stipulation of Settlement, BTU, its insurer(s), or its successor(s) in interest are responsible for payment of fees and expenses in the amount of \$325,000 which were paid in full on April 1, 2016.

As described above, the Released Claims are limited solely to claims related to any disclosures (or lack thereof) to BTU's stockholders concerning the merger and any fiduciary claims concerning the decision to enter into the merger. While we are currently unaware of any other pending or threatened litigation related to additional claims arising from the Stockholder Actions, any future claims are uncertain, so additional harm could potentially result to the Company from this litigation, which may cause the Company to incur substantial costs and divert management's attention from operational matters.

## 9. Investments

The Company's equity method investments include a 15% interest in Kingstone Technology Hong Kong Limited ("Kingstone"). The Company recognizes its portion of net income or losses on a one-quarter lag. The carrying value of the equity method investment in Kingstone was \$3.4 million and \$2.7 million as of March 31, 2016 and September 30, 2015, respectively. For the three and six months ended March 31, 2016, Amtech's equity income from the investment in Kingstone was \$0.7 million and has been included in our condensed consolidated statements of operations in income from equity method investment.

## 10. Related Party Transactions

In the fourth quarter of 2015, the Company deconsolidated Kingstone, reducing its ownership to 15% of the Hong Kong holding company. Upon the deconsolidation, Kingstone became a related party of the Company. Based on the terms of the transaction

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agreements in the second quarter of 2016, the Company received a payment of \$4.9 million from Kingstone for its exclusive sale and service rights in the solar ion implant equipment. The company recognized a gain on the sale of \$2.6 million for the three and six months ended March 31, 2016, which is included in our condensed consolidated statement of operations in Gain on sale of other assets. At March 31, 2016, the Company's related accounts receivable due from Kingstone were \$0.5 million, which are included in Accounts Receivable on the Condensed Consolidated Balance Sheet.

## **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, 2015.

### **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 ("Company", "Amtech", "we" or "our"), 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 (the "Exchange Act")). 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, 2015 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
- Impact of Recently Issued Accounting Pronouncements

### **Overview**

We operate in three reportable business segments: (i) solar, (ii) semiconductor and (iii) polishing. In our solar segment, we are a leading global supplier of thermal processing systems, including diffusion, plasma-enhanced chemical vapor deposition (PECVD), atomic layer deposition (ALD), and related automation, parts and services, to the solar/photovoltaic industry. In our semiconductor segment, we supply thermal processing equipment, including solder reflow equipment and related controls for use by leading semiconductor manufacturers, and in electronics assembly for automotive and other industries. In our polishing supplies segment, we produce consumables and machinery for lapping (fine abrading) and polishing of materials, such as sapphire substrates, optical components, silicon wafers, numerous types of crystalline materials, ceramics and metal components.

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. Since 2012, the solar cell industry has experienced a structural imbalance between supply and demand. This imbalance has negatively impacted our results of operations.

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. On January 30, 2015, we completed the acquisition of BTU, which provides complementary thermal processing technologies in the semiconductor, electronics and solar sectors, and strengthens our footprint in China and other key geographic markets. On December 24, 2014, we expanded our participation in the solar market by acquiring a 51% controlling interest in SoLayTec, which provides atomic layer deposition systems used in high efficiency solar cells.

In September 2015, we sold a portion of our interest in Kingstone, a Shanghai-based technology company specializing in ion implant solutions for the solar and semiconductor industries (in which we acquired a 55% ownership in February 2011), to a China-based venture capital firm. Proceeds from the sale of shares were paid to Amtech and used to support the company's core strategic initiatives. Upon completion of the transaction, we owned 15% of the Hong Kong holding company.

### **Results of Operations**

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

	Three Months Ended		Six Months Ended	
	March 31, 2016	March 31, 2015	March 31, 2016	March 31, 2015
Net revenue	100 %	100 %	100 %	100 %
Cost of sales	73 %	72 %	73 %	72 %
Gross margin	27 %	28 %	27 %	28 %
Selling, general and administrative	33 %	33 %	34 %	39 %
Research, development and engineering	10 %	3 %	10 %	7 %
Operating loss	(16)%	(8)%	(17)%	(18)%
Gain on sale of other assets	11 %	0 %	6 %	0 %
Income from equity method investment	3 %	0 %	2 %	0 %
Interest expense and other income, net	0 %	(1)%	1 %	0 %
Loss before income taxes	(2)%	(9)%	(10)%	(18)%
Income taxes provision	7 %	1 %	4 %	1 %
Net loss	(9)%	(10)%	(14)%	(19)%
Add: net loss (income) attributable to noncontrolling interest	2 %	0 %	2 %	(1)%
Net loss attributable to Amtech Systems, Inc.	(7)%	(10)%	(12)%	(20)%

### Net Revenue

Net revenue consists of revenue recognized upon shipment or installation of equipment, with the exception of products using new technology, for which revenue is recognized upon customer acceptance. Spare parts sales are recognized upon shipment and 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 system sales, revenue and operating income can be significantly impacted by the timing of system shipments, and recognition of revenue based on customer acceptances.

Segment	Three Months Ended March 31,				Six Months Ended March 31,			
	2016	2015	Incr (Decr)	% Change	2016	2015	Incr (Decr)	% Change
	(dollars in thousands)							
Solar	\$ 9,801	\$ 9,463	\$ 338	4 %	\$ 19,344	\$ 17,749	\$ 1,595	9 %
Semiconductor	10,507	12,088	(1,581)	(13)%	21,206	12,820	8,386	65 %
Polishing	2,175	2,722	(547)	(20)%	4,007	6,100	(2,093)	(34)%
Total net revenue	<u>\$ 22,483</u>	<u>\$ 24,273</u>	<u>\$ (1,790)</u>	(7)%	<u>\$ 44,557</u>	<u>\$ 36,669</u>	<u>\$ 7,888</u>	22 %

Net revenue for the quarters ended March 31, 2016 and 2015 was \$22.5 million and \$24.3 million, respectively, a decrease of \$1.8 million or 7%. Revenue from the solar segment increased 4% compared to the prior year quarter due primarily to increased recognition of previously-deferred revenue. Revenue from the semiconductor segment decreased 13% compared to the prior year quarter due primarily to lower shipments caused by the cyclical nature of this industry. Revenue from the polishing segment decreased 20% compared to the prior year quarter due primarily to decreases in sales of polishing templates and equipment, due primarily to competitive pressures caused, in part, by the strength of the US dollar versus currencies in the markets we serve.

Net revenue for the six months ended March 31, 2016 and 2015 was \$44.6 million and \$36.7 million, respectively, an increase of \$7.9 million or 22%. Revenue from the solar segment increased 9% compared to the first six months of 2015 due primarily to increased recognition of previously-deferred revenue. Revenue from the semiconductor segment increased 65% compared to the first six months of 2015 due primarily to the acquisition of BTU in January 2015, partially offset by lower shipments caused by the cyclical nature of this industry and our dependence on a relatively small number of customers. Revenue from the polishing segment decreased 34% compared to the first six months of 2015 due to the reasons mentioned above.

### Backlog and Orders

Our order backlog as of March 31, 2016 and 2015 was \$67.3 million and \$56.0 million, respectively, an increase of \$11.3 million or 20%. Our backlog as of March 31, 2016 includes approximately \$51.3 million of orders and deferred revenue from our solar industry customers, compared to \$43.3 million at March 31, 2015. New orders booked in the quarter ended March 31, 2016 were \$45.0 million (\$28.0 million solar) compared to \$30.9 million (\$16.7 million solar) of customer orders in the quarter ended March 31, 2015. As of March 31, 2016 three customers individually accounted for 29%, 13%, and 11% of our backlog. The orders included in our backlog are generally credit approved customer purchase orders believed to be firm, and are generally 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.

Segment	Three Months ended March 31,				Six Months Ended March 31,			
	2016	2015	Incr (Deer)	% Change	2016	2015	Incr (Deer)	% Change
(dollars in thousands)								
Solar	\$ 1,420	\$ 1,723	\$ (303)	(18)%	\$ 3,168	\$ 3,760	\$ (592)	(16)%
Semiconductor	3,882	4,147	(265)	(6)%	7,624	4,330	3,294	76 %
Polishing	699	1,019	(320)	(31)%	1,164	2,227	(1,063)	(48)%
Total gross profit	<u>\$ 6,001</u>	<u>\$ 6,889</u>	<u>\$ (888)</u>	(13)%	<u>\$ 11,956</u>	<u>\$ 10,317</u>	<u>\$ 1,639</u>	16 %

Gross profit for the three months ended March 31, 2016 and 2015 was \$6.0 million and \$6.9 million, respectively, a decrease of \$0.9 million. Gross margin on products from our solar segment decreased compared to the three months ended March 31, 2015, due primarily less usage of previously reserved inventory, which resulted in higher material costs as a percentage of shipments. Gross margin on products from our semiconductor segment increased primarily due to product mix. Gross margins on our polishing segments decreased primarily due to lower sales volumes. For the three months ended March 31, 2016, we recognized previously-deferred profit of \$0.8 million. For the three months ended March 31, 2015 we deferred profit of \$0.7 million.

Gross profit for the six months ended March 31, 2016 and 2015 was \$12.0 million and \$10.3 million, respectively, an increase of \$1.6 million. Gross margin on products from our solar segment decreased compared to the first six months of fiscal 2015, due primarily to high margins on ion implant revenue in the first quarter of fiscal 2015 which did not repeat in fiscal 2016. In the semiconductor segment, gross profit and gross margin increased primarily due to the BTU acquisition. Gross margin on products from our polishing segment decreased primarily due to lower sales volumes. For the six months ended March 31, 2016 and 2015, we recognized previously-deferred profit of \$1.5 million and \$0.5 million, respectively.

### Selling, General and Administrative

Selling, general and administrative expenses ("SG&A") consist of the cost of employees, consultants and contractors, facility costs, sales commissions, shipping costs, promotional marketing expenses, legal, accounting expenses and bad debt expense.

SG&A expenses for the three months ended March 31, 2016 and 2015 were \$7.4 million and \$8.1 million, respectively. SG&A decreased compared to the prior year quarter due primarily to lower legal and consulting expenses related to our acquisition of BTU in January 2015, as well as lower commission expenses. Partially offsetting the decrease are three months of expenses incurred by BTU in the quarter ended March 31, 2016 compared to only two months of expenses in the quarter ended March 31, 2015. SG&A expense includes \$0.4 million and \$0.3 million of stock-based compensation expense for the three months ended March 31, 2016 and 2015, respectively.

SG&A expenses for the six months ended March 31, 2016 and 2015 were \$15.0 million and \$14.5 million, respectively. SG&A increased primarily due to expenses incurred by BTU which was acquired in January 2015. SG&A expense includes \$0.7 million and \$0.6 million of stock-based compensation expense for the six months ended March 31, 2016 and 2015, respectively.

### Research, Development and Engineering

Research, development and engineering ("RD&E") 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. We receive reimbursements through governmental research and development grants which are netted against these expenses when certain conditions have been met.

	Three Months ended March 31,				Six Months Ended March 31,			
	2016	2015	Incr. (Decr.)	% change	2016	2015	Incr. (Decr.)	% change
	(dollars in thousands)				(dollars in thousands)			
Research, development and engineering	\$ 2,525	\$ 3,540	\$ (1,015)	(29)%	\$ 5,139	\$ 6,113	\$ (974)	(16)%
Grants earned	(365)	(2,790)	2,425	(87)%	(692)	(3,527)	2,835	(80)%
Net research, development and engineering	\$ 2,160	\$ 750	\$ 1,410	188 %	\$ 4,447	\$ 2,586	\$ 1,861	72 %

RD&E expense, net of grants earned, for the three months ended March 31, 2016 increased \$1.4 million compared to the three months ended March 31, 2015. For the six months ended March 31, 2016, RD&E expense, net of grants, increased \$1.9 million compared to the six months ended March 31, 2015. Lower grants earned in fiscal 2016 were partially offset by lower fiscal 2016 spending in the first six months of 2016. The decrease in RD&E spending results primarily from the deconsolidation of Kingstone in fiscal 2015, partially offset by the acquisitions of BTU and SoLayTec. The decrease in grants earned resulted from the effect of the deconsolidation of Kingstone in fiscal 2015.

#### ***Gain on Sale of Other Assets***

For the three and six months ended March 31, 2016, we recognized a gain of \$2.6 million on the receipt of sale of our exclusive sales and service rights in the Kingstone solar ion implant equipment.

#### ***Income from Equity Method Investment***

For the three and six months ended March 31, 2016 we recognized investment income of \$0.7 million related to our 15% equity investment in Kingstone.

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

For the three and six months ended March 31, 2016 we recorded income tax expense of \$1.7 million and \$2.0 million, respectively. For the three and six months ended March 31, 2015 we recorded income tax expense of \$0.2 million and \$0.4 million respectively. 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 are treated separately. The gain on the Kingstone transaction, described above, was treated as a discrete item and accounted for \$1.7 million of the tax expense in the quarter, with the tax calculated utilizing the effective tax rate and other discrete items nearly offsetting each other. During the three months ended March 31, 2016, the valuation allowance on deferred tax assets increased due to net operating losses in The Netherlands, France and China, partially offset by a reduction of the valuation allowance due to the utilization of net operating losses in the United States.

The Company establishes a valuation allowance when it is “more likely than not” that all or a portion of deferred tax assets will not be realized. A review of all available positive and negative evidence is considered, including a company’s performance, the market environment in which the company operates and the length of carryback and carryforward periods. According to the accounting standards, it is difficult to conclude that a valuation allowance is not needed when the negative evidence includes cumulative losses in recent years. Therefore, cumulative losses weigh heavily in the overall assessment. As a result of the merger with BTU, we determined that it is more likely than not that some of our U.S. federal deferred tax assets would not be realized, and thus the Company recorded a partial valuation allowance in the U.S. In making this determination, we considered the cumulative losses in the U.S., including those of BTU, expected future taxable income and available tax planning strategies. The Company continues to have a full valuation allowance on the deferred tax assets related to The Netherlands, China and the United Kingdom and a partial valuation allowance on the deferred tax assets in the United States and France.

Our future effective income tax rate depends on various factors, such as the amount of income (loss) in each tax jurisdiction, tax regulations governing each region, non-tax deductible expenses incurred 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 restructure on our tax rate depends on the amount of income or loss earned 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, 2016, and September 30, 2015, cash and cash equivalents were \$31.8 million and \$25.9 million, respectively. At March 31, 2016, and September 30, 2015, restricted cash was \$0.5 million and \$0.6 million, respectively. Our working capital was \$44.7 million as of March 31, 2016 and \$46.3 million as of September 30, 2015.

The increase in cash for the first six months of fiscal 2016 of \$6.0 million was primarily due to proceeds received from the partial sale of our equity interest in Kingstone of \$7.0 million and the sale of the related sales and service rights for \$4.9 million, along with net borrowings on long-term debt of \$0.6 million. These increases were partially offset by cash used in operating activities of \$6.4 million. 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 2.1:1 and 2.2:1 as of March 31, 2016, and September 30, 2015, respectively. 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. 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 \$6.4 million for the six months ended March 31, 2016, compared to \$3.0 million used in such activities for the six months ended March 31, 2015. During the six months ended March 31, 2016, \$7.5 million was used in losses on operations, net of non-cash charges and cash of \$1.1 million was provided by income taxes and other accrued liabilities, offset by purchases of inventory and payment of accounts payable.

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

Our investing activities for each of the six month periods ended March 31, 2016 and 2015 consisted of purchases of property, plant and equipment of approximately \$0.2 million and \$0.1 million, respectively. In six months ended March 31, 2016, we received cash of \$7.0 million from the partial sale of our equity interest in Kingstone and \$4.9 million from the sale of the related sales and service rights. In the six months ended March 31, 2015 we acquired a 51% interest SoLayTec, for an investment of \$0.3 million and acquired \$8.8 million in the acquisition of BTU.

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

For the six months ended March 31, 2016, the primary source of \$0.6 million of cash provided by financing activities were primarily comprised of borrowings of long-term debt of \$0.8 million, net of payments of \$0.3 million. Cash flows from borrowings were \$0.3 million for the six months ended March 31, 2015.

### **Off-Balance Sheet Arrangements**

As of March 31, 2016, 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 \$19.9 million as of March 31, 2016, compared to \$9.8 million as of September 30, 2015, an increase of \$10.1 million due to increased customer orders. In January 2015, the Company acquired \$7.2 million of long-term debt as part of the BTU acquisition. The debt is secured by the Company's real property in Billerica, Massachusetts, and has a remaining balance of \$6.7 million as of March 31, 2016. The debt has an interest rate of 4.4% through September 26, 2018, at which time the interest rate will be adjusted to a per annum fixed rate equal to the aggregate of the Federal Home Loan Board Five Year Classic Advance Rate plus two hundred forty basis points. The maturity date of the debt is September 26, 2023. All outstanding principal and accrued and unpaid interest will be due and payable on the maturity date.

In December 2014, the Company acquired \$2.0 million of long-term debt as part of the SoLayTec acquisition. During the six months ended March 31, 2016, SoLayTec borrowed an additional \$0.8 million. As of March 31, 2016 the SoLayTec long-term debt has a remaining balance of \$3.4 million, with interest capitalized per the agreement bearing interest at rates ranging from 5.95% to 10% and maturity dates ranging from fiscal 2017 to fiscal 2021.

Refer to Amtech's annual report on Form 10-K for the year ended September 30, 2015, 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, 2015. 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, 2015 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, 2016.

### **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 generally conducted in U.S. dollars. Our operations in Europe, China and other countries conduct business primarily in their respective functional currencies, but occasionally we enter into transactions in non-functional currencies. 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 2015 and in the first six months of fiscal 2016, we did not hold any stand-alone or separate derivative instruments. We incurred net foreign currency transaction gains of \$0.1 million and less than \$0.1 million during the six months ended March 31, 2016 and 2015, respectively.

We incurred foreign currency translation gain of \$0.1 million and loss of \$3.4 million, during the six months ended March 31, 2016 and 2015, 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 \$22.0 million as of March 31, 2016. A 10% change in the value of the foreign currencies relative to the U.S. dollar would cause approximately \$2.2 million of other comprehensive income (loss).

As of March 31, 2016, sales commitments denominated in a currency other than the functional currency of our transacting operation totaled approximately \$10.5 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, 2016, purchase commitments denominated in a currency other than the functional currency of our transacting operation totaled \$1.6 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, 2016, pursuant to Exchange Act Rules 13a-15(e) and 15(d)-15(e). Disclosure controls and procedures means controls and other procedures that are designed to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to management, including the principal executive and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. Based upon that evaluation, our CEO and CFO have concluded that as of such date, our disclosure controls and procedures in place were effective.

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

There were no changes in Amtech's internal control over financial reporting during the six months ended March 31, 2016 that has materially affected, or is reasonably likely to materially affect, its internal control over financial reporting.

**PART II. OTHER INFORMATION**

**Item 1. Legal Proceedings**

The Company and its subsidiaries are defendants from time to time in actions for matters arising out of their business operations. As previously disclosed in the Company's filings with the SEC, shortly after the Company entered into the merger agreement with BTU, two separate putative stockholder class action complaints (together, the "Stockholder Actions") were filed in the Court of Chancery of the State of Delaware (the "Delaware Court"). The first was filed on November 4, 2014 and the second on November 17, 2014, on behalf of BTU's public stockholders, against BTU, members of the BTU board, Amtech and the special purpose merger subsidiary. The Stockholder Actions were consolidated on December 4, 2014. The complaints generally alleged that, in connection with entering into the merger agreement, the BTU board of directors breached certain fiduciary duties owed to BTU's stockholders. The complaints sought various forms of declaratory and injunctive relief, as well as compensatory damages.

On February 18, 2016, the Delaware Court entered the Order approving the Amended Stipulation of Settlement. As a result, the Released Claims were dismissed with prejudice and without any admission of wrongdoing by any of the parties to the Stockholder Actions. Pursuant to the Amended Stipulation of Settlement, BTU, its insurer(s), or its successor(s) in interest are responsible for payment of fees and expenses in the amount of \$325,000 which were paid in full on April 1, 2016.

As described above, the Released Claims are limited solely to claims related to any disclosures (or lack thereof) to BTU's stockholders concerning the merger and any fiduciary claims concerning the decision to enter into the merger. While we are currently unaware of any other pending or threatened litigation related to additional claims arising from the Stockholder Actions, any future claims are uncertain, so additional harm could potentially result to the Company from this litigation, which may cause the Company to incur substantial costs and divert management's attention from operational matters.

**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, 2015. There have been no material changes to the risk factors previously disclosed in our Form 10-K for the fiscal year ended September 30, 2015.

**Item 2. Unregistered Sales of Equity Securities and Use of Proceeds**

None.

**Item 3. Defaults Upon Senior Securities**

None.

**Item 4. Mine Safety Disclosures**

Not applicable.

**Item 5. Other Information**

None.

**Item 6. Exhibits**

10.1	Second Amendment to Employment Agreement, dated March 10, 2016, by and between the Amtech Systems, Inc. and Bradley C. Anderson	*
10.2	Key Terms for Robert Hass Employment Agreement, dated February 22, 2016, by and between the Amtech Systems, Inc. and Robert T. Hass	*
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.

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 5, 2016

Robert T. Hass

Vice President & Interim Chief Financial Officer

(Principal Financial Officer & Principal Accounting Officer)

## AMENDMENT TO EMPLOYMENT AGREEMENT

**WHEREAS**, Amtech Systems, Inc. (the "Company") and Bradley C. Anderson (the "Executive") entered into an Employment Agreement ("Agreement") dated April 9, 2015; and

**WHEREAS**, the Company and the Executive desire to modify the Agreement and to enter in this Amendment to Employment Agreement (this "Amendment") in order to modify the Executive's role, responsibilities, and compensation effective April 1, 2016.

**NOW, THEREFORE**, the parties agree to the following Amendment, to be effective as of the dates set forth below, with all unmodified portions of the Agreement to remain in full force and effect:

1. The term "Executive" is replaced with the term "Employee" throughout the Agreement.

2. Section 1 is hereby amended to read as follows: "Employment. Subject to the terms and conditions of this Agreement, the Company agrees to employ the Employee as its Director - Special Projects effective April 1, 2016, through the end of the Employment Period (as defined in Section 7). The Employee agrees to perform such acts and duties and furnish such services to the Company and its affiliates as reasonably requested by the Chief Executive Officer (CEO) and/or the Chief Financial Officer (CFO). Investor relations will not be a duty of the Employee. The Employee hereby accepts such employment and agrees to work approximately three days a week (either in the office or remotely, as determined by the Employee) and devote his best efforts to the duties provided herein, provided, that the Employee may engage in other business activities which (i) involve no conflict of interest with the interests of the Company, and (ii) do not materially interfere with the performance by the Employee of his duties under this Agreement."

3. Section 2 is hereby amended to read as follows: "Compensation. For services rendered to the Company during the term of this Agreement, the Company shall compensate the Employee with a base salary, payable in monthly installments, of \$174,900 per annum, effective April 1, 2016, and may not be decreased." Both the Employee and the Company agree that this change in salary will not constitute "Good Reason" as defined in the agreement.

4. Section 3 Incentive Compensation is removed in its entirety effective April 1, 2016.

5. Section 4(b) is deleted in its entirety.

6. In the last sentence of Section 5, the reference to "\$10,000" is hereby replaced with "\$6,000" effective April 1, 2016, and the following sentence is added, effective April 1, 2016, "In the event the Employee or the Company terminates this Agreement, the Company will pay the Employee's entire healthcare premiums for a period of up to 18 months following termination, either through the current healthcare plan or through COBRA, whichever may apply."

7. Section 6 is hereby amended to read as follows: "Vacation. On April 1, 2016, the Employee will be paid his accrued vacation at the annual pay rate of \$291,500, and shall be granted four weeks of accrued vacation at the new pay rate of \$174,900. Thereafter, the Employee shall be entitled to annual vacations in accordance with the Company's vacation policies in effect from time to time for employees of the Company."

8. Section 7 Term; Employment Period is hereby amended to read as follows: "Effective April 1, 2016, the "Employment Period" shall end January 1, 2017. If the Company and Employee mutually agree that the Employee will remain in the employ of the Company beyond the Employment Period without any written agreement between the parties, this Agreement shall be deemed to continue on a month-to-month basis and either party shall have the right to terminate this Agreement at the end of any ensuing calendar month after giving at least thirty (30) days prior written notice to the other party."

9. In Section 8(b) under "Good Reason" the following is deleted "(i) the Company's failure to elect or reelect or to appoint or reappoint, Employee to the office of EVP-CFO of the Company and the reference to "EVP-CFO" is replaced with "Director - Special Projects", effective April 1, 2016. In Section 8(b) under "Cause" (i) the following phrase will be deleted effective April 1, 2016, "...and to comply with any reasonable or proper direction given by or on behalf of the Company's Board of Directors..."

10. Section 9(a)(i) is amended to read as follows effective April 1, 2016: "a cash lump sum equal to the Employee's base salary for the remainder of the Employment Period."

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11. Section 9(a)(ii) is removed effective April 1, 2016.

12. Section 9(b) is amended to delete, "his pro-rata Incentive Compensation through the Termination Date and". The following sentence is added to Section 9(b): "In the event the Employee terminates his employment the Employee shall be entitled to continue vesting and exercise of all outstanding stock options and restricted stock held by the Employee for a period of 24 months following the termination."

13. Section 18(a)(i) is amended effective April 1, 2016, to read as follows: "a cash lump sum equal to one (1) year of Employee's base salary in effect on the Termination Date."

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of March 10, 2016.

AMTECH SYSTEMS, INC.

By: /s/ Bradley C. Anderson

Name: Bradley C. Anderson

By: /s/ Fokko Pentinga

Name: Fokko Pentinga

Title: Chief Executive Officer

AMTECH SYSTEMS, INC.  
Key Terms for Robert Hass Employment  
(Restoration to June 30, 2012 Level)

Effective Date	April 1, 2016
Salary	\$170,000, based on a 5-day week. Flexible work week of 3-5 days/week, with salary paid on a prorate basis.
Car Allowance	\$7,000 per year
Vacation Accrual	daily accrual based on actual days worked each period and 3 weeks/year
401(k) Match	same as other employees, except paid as additional compensation.
Change in control agreement	Comparable to one prior to July 2013 - 1 year salary - prorated incentive compensation - full vesting of options & restricted stock
Paid holidays, sick days, bereavement days, family leave	Based on company policies
Group Medical and Group Insurance	Same as other employees
Group Dental, Life and Disability Insurance	Same as other employees
Group Disability Insurance	Same as other employees
Cafeteria 125 Plan and Health Savings Account	Same as other employees
Eligible for bonuses, stock options, and restricted stock in amounts	To be determined by the company
Expense reimbursement	Same as company's policy
Severance	Determined by company, but no less than the company's past practice for middle managers
Employment at will of employer.	

**AGREED TO:**

Date: March 10, 2016 By: /s/ Robert T. Hass  
Name: Robert T. Hass

Date: March 10, 2016 By: /s/ Fokko Pentinga  
Name: Fokko Pentinga  
Title: Chief Executive Officer

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 5, 2016

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, Robert T. Hass, 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/ Robert T. Hass

Robert T. Hass

Vice President & Interim Chief Financial Officer

(Principal Financial Officer & Principal Accounting Officer)

Amtech Systems, Inc.

Date: May 5, 2016

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, 2016, 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 5, 2016

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, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Robert T. Hass, Interim 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/ Robert T. Hass

Robert T. Hass

Vice President & Interim Chief Financial Officer

(Principal Financial Officer & Principal Accounting Officer)

Amtech Systems, Inc.

Date: May 5, 2016

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.