

**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: December 31, 2009

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 (§229.405 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, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" 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 February 1, 2010: 9,017,352

**AMTECH SYSTEMS, INC. AND SUBSIDIARIES**  
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## PART I FINANCIAL INFORMATION

### ITEM 1. Condensed Consolidated Financial Statements

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

	<b>December 31, 2009</b>	<b>September 30, 2009</b>
	(Unaudited)	
<b>Assets</b>		
<b>Current Assets</b>		
Cash and cash equivalents	\$ 42,475	\$ 42,298
Restricted cash	2,314	1,496
Accounts receivable		
Trade (less allowance for doubtful accounts of \$259 and \$465 at December 31, 2009 and September 30, 2009, respectively)	7,482	8,409
Unbilled and other	4,851	5,156
Inventories	12,310	13,455
Deferred income taxes	2,190	2,290
Other	1,688	841
<b>Total current assets</b>	<b>73,310</b>	<b>73,945</b>
<b>Property, Plant and Equipment - Net</b>	<b>8,394</b>	<b>8,477</b>
<b>Deferred Income Taxes - Long Term</b>	<b>1,260</b>	<b>1,140</b>
<b>Intangible Assets - Net</b>	<b>3,652</b>	<b>3,828</b>
<b>Goodwill</b>	<b>5,058</b>	<b>5,136</b>
<b>Other Assets</b>	<b>25</b>	<b>-</b>
<b>Total Assets</b>	<b>\$ 91,699</b>	<b>\$ 92,526</b>

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

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

	<b>December 31,</b> <b>2009</b>	<b>September 30,</b> <b>2009</b>
	(Unaudited)	
<b>Liabilities and Stockholders' Equity</b>		
<b>Current Liabilities</b>		
Accounts payable	\$ 4,342	\$ 4,181
Bank loans and current maturities of long-term debt	121	121
Accrued compensation and related taxes	2,546	2,877
Accrued warranty expense	1,215	1,429
Deferred profit	4,432	4,727
Customer deposits	3,297	2,861
Other accrued liabilities	1,462	1,721
Income taxes payable	10	160
Total current liabilities	17,425	18,077
<b>Income Taxes Payable Long-term</b>	490	480
<b>Long-Term Obligations</b>	132	164
Total liabilities	18,047	18,721
<b>Commitments and Contingencies</b>		
<b>Stockholders' Equity</b>		
Preferred stock; 100,000,000 shares authorized; none issued	-	-
Common stock; \$0.01 par value; 100,000,000 shares authorized; shares issued and outstanding: 9,002,652 and 8,961,494 at December 31, 2009 and September 30, 2009, respectively	90	90
Additional paid-in capital	70,817	70,403
Accumulated other comprehensive income	14	661
Retained Earnings	2,731	2,651
Total stockholders' equity	73,652	73,805
<b>Total Liabilities and Stockholders' Equity</b>	<b>\$ 91,699</b>	<b>\$ 92,526</b>

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

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

	<b>Three Months Ended December 31,</b>	
	<b>2009</b>	<b>2008</b>
Revenues, net of returns and allowances	\$ 15,457	\$ 17,872
Cost of sales	10,857	11,786
Gross profit	4,600	6,086
Selling, general and administrative	3,975	4,483
Research and development	497	224
Operating income	128	1,379
Interest and other income, net	2	61
Income before income taxes	130	1,440
Income tax provision	50	580
<b>Net income</b>	<b>\$ 80</b>	<b>\$ 860</b>

**Earnings Per Share:**

Basic income per share	\$ 0.01	\$ 0.09
Weighted average shares outstanding	8,972	9,098
Diluted income per share	\$ 0.01	\$ 0.09
Weighted average shares outstanding	9,059	9,109

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>Three Months Ended December 31,</b>	
	<b>2009</b>	<b>2008</b>
<b>Operating Activities</b>		
Net income	\$ 80	\$ 860
Adjustments to reconcile net income to net cash provided by (used in) operating activities:		
Depreciation and amortization	424	363
Write-down of inventory	124	119
Deferred income taxes	(31)	(374)
Non-cash share based compensation expense	377	166
Provision for (reversal of) allowance for doubtful accounts	(122)	66
Changes in operating assets and liabilities:		
Restricted cash	(867)	1,466
Accounts receivable	1,171	890
Inventories	846	(935)
Accrued income taxes	(180)	623
Prepaid expenses and other assets	(902)	(687)
Accounts payable	222	(135)
Accrued liabilities and customer deposits	(225)	(2,019)
Deferred profit	(218)	736
Net cash provided by operating activities	<u>699</u>	<u>1,139</u>
<b>Investing Activities</b>		
Purchases of property, plant and equipment	(373)	(222)
Payment for licensing agreement	-	(300)
Net cash used in investing activities	<u>(373)</u>	<u>(522)</u>
<b>Financing Activities</b>		
Proceeds from issuance of common stock	37	-
Payments on long-term obligations	(31)	(62)
Net cash provided by (used in) financing activities	<u>6</u>	<u>(62)</u>
<b>Effect of Exchange Rate Changes on Cash</b>	<u>(155)</u>	<u>355</u>
<b>Net Increase in Cash and Cash Equivalents</b>	177	910
<b>Cash and Cash Equivalents, Beginning of Period</b>	42,298	37,501
<b>Cash and Cash Equivalents, End of Period</b>	<u>\$ 42,475</u>	<u>\$ 38,411</u>
<b>Supplemental Cash Flow Information:</b>		
Interest paid	\$ 4	\$ 8
Income tax refunds	\$ 21	\$ 131
Income tax payments	\$ 288	\$ 345
<b>Supplemental Non-cash Investing Activities:</b>		
Transfer inventory to capital equipment	\$ -	\$ 116
Intangible assets funded with current liabilities	\$ -	\$ 500

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 MONTHS ENDED DECEMBER 31, 2009 AND 2008**  
**(UNAUDITED)**

**1. Basis of Presentation**

**Nature of Operations and Basis of Presentation** – Amtech Systems, Inc. (the “Company”) designs, assembles, sells and installs capital equipment and related consumables used in the manufacture of solar cells, semiconductors, and wafers of various materials, primarily for the solar and semiconductor industries. The Company sells these products worldwide, particularly in Asia, the United States and Europe. In addition, the Company provided semiconductor manufacturing support services until November 2009.

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 U.S. generally accepted accounting principles. In the opinion of management, the accompanying unaudited interim condensed consolidated financial statements contain all adjustments necessary, all of which are of a normal 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, 2009.

The condensed consolidated results of operations for the three months ended December 31, 2009, are not necessarily indicative of the results to be expected for the full fiscal year.

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

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

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

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

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

	<b>December 31, 2009</b>	<b>September 30, 2009</b>
	(dollars in thousands)	
Deferred revenues	\$ 5,453	\$ 6,904
Deferred costs	1,021	2,177
Deferred profit	<u>\$ 4,432</u>	<u>\$ 4,727</u>

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

As of December 31, 2009, receivables from one customer accounted for 16% of total accounts receivable. As of September 30, 2009, accounts receivable from three customers each exceeded 10% of accounts receivable; these three customers accounted for 19%, 11% and 10% of total accounts receivable, respectively.

**Restricted Cash** – Current restricted cash of \$2.3 million and \$1.5 million as of December 31, 2009 and September 30, 2009, consists of bank guarantees required by certain customers from whom deposits have been received in advance of shipment and \$0.5 million of cash in an escrow account related to contingent payments to be paid to the sellers of R2D due to the fulfillment of certain requirements.

**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 and acceptance of the product, which amounts are generally billed upon final acceptance by our customers. The majority of these amounts are offset by balances included in deferred profit.

**Inventories** – Inventories are stated at the lower of cost or net realizable value. Costs for approximately 80% of inventory are determined 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>December 31, 2009</b>	<b>September 30, 2009</b>
	(dollars in thousands)	
Purchased parts and raw materials	\$ 6,568	\$ 7,550
Work-in-process	3,328	3,277
Finished goods	2,414	2,628
	<u>\$ 12,310</u>	<u>\$ 13,455</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 10 years; and for buildings 20 years.

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

	<b>December 31,</b>	<b>September 30,</b>
	<b>2009</b>	<b>2009</b>
	<b>(dollars in thousands)</b>	
Land, building and leasehold improvements	\$ 7,037	\$ 7,124
Equipment and machinery	4,504	4,295
Furniture and fixtures	3,428	3,404
	<u>14,969</u>	<u>14,823</u>
Accumulated depreciation and amortization	(6,575)	(6,346)
	<u>\$ 8,394</u>	<u>\$ 8,477</u>

**Goodwill** - Goodwill and intangible assets with indefinite lives are not subject to amortization, but are tested for impairment at least annually. Goodwill is reviewed for impairment on an annual basis, typically at the end of the fiscal year, or more frequently if circumstances dictate.

**Intangibles** – Intangible assets are capitalized and amortized over two to 10 years.

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.

The following is a summary of intangibles:

	<b>Useful Life</b>	<b>December 31,</b>	<b>September 30,</b>
		<b>2009</b>	<b>2009</b>
		<b>(dollars in thousands)</b>	
Non-compete agreements	10 years	175	178
Customer lists	10 years	923	940
Technology	10 years	1,830	1,863
Licenses	10 years	1,500	1,500
Other	2-10 years	94	96
		<u>4,522</u>	<u>4,577</u>
Accumulated amortization		(870)	(749)
		<u>\$ 3,652</u>	<u>\$ 3,828</u>

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

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

	<b>Three Months Ended December 31,</b>	
	<b>2009</b>	<b>2008</b>
	(dollars in thousands)	
Beginning balance	\$ 1,429	\$ 1,155
Warranty expenditures	(159)	(151)
Reserve adjustment	(55)	327
Ending balance	<u>\$ 1,215</u>	<u>\$ 1,331</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 reported as cash flow from financing activities rather than as cash flow from operating activities. Our stock-based compensation plans are summarized in the table below:

Name of Plan	Shares	Shares	Options Outstanding	Plan
	Authorized	Available		Expiration
2007 Employee Stock Incentive Plan	500,000	1,337	343,813	Apr. 2017
1998 Employee Stock Option Plan	500,000	-	315,682	Jan. 2008
Non-Employee Directors Stock Option Plan	200,000	1,600	121,000	Jul. 2015
		<u>2,937</u>	<u>780,495</u>	

Stock-based compensation expense recognized reduced the Company’s results of operations as follows:

	<b>Three Months Ended December 31,</b>	
	<b>2009</b>	<b>2008</b>
	(dollars in thousands, except per share amounts)	
Effect on income before income taxes (1)	\$ (377)	\$ (166)
Effect on income taxes	106	31
Effect on net income	<u>\$ (271)</u>	<u>\$ (135)</u>

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

Qualified stock options issued under the terms of the plans have, or will have, an exercise price equal to or greater than the fair market value of the common stock at the date of the option grant and expire no later than 10 years from the date of grant, with the most recent grant expiring in 2019. Under the terms of the 1998 Employee Stock Option Plan, nonqualified stock options may also be issued. Options issued by the Company vest over one to five years.

The stock option transactions and the options outstanding are summarized as follows:

	<b>Three Months Ended December 31,</b>			
	<b>2009</b>		<b>2008</b>	
	<b>Options</b>	<b>Weighted Average Exercise Price</b>	<b>Options</b>	<b>Weighted Average Exercise Price</b>
Outstanding at beginning of period	691,403	\$ 7.03	487,053	\$ 8.39
Granted	102,000	6.44	163,000	3.80
Exercised	(7,533)	4.87	-	-
Forfeited	(5,375)	5.40	(250)	7.00
Outstanding at end of period	<u>780,495</u>	<u>\$ 6.98</u>	<u>649,803</u>	<u>\$ 7.24</u>
Exercisable at end of period	<u>436,681</u>	<u>\$ 7.19</u>	<u>296,892</u>	<u>\$ 7.15</u>
Weighted average fair value of options granted during the period		\$ 3.97		\$ 2.29

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

	<b>Three Months Ended December 31,</b>	
	<b>2009</b>	<b>2008</b>
Risk free interest rate	2.57%	1.82%
Expected life	6 years	6 years
Dividend rate	0%	0%
Volatility	68%	66%
Forfeiture rate	5%	8%

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.

There were 102,000 and 163,000 options granted during the three months ended December 31, 2009 and 2008, respectively. Total fair value of options granted was approximately \$0.4 million for the three months ended December 31, 2009 and 2008.

In December 2007, we began awarding restricted shares under the existing share-based compensation plans. Our restricted share awards vest in equal annual installments over a 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.

	Three Months Ended December 31,			
	2009		2008	
	Awards	Weighted Average Grant Date Fair Value	Awards	Weighted Average Grant Date Fair Value
Beginning Outstanding	122,875	\$ 5.85	30,500	\$ 14.79
Awarded	24,000	6.15	100,000	3.80
Released	(33,625)	6.46	(7,625)	14.79
Forfeited	(1,250)	8.20	-	-
Ending Outstanding	<u>112,000</u>	<u>\$ 5.70</u>	<u>122,875</u>	<u>\$ 5.85</u>

There were 24,000 and 100,000 restricted shares awarded during the three months ended December 31, 2009 and 2008, respectively. Total fair value of restricted shares awarded was approximately \$0.1 million and \$0.4 million for the three months ended December 31, 2009 and 2008, respectively.

**Fair Value of Financial Instruments** – The carrying values of the Company’s current financial instruments approximate fair value due to the short term in which these instruments mature.

**Shipping expense** – Shipping expenses of \$0.3 million and \$0.2 million for the three months ended December 31, 2009 and 2008, respectively, are included in selling, general and administrative expenses.

### Impact of Recently Issued Accounting Pronouncements

In October 2009, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2009-13, Revenue Recognition–Multiple Deliverable Revenue Arrangements. This guidance updates the existing multiple-element revenue arrangements guidance currently included in FASB ASC 605-25, Revenue Recognition–Multiple–Element Arrangements. The revised guidance provides for two significant changes to the existing multiple element revenue arrangements guidance. The first change relates to the determination of when the individual deliverables included in a multiple-element arrangement may be treated as separate units of accounting. The second change modifies the manner in which the transaction consideration is allocated across the separately identified deliverables. This guidance also significantly expands the disclosures required for multiple-element revenue arrangements. The revised multiple-element revenue arrangements guidance will be effective for the fiscal year ending September 30, 2011, however, early adoption is permitted, provided that the revised guidance is retroactively applied to the beginning of the year of adoption. The Company has not yet determined the impact, if any, the adoption of this guidance will have 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 tax rates and planned tax strategies in the various jurisdictions in which the Company operates.

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 the 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 and expected future taxable income. The company maintains a valuation allowance with respect to certain state and foreign net operating losses that may not be recovered. Each quarter the valuation allowance is re-evaluated. During the quarter ended December 31, 2009, no significant changes were made to the valuation allowance.

The Company classifies uncertain tax positions as non-current income taxes payable unless expected to be paid within one year. At December 31, 2009, and September 30, 2009, the total amount of unrecognized tax benefits was \$0.5 million. If recognized, these amounts would favorably impact the effective tax rate.

The Company classifies interest and penalties related to unrecognized tax benefits in income tax expense. As of December 31, 2009 and September 30, 2009, the Company accrued \$0.1 million for potential interest and penalties.

The Company and one or more of its subsidiaries file income tax returns in The Netherlands, Germany, France and other foreign jurisdictions, as well as the U.S. and various states in the U.S. The Company and its subsidiaries have open tax years primarily from fiscal 2004 to fiscal 2008 with taxing foreign jurisdictions and the U.S. These open years contain certain matters that could be subject to differing interpretations of applicable tax laws and regulations as they relate to the amount, timing, or inclusion of revenues and expenses, or the sustainability of income tax positions of the Company and its subsidiaries.

### **3. Earnings Per Share**

Basic earnings per share (EPS) is computed by dividing net income by the weighted average number of common shares outstanding for the period. Diluted EPS is computed similarly to basic EPS except that the denominator is increased to include the number of additional common shares that would have been outstanding if potentially dilutive common shares had been issued.

Common shares relating to stock options where the exercise prices exceeded the average market price of our common shares during the period were excluded from the diluted earnings per share calculation as the related impact was anti-dilutive. For the three months ended December 31, 2009, options for 398,000 shares and 22,000 restricted stock award shares are excluded from the diluted EPS calculations because they are anti-dilutive. For the three months ended December 31, 2008, options for 630,000 shares and 30,500 restricted stock award shares are excluded from the diluted EPS calculations because they are anti-dilutive.

	<b>Three Months Ended</b>	
	<b>December 31,</b>	
	<b>2009</b>	<b>2008</b>
	<small>(in thousands, except per share amounts)</small>	
<b><u>Basic Earnings Per Share Computation</u></b>		
Net income	\$ 80	\$ 860
<b>Weighted Average Shares Outstanding:</b>		
Common stock	8,972	9,098
Basic earnings per share	\$ 0.01	\$ 0.09
<b><u>Diluted Earnings Per Share Computation</u></b>		
Net income	\$ 80	\$ 860
<b>Weighted Average Shares Outstanding:</b>		
Common stock	8,972	9,098
Common stock equivalents (1)	87	11
Diluted shares	9,059	9,109
Diluted earnings per share	\$ 0.01	\$ 0.09

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

#### 4. Comprehensive Income (Loss)

	<b>Three Months Ended</b>	
	<b>December 31,</b>	
	<b>2009</b>	<b>2008</b>
	<small>(dollars in thousands)</small>	
Net income, as reported	\$ 80	\$ 860
Foreign currency translation adjustment	(647)	(459)
Comprehensive income (loss)	\$ (567)	\$ 401

#### 5. Business Segment Information

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

Information concerning our business segments is as follows:

	<b>Three Months Ended</b>	
	<b>December 31,</b>	
	<b>2009</b>	<b>2008</b>
(dollars in thousands)		
<b>Net Revenues:</b>		
Solar and semiconductor equipment	\$ 13,975	\$ 16,132
Polishing supplies	1,482	1,740
	<u>\$ 15,457</u>	<u>\$ 17,872</u>
<b>Operating Income:</b>		
Solar and semiconductor equipment	\$ (32)	\$ 1,407
Polishing supplies	160	(28)
	128	1,379
Interest and other income (expense), net	2	61
Income before income taxes	<u>\$ 130</u>	<u>\$ 1,440</u>
	<b>December 31,</b>	<b>September 30,</b>
	<b>2009</b>	<b>2009</b>
(dollars in thousands)		
<b>Identifiable Assets:</b>		
Solar and semiconductor equipment	\$ 87,630	\$ 88,617
Polishing supplies	4,069	3,909
	<u>\$ 91,699</u>	<u>\$ 92,526</u>
<b>Goodwill:</b>		
Solar and semiconductor equipment	\$ 4,330	\$ 4,408
Polishing supplies	728	728
	<u>\$ 5,058</u>	<u>\$ 5,136</u>

## 6. Major Customers and Foreign Sales

During the three month period ended December 31, 2009, two customers individually represented 26% and 24% of net revenues. During the three months ended December 31, 2008, two customers individually represented 33% and 12% of net revenues.

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

	<b>Three Months Ended</b>	
	<b>December 31,</b>	
	<b>2009</b>	<b>2008</b>
United States	10%	18%
<b>Total North America</b>	<b>10%</b>	<b>18%</b>
China	60%	17%
Taiwan	4%	48%
Other	5%	4%
<b>Total Asia</b>	<b>69%</b>	<b>69%</b>
<b>Total Europe</b>	<b>21%</b>	<b>13%</b>
	<b>100%</b>	<b>100%</b>

## 7. Commitments and Contingencies

**Purchase Obligations** – As of December 31, 2009, we had purchase obligations in the amount of \$14.2 million compared to \$4.7 million as of September 30, 2009. 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 in the event that any agreements are renegotiated, cancelled or terminated.

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

## 8. Subsequent Events

The Company has evaluated subsequent events for recognition and disclosure through February 9, 2010, the date these consolidated financial statements on this Form 10-Q were filed with the Securities and Exchange Commission. Through that date, there were no events requiring adjustment to or disclosure in these consolidated financial statements.

## 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 Financial Statement” 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, 2009.

## Cautionary Statement Regarding Forward-Looking Statements

*The statements in this report include forward-looking statements. These forward-looking statements are based on our management's current expectations and beliefs and involve numerous risks and uncertainties that could cause actual results to differ materially from expectations. You should not rely upon these forward-looking statements as predictions of future events because we cannot assure you that the events or circumstances reflected in these statements will be achieved or will occur. You can identify forward-looking statements by the use of forward-looking terminology, including the words "believes," "expects," "may," "will," "should," "seeks," "intends," "plans," "estimates" or "anticipates" or the negative of these words and phrases or other variations of these words and phrases or comparable terminology. These forward-looking statements relate to, among other things: our sales, results of operations and anticipated cash flows; capital expenditures; depreciation and amortization expenses; research and development expenses; selling, general and administrative expenses; the development and timing of the introduction of new products and technologies; our ability to maintain and develop relationships with our existing and potential future customers and our ability to maintain the level of investment in research and development and capacity that is required to remain competitive. Many factors could cause our actual results to differ materially from those projected in these forward-looking statements, including, but not limited to: whether we will be able to complete acquisitions and integrate such businesses successfully and achieve anticipated synergies; variability of our revenues and financial performance; risks associated with product development and technological changes; the acceptance of our products in the marketplace by existing and potential future customers; disruption of operations or increases in expenses caused by civil or political unrest or other catastrophic events; general economic conditions and conditions in the semiconductor and solar industries in particular; the continued employment of our key personnel and risks associated with competition.*

*For a discussion of the factors that could cause actual results to differ materially from the forward-looking statements, see the "Risk Factors" set forth in Item 1A of Part I of Amtech Systems, Inc.'s Annual Report on Form 10-K for the fiscal year ended September 30, 2009, the "Liquidity and Capital Resources" section under "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this item of this report and the other risks and uncertainties that are set forth elsewhere in this report or detailed in our other Securities and Exchange Commission reports and filings. We assume no obligation to update these forward-looking statements.*

## 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 two segments: the solar and semiconductor equipment segment and the polishing supplies segment. Our solar and semiconductor equipment segment is a leading supplier of thermal processing systems, including related automation, parts and services, to the solar/photovoltaic, semiconductor, silicon wafer and MEMS industries.

Our polishing supplies and equipment segment is a leading supplier of wafer carriers to manufacturers of silicon wafers, the raw material used in the manufacture of solar cells and semiconductors. The polishing segment also manufactures polishing templates, steel carriers and double-sided polishing and lapping machines to fabricators of optics, quartz, ceramics and metal parts, and to manufacturers of medical equipment 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.

## Results of Operations

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

	Three Months Ended	
	December 31, 2009	December 31, 2008
Net revenue	100%	100%
Cost of goods sold	70%	66%
Gross margin	30%	34%
Operating expenses:		
Selling, general and administrative	26%	25%
Research and Development	3%	1%
Total operating expenses	29%	26%
Income from operations	1%	8%
Interest income (expense), net	0%	0%
Income before income taxes	1%	8%
Income taxes	0%	3%
Net Income	1%	5%

## Net Revenue

Net revenue consists of revenue recognized upon shipment or installation of products using proven technology and upon acceptance of products using new technology. In addition, spare parts sales are recognized upon shipment. Service revenue is recognized upon completion of the service activity or ratably over the term of the service contract. The majority of our revenue is generated from large furnace systems sales which, depending on the timing of shipment and installation, can have a significant impact on our revenue and earnings in any given period. *See* Critical Accounting Policies – Revenue Recognition.

Segment	Three Months Ended		Increase (Decrease)	%
	December 31, 2009	December 31, 2008		
	(dollars in thousands)			
Solar and Semiconductor Equipment Segment	\$ 13,975	\$ 16,132	\$ (2,157)	(13%)
Polishing Supplies Segment	1,482	1,740	(258)	(15%)
<b>Total Net Revenue</b>	<b>\$ 15,457</b>	<b>\$ 17,872</b>	<b>\$ (2,415)</b>	<b>(14%)</b>

Net revenue for the quarter ended December 31, 2009 decreased by \$2.4 million, or 14%, from the quarter ended December 31, 2008. Revenue in the solar and semiconductor equipment segment decreased as a result of lower shipment volumes to both the solar and the semiconductor industries, partially offset by an increase in recognition of previously-deferred solar revenue. The decrease in shipments was caused primarily by the global economic downturn and credit crisis. Within the solar and semiconductor equipment segment, net revenue from the solar market was \$11.9 million for the three months ended December 31, 2009, a \$0.8 million or 7% increase from the three months ended December 31, 2008. The decrease of \$0.3 million in net revenue from the Polishing Supplies Segment is also due to the economic downturn as described above.

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

Our order backlog as of December 31, 2009 and 2008 was \$74.4 million and \$42.4 million, respectively. Our backlog as of December 31, 2009 includes approximately \$69.7 million of orders from our solar industry customers compared to \$35.8 million at December 31, 2008. New orders booked in our most recent quarter ended December 31, 2009 increased more than 500% to \$59.4 million compared to \$9.3 million in the quarter ended December 31, 2008. The increase in new orders and backlog resulted primarily from solar cell manufacturers accelerating their capacity expansion plans. New orders include the recent large multi-system solar order from a single customer in Asia. As a result of the large multi-system order, 54 % of our backlog at December 31, 2009 is from this single customer.

The orders included in our backlog are generally credit approved customer purchase orders expected to ship within the next 12 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. Our backlog as of December 31, 2009 and 2008, respectively, include \$0.1 million and \$1.1 million of open orders or deferred revenue for which we anticipate no gross profit.

### ***Gross Profit***

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 parts and the cost of service and support to customers for warranty, installation and paid service calls.

The timing of revenue recognition can have a particularly significant effect on gross margin when the equipment revenue of an order is recognized in one period and the remainder of the revenue attributed to holdbacks is recognized in a later period. The portion of revenue attributed to the holdbacks generally comprises 10-20% of an order and has a significantly higher gross margin percentage.

Segment	Three Months Ended		Increase (Decrease)	%
	December 31, 2009	December 31, 2008		
	(dollars in thousands)			
Solar and Semiconductor Equipment Segment	\$ 4,135	\$ 5,778	\$ (1,643)	(28%)
Polishing Supplies Segment	465	308	157	51%
<b>Total Gross Profit</b>	<b>\$ 4,600</b>	<b>\$ 6,086</b>	<b>\$ (1,486)</b>	<b>(24%)</b>
Gross Margin	30%	34%		

For the three months ended December 31, 2009, gross profit in the solar and semiconductor equipment segment decreased 28% versus the three months ended December 31, 2008. The decrease was driven primarily by lower volumes which resulted in less efficient capacity utilization. The decrease in gross profit on shipments was partially offset by recognition of previously-deferred profit. We recognized \$0.2 million of previously-deferred profit in the quarter ended December 31, 2009, net of deferrals, compared to a net deferral of \$0.8 million of profit in the quarter ended December 31, 2008. To support our current growth in the solar and semiconductor equipment segment, we are making substantial investments in labor and facilities. These investments are expected to have a short-term negative impact on gross profit in the second fiscal quarter of 2010. Gross margins in the polishing supplies segment were positively impacted by product mix as volumes of higher-margin carriers and templates increased while sales of polishing machines, which generally carry a lower gross margin, decreased.

### *Selling, General and Administrative*

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

Segment	Three Months Ended		Increase (Decrease)	%
	December 31, 2009	December 31, 2008		
	(dollars in thousands)			
Solar and Semiconductor Equipment Segment	\$ 3,670	\$ 4,147	\$ (477)	(12%)
Polishing Supplies Segment	305	336	(31)	(9%)
<b>Total SG&amp;A</b>	<b>\$ 3,975</b>	<b>\$ 4,483</b>	<b>\$ (508)</b>	<b>(11%)</b>
Percent of net revenue	26%	25%		

Total selling, general and administrative (SG&A) expense for the three months ended December 31, 2009 decreased \$0.5 million, or 11%, compared to the three months ended December 31, 2008. SG&A expenses include \$0.4 million and \$0.2 million of stock-based compensation expense in the three months ended December 31, 2009 and 2008, respectively. The decrease in SG&A expenses was due primarily to lower commission expense resulting from lower revenues generated in regions where third-party sales agents are utilized, primarily in the Asian solar market.

### *Research and Development*

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

Segment	Three Months Ended		Increase (Decrease)	%
	December 31, 2009	December 31, 2008		
	(dollars in thousands)			
Semiconductor and Solar Equipment Segment	\$ 497	\$ 224	\$ 273	122%
Polishing Supplies Segment	-	-	-	0%
<b>Total Research and Development</b>	<b>\$ 497</b>	<b>\$ 224</b>	<b>\$ 273</b>	<b>122%</b>
Percent of net revenue	3%	1%		

Research and development costs for the three months ended December 31, 2009 increased \$0.3 million compared to the three months ended December 31, 2008, due to increased activity in development of new products and processes, primarily related to the production of photovoltaic cells. In the three months ended December 31, 2009 and 2008, we recognized \$0.1 million of reimbursements of our research and development costs from governmental grants.

### *Income Taxes*

During the three months ended December 31, 2009, we recorded income taxes of \$50,000. The effective tax rate used for calculating the income tax provision for the three months ended December 31, 2009 and December 31, 2008 were approximately 38% and 40%, respectively. The rates are estimates based upon projected annual income, estimated annual permanent differences and statutory tax rates in the various jurisdictions in which we operate.

### *Liquidity and Capital Resources*

At December 31, 2009 and September 30, 2009, cash and cash equivalents were \$42.5 million and \$42.3 million, respectively. Our working capital as of December 31, 2009 and September 30, 2009 was \$55.9 million. The increase in cash and cash equivalents resulted primarily from cash provided by operations, partially offset by purchases of property, plant and equipment. The increase in customer orders is expected to result in higher operating levels which will result in the use of cash for working capital and potential capital expenditures. We have never paid dividends on our Common Stock. Our present policy is to apply cash to investment in product development, acquisition or expansion; consequently, we do not expect to pay dividends on Common Stock in the foreseeable future. We continue to have minimal long-term obligations to service. We believe that our principal sources of liquidity discussed above are sufficient to support operations.

The success of our growth strategy is dependent upon the availability of additional capital resources on terms satisfactory to management. Our sources of capital in the past have included the sale of equity securities, which include common and preferred stock sold in private transactions and public offerings, capital leases and long-term debt. There can be no assurance that we can raise such additional capital resources on satisfactory terms.

### *Cash Flows from Operating Activities*

Cash provided by our operating activities was \$0.7 million for the three months ended December 31, 2009, compared to \$1.1 million provided by such activities for the three months ended December 31, 2008. In the first quarter of fiscal 2010, cash was primarily generated from collections of accounts receivable and changes in inventory, partially offset by increases in prepaid expenses and other assets. In the first quarter of fiscal 2009, cash was primarily generated by earnings from net income adjusted for non-cash items, partially offset by increases in inventory and prepaid expenses and other assets as well as decreases in accrued liabilities and customer deposits.

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

Our investing activities for the three months ended December 31, 2009 and 2008 used \$0.4 million and \$0.5 million respectively. For the three months ended December 31, 2009, we had capital expenditures of \$0.4 million, primarily for machinery and equipment. For the three months ended December 31, 2008, we had capital expenditures of \$0.2 million primarily for machinery and equipment and we made a payment of \$0.3 million for our licensing agreement with PST.

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

For the three months ended December 31, 2009, less than \$0.1 million of cash was used in financing activities for the payment of long-term debt and less than \$0.1 million of cash was received due to the exercise of stock options. This compares to cash of \$0.1 million used in the three months ended December 31, 2008 for the payment of long-term debt.

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

As of December 31, 2009, 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**

The only significant changes in contractual obligations since the end of fiscal 2009 have been purchase obligations (See Note 7 of the Condensed Consolidated Financial Statements). Purchase obligations increased \$9.5 million from \$4.7 million as of September 30, 2009 to \$14.5 million as of December 31, 2009. The increase in purchase obligations relates to the recent increase in sales orders and backlog. To meet the increased demand, we accelerated our purchases of inventory. Refer to Amtech's annual report on Form 10-K for the year ended September 30, 2009, 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 consolidated financial statements that have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amount of assets and liabilities at the date of the consolidated financial statements, the 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.

On an on-going basis, we evaluate our estimates and judgments, including those related to revenue recognition, inventory valuation, accounts 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 "Item 1A. Risk Factors." We believe the following critical accounting policies affect the more significant judgments and estimates used in the preparation of our consolidated financial statements.

**Revenue Recognition.** We review product and service sales contracts with multiple deliverables to determine if separate units of accounting are present in the arrangements. Where separate units of accounting exist, revenue is allocated to delivered items equal to the total sales price less the greater of (1) the relative fair value of the undelivered items, and (2) all contingent portions of the sales arrangement.

We recognize revenue when persuasive evidence of an arrangement exists; the product has been delivered and title has transferred, or services have been rendered; 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 solar and semiconductor equipment segment, transactions where legal title passes to the customer upon shipment, we recognize revenue 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. However, a portion of the revenue associated with certain installation-related tasks, equal to the greater of the relative fair value of those tasks or the portion of the contract price contingent upon their completion, generally 10%-20% of the system's selling price (the "holdback"), and directly related costs, if any, are deferred and recognized into income when the tasks are completed. Since we defer only those costs directly related to installation or other unit of accounting not yet delivered and the deferred portion of the contract price is often considerably greater than the cost of those items, our 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 recognized in a subsequent period will improve.

(2) 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. We have, on occasion, experienced longer than expected delays in receiving cash from certain customers pending final installation or system acceptance. If some of our customers refuse to pay the final payment, or otherwise delay final acceptance or installation, the deferred revenue would not be recognized, adversely affecting our future operating results.

(3) Equipment sold by the polishing supplies segment generally does not include process guarantees, acceptance criteria or holdbacks; therefore, the related revenue is generally recorded upon transfer of title which is generally at time of shipment.

(4) For all segments, sales of spare parts and consumables are recognized upon shipment, as there are no post shipment obligations other than standard warranties.

(5) 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.

**Income taxes.** The calculation of tax liabilities involves significant judgment in estimating the impact of uncertainties in the application of complex tax laws. Resolution of these uncertainties in a manner inconsistent with our expectations could have a material impact on our operations and financial condition.

We are required to apply a more likely than not threshold to the recognition and derecognition of uncertain tax positions. We are required to recognize the amount of tax benefit that has a greater than 50 percent likelihood of being ultimately realized upon settlement. It further requires that a change in judgment related to the expected ultimate resolution of uncertain tax positions be recognized in earnings in the quarter of such change. Prior to adoption, our policy was to establish reserves that reflected the probable outcome of known tax contingencies.

**Inventory Valuation.** We value our inventory at the lower of cost or net realizable value. Costs for approximately 85% of inventory are determined on an average cost basis with the remainder determined on a first-in, first-out (FIFO) basis. We regularly review inventory quantities and record a write-down for excess and obsolete inventory.

The write-down is primarily based on historical inventory usage adjusted for expected changes in product demand and production requirements. However, our industry is characterized by customers in highly cyclical industries, rapid technological changes, frequent new product developments and rapid product obsolescence. Changes in demand for our products and product mix could result in further write-downs.

**Allowance for Doubtful Accounts.** We maintain an allowance for doubtful accounts for estimated losses resulting from the inability or unwillingness of our customers to make required payments. This allowance is based on historical experience, credit evaluations, specific customer collection history and any customer-specific issues we have identified. Since a significant portion of our revenue is derived from the sale of high-value systems, our accounts receivable are often concentrated in a relatively few number of customers. A significant change in the liquidity or financial position of any one of these customers could have a material adverse impact on the collectability of our accounts receivable and our future operating results.

**Warranty.** We provide a limited warranty, generally for 12 to 24 months, to our customers. A provision for the estimated cost of providing warranty coverage is recorded upon acceptance of all systems. On occasion, we have been required and may be required in the future to provide additional warranty coverage to ensure that the systems are ultimately accepted or to maintain customer goodwill. While our warranty costs have historically been within our expectations and we believe that the amounts accrued for warranty expenditures are sufficient for all systems sold through December 31, 2009, we cannot guarantee that we will continue to experience a similar level of predictability with regard to warranty costs. In addition, technological changes or previously unknown defects in raw materials or components may result in more extensive and frequent warranty service than anticipated, which could result in an increase in our warranty expense.

**Impairment of Long-lived Assets.** We periodically evaluate whether events and circumstances have occurred that indicate the estimated useful lives of long-lived assets or intangible assets may warrant revision or that the remaining balance may not be recoverable. Goodwill and indefinite-lived intangibles are also tested for impairment at least annually. When factors indicate that an asset should be evaluated for possible impairment, we use an estimate of the related undiscounted net cash flows generated by the asset over the remaining estimated life of the asset in measuring whether the asset is recoverable. We make judgments and estimates used in establishing the carrying value of long-lived or intangible assets. Those judgments and estimates could be modified if adverse changes occurred in the future resulting in an inability to recover the carrying value of these assets. Below is a more detailed explanation of the procedures we perform.

We perform a two-step impairment test. In the first step, we estimate the fair value of the reporting unit and compare it to the carrying value of the reporting unit. Most of our reporting units are operating segments that are one level below the reportable segment into which they are aggregated. The one exception is P.R. Hoffman Machine Products, Inc. which is a reportable segment. When the carrying value exceeds the fair value of the reporting unit, the second step is performed to measure the amount of the impairment loss, if any. In the second step, the amount of the impairment loss is the excess of the carrying amount of the goodwill and other intangibles not subject to amortization over their implied fair value.

The methods used to estimate fair value of the reporting unit for the purpose of determining the implied fair value of goodwill include the market approach and discounted cash flows, as follows:

- i. One valuation methodology used is to determine the multiples of market value of invested capital (“MVIC”) of similar public companies to their revenue for the last twelve months (“LTM”) and next twelve months (“NTM”), and apply those multiples to the revenue for the comparable periods of the reporting unit being tested for impairment. One benefit of this approach is it is the closest to quoted market prices that are readily available. However, we generally give less weight to this method, because the market value of the minority interest of public companies may not be that relevant to the fair value of our wholly-owned reporting units, which are not public companies. Also, MVIC to revenue for the LTM uses a historical value in the denominator, while the market values tend to be forward looking; and MVIC of revenue for the NTM involves the use of projections for both the comparable companies and the reporting unit.
- ii. Another market approach that we sometimes use is based upon prices paid in merger and acquisition transactions for other companies in the same industry, again applying the MVIC to revenue of those companies to the historical and projected revenue of the reporting unit. When we use both market prices determined as described in (i), above, and prices paid in merger and acquisition transactions, we weight them to determine an indicated value under the market approach.
- iii. As stated, we also use discounted cash flows as an indication of what a third-party would pay for the reporting unit in an arms-length transaction. This method requires projections of EBITDA (earnings before interest, taxes, depreciation and amortization) and applying an appropriate discount rate based on the weighted average cost of capital for the reporting unit.

We generally give the greatest weight, often 75% or more, to the discounted cash flow method, due to difficulty in identifying a sufficient number of companies that are truly comparable to a given reporting unit. This is because two of our three reporting units are relatively small businesses serving niche markets.

The material estimates and assumptions used in the discounted cash flows method of determining fair value include (i) the appropriate discount rate, given the risk-free rate of return and various risk premiums, (ii) projected revenues, (iii) projected material cost as a percentage of revenue, and (iv) the rate of increase in payroll and other expense. Quantitatively, the discount rate is the assumption that has the most pervasive effect on the discounted cash flows. We determine the discount rate used based on input from a valuation firm, which applies various approaches taking into account the particular circumstances of the reporting unit in arriving at a recommendation. For annual valuations, we test the sensitivity of the assumptions used in our discounted cash flow projection with the aid of a valuation firm, which utilizes a Monte Carlo simulation model, wherein various probabilities are assigned to the key assumptions.

In fiscal year 2009, we performed a mid-year test of the impairment of the goodwill and other intangibles due to changing circumstances regarding the Bruce Technologies reporting unit. This test required us to use judgments and estimates that could be materially different than actual results. Bruce Technologies continued to incur losses after a restructuring and cost reductions put into place during the prior fiscal year and expectations that semiconductor customers served by this reporting unit would not in the future achieve the kinds of growth rates they had in the past due to increased maturity of that industry. We used the same discount rate as used in the prior annual impairment test of this reporting unit, but the other assumptions became more conservative due to the changing circumstances. It was primarily the lowered projections of future revenue that resulted in a lower estimate of fair value and the impairment loss. The payroll and certain expense assumptions, however, were lowered to take into account a second restructuring of the reporting unit, which involved a significant reduction in the number of employees. The material cost assumption was also lowered to take into account a change in product mix.

**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 reported as cash flow from financing activities rather than as cash flow from operating activities.

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

For discussion of the impact of recently issued accounting pronouncements, see “Part 1. Financial Information” in Note 1 to the financial statements under “Impact of Recently Issued Accounting Pronouncements”.

### **ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

We are exposed to financial market risks, including changes in foreign currency exchange rates and interest rates. Our operations in the United States are conducted in U.S. dollars. Our operations in Europe, a component of the solar and semiconductor equipment segment, conduct business primarily in the Euro. The functional currency of our European operation is the Euro. Nearly all of the transactions, assets and liabilities of all other operating units are denominated in the U.S. dollar, their functional currency. The following disclosures about market risk should be read in conjunction with the more in depth discussion in Item 7A, Quantitative and Qualitative Disclosures About Market Risk in our Annual Report on Form 10-K for the fiscal year ended September 30, 2009.

As of December 31, 2009, we did not hold any stand-alone or separate derivative instruments. We incurred net foreign currency transaction gains or losses of less than \$0.1 million during the three months ended December 31, 2009 and 2008. As of December 31, 2009, our foreign subsidiaries had \$0.5 million of assets (cash and receivables) denominated in currencies other than the functional currency. A 10% change in the value of the functional currency relative to the non-functional currency would result in a gain or loss of \$0.1 million. As of December 31, 2009, we had \$2.4 million of accounts payable, consisting primarily of amounts owed by our foreign subsidiaries to our U.S. companies, denominated in U.S. dollars. Although the intercompany accounts are eliminated in consolidation, a 10% change in the value of the euro relative to the U.S. dollar would result in a gain or loss of \$0.2 million.

We incurred a foreign currency translation loss of \$0.6 million and \$0.4 million during the quarters ended December 31, 2009 and 2008, respectively. Our net investment in and advances to our foreign operations totaled \$44.2 million as of December 31, 2009. A 10% change in the value of the euro relative to the U.S. dollar would cause an approximately \$4.4 million foreign currency translation adjustment, a type of other comprehensive income (loss), which would be a direct adjustment to our stockholders' equity.

During three months ended December 31, 2009 and 2008, our European operations transacted U.S. dollar denominated sales and purchases of \$0.4 million and \$0.6 million, respectively. As of December 31, 2009, sales commitments denominated in a currency other than the function currency of our transacting operation totaled less than \$0.1 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 cause our gross profit on such orders to be less than \$0.1 million greater than or less than expected on the date the order was taken. As of December 31, 2009, purchase commitments denominated in a currency other than the function currency of our transacting operation totaled \$2.3 million. A 10% change in the relevant exchange rates between the time the purchase order was placed and the time the order is received would cause our cost of such items to be less than \$0.2 million greater than 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 December 31, 2009, pursuant to Exchange Act Rules 13a-15(e) and 15(d)-15(e). Based upon that evaluation, our CEO and CFO have concluded that as of such date, our disclosure controls and procedures in place are effective.

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

There has been no change in Amtech’s internal control over financial reporting during the first quarter of fiscal 2010 that has materially affected, or is reasonably likely to materially affect, its internal control over financial reporting.

## PART II. OTHER INFORMATION

### **Item 6. Exhibits**

- |      |   |   |
|------|---|---|
| 31.1 | Certification of Chief Executive Officer Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as Amended                  | * |
| 31.2 | Certification of Chief Financial Officer Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as Amended                  | * |
| 32.1 | Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 | * |
| 32.2 | Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 | * |

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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: February 9, 2010

Robert T. Hass  
Chief Accounting Officer  
(Principal Accounting Officer)

## EXHIBIT INDEX

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

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\* Filed herewith.

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, Jong S. Whang, 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 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 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 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 we 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 (the registrant’s fourth quarter in the case of an annual report) 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 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/ Jong S. Whang

Jong S. Whang

President and Chief Executive Officer

Amtech Systems, Inc.

Date: February 9, 2010

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Exhibit 31.2

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

I, Bradley C. Anderson, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Amtech Systems, Inc. (the “registrant”),

2. Based on my knowledge, this 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 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 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 we 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 (the registrant’s fourth quarter in the case of an annual report) 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 registrant’s board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

By /s/ Bradley C. Anderson

Bradley C. Anderson

Chief Financial Officer

Amtech Systems, Inc.

Date: February 9, 2010

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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 December 31, 2009, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jong S. Whang, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. ss. 1350, as adopted pursuant to ss. 906 of the Sarbanes-Oxley Act of 2002, that:

(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 result of operations of the Company.

By /s/ Jong S. Whang

Jong S. Whang

President and Chief Executive Officer

Date: February 9, 2010

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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 December 31, 2009, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Bradley C. Anderson, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. ss. 1350, as adopted pursuant to ss. 906 of the Sarbanes-Oxley Act of 2002, that:

(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 result of operations of the Company.

By /s/ Bradley C. Anderson

Bradley C. Anderson

Chief Financial Officer

Date: February 9, 2010

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