

**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, 2010

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 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 29, 2010: 9,020,727

AMTECH SYSTEMS, INC. AND SUBSIDIARIES  
TABLE OF CONTENTS

	<u>Page</u>
<b><u>PART I. FINANCIAL INFORMATION</u></b>	
<b><u>Item 1. Condensed Consolidated Financial Statements</u></b>	
<u>Condensed Consolidated Balance Sheets</u>	
<u>March 31, 2010 (Unaudited) and September 30, 2009</u>	3
<u>Condensed Consolidated Statements of Operations (Unaudited)</u>	
<u>Three and Six Months Ended March 31, 2010 and 2009</u>	5
<u>Condensed Consolidated Statements of Cash Flows (Unaudited)</u>	
<u>Six Months Ended March 31, 2010 and 2009</u>	6
<u>Notes to Condensed Consolidated Financial Statements (Unaudited)</u>	7
<b><u>Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations</u></b>	
<u>Caution Regarding Forward-Looking Statements</u>	17
<u>Overview</u>	18
<u>Results of Operations</u>	18
<u>Liquidity and Capital Resources</u>	22
<u>Off-Balance Sheet Arrangements</u>	23
<u>Contractual Obligations</u>	23
<u>Critical Accounting Policies</u>	23
<u>Impact of Recently Issued Accounting Pronouncements</u>	24
<u>Item 3. Quantitative and Qualitative Disclosures About Market Risk</u>	25
<u>Item 4. Controls and Procedures</u>	25
<b><u>PART II. OTHER INFORMATION</u></b>	
<u>Item 1A. Risk Factors</u>	26
<u>Item 6. Exhibits</u>	26
<u>SIGNATURES</u>	27
<u>EXHIBIT INDEX</u>	28

PART I FINANCIAL INFORMATION

ITEM 1. Condensed Consolidated Financial Statements

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

	<u>March 31,</u> <u>2010</u>	<u>September 30,</u> <u>2009</u>
<b>Assets</b>	(Unaudited)	
<b>Current Assets</b>		
Cash and cash equivalents	\$ 43,145	\$ 42,298
Restricted cash	5,126	1,496
Accounts receivable		
Trade (less allowance for doubtful accounts of \$348 and \$465 at March 31, 2010 and September 30, 2009, respectively)	8,748	8,409
Unbilled and other	6,213	5,156
Inventories	20,569	13,455
Deferred income taxes	2,650	2,290
Income taxes receivable	120	-
Note receivable	1,009	-
Prepaid expenses and other	2,661	841
Total current assets	<u>90,241</u>	<u>73,945</u>
<b>Property, Plant and Equipment - Net</b>	9,251	8,477
<b>Deferred Income Taxes - Long Term</b>	740	1,140
<b>Intangible Assets - Net</b>	3,359	3,828
<b>Goodwill</b>	4,792	5,136
<b>Other Assets</b>	25	-
<b>Total Assets</b>	<u>\$ 108,408</u>	<u>\$ 92,526</u>

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)

	March 31, 2010	September 30, 2009
	(Unaudited)	
<b>Liabilities and Stockholders' Equity</b>		
<b>Current Liabilities</b>		
Accounts payable	\$ 11,261	\$ 4,181
Current maturities of long-term debt	121	121
Accrued compensation and related taxes	3,293	2,877
Accrued warranty expense	1,334	1,429
Deferred profit	3,891	4,727
Customer deposits	14,486	2,861
Other accrued liabilities	1,434	1,721
Income taxes payable	-	160
Total current liabilities	35,820	18,077
<b>Income Taxes Payable Long-term</b>	490	480
<b>Other Long-Term Obligations</b>	96	164
Total liabilities	36,406	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: 9,020,727 and 8,961,494 at March 31, 2010 and September 30, 2009, respectively	90	90
Additional paid-in capital	71,136	70,403
Accumulated other comprehensive income (loss)	(2,160)	661
Retained Earnings	2,936	2,651
Total stockholders' equity	72,002	73,805
<b>Total Liabilities and Stockholders' Equity</b>	<b>\$ 108,408</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 March 31,</b>		<b>Six Months Ended March 31,</b>	
	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>
Revenues, net of returns and allowances	\$ 16,077	\$ 10,904	\$ 31,534	\$ 28,776
Cost of sales	11,369	8,547	22,226	20,333
Gross profit	4,708	2,357	9,308	8,443
Selling, general and administrative	4,061	3,101	8,037	7,585
Impairment and restructuring charges	-	1,682	-	1,682
Research and development, net of grants earned	225	152	722	376
Operating income (loss)	422	(2,578)	549	(1,200)
Interest and other income (expense), net	(76)	(14)	(74)	47
Income (loss) before income taxes	346	(2,592)	475	(1,153)
Income tax expense (benefit)	140	(580)	190	-
<b>Net income (loss)</b>	<b>\$ 206</b>	<b>\$ (2,012)</b>	<b>\$ 285</b>	<b>\$ (1,153)</b>
<b>Earnings (Loss) Per Share:</b>				
Basic earnings (loss) per share	\$ 0.02	\$ (0.22)	\$ 0.03	\$ (0.13)
Weighted average shares outstanding	9,018	9,057	8,995	9,078
Diluted earnings (loss) per share	\$ 0.02	\$ (0.22)	\$ 0.03	\$ (0.13)
Weighted average shares outstanding	9,239	9,057	9,156	9,078

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>2010</b>	<b>2009</b>
<b>Operating Activities</b>		
Net income (loss)	\$ 285	\$ (1,153)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depreciation and amortization	845	747
Write-down of inventory	258	257
Deferred income taxes	(9)	(711)
Impairment of long-lived assets	-	1,054
Non-cash share based compensation expense	570	333
Provision for (reversal of) allowance for doubtful accounts	(20)	103
Changes in operating assets and liabilities:		
Restricted cash	(3,949)	1,756
Accounts receivable	(2,430)	6,082
Inventories	(8,708)	(448)
Accrued income taxes	(441)	420
Prepaid expenses and other assets	(1,991)	(277)
Accounts payable	7,723	(3,429)
Accrued liabilities and customer deposits	12,923	(3,556)
Deferred profit	(501)	349
Net cash provided by operating activities	<u>4,555</u>	<u>1,527</u>
<b>Investing Activities</b>		
Purchases of property, plant and equipment	(2,059)	(838)
Decrease in restricted cash long-term	-	164
Payment for licensing agreement	-	(600)
Investment in note receivable	(1,000)	-
Investment in R2D	-	(164)
Net cash used in investing activities	<u>(3,059)</u>	<u>(1,438)</u>
<b>Financing Activities</b>		
Proceeds from issuance of common stock	155	-
Purchase of common stock under repurchase program	-	(448)
Payments on long-term obligations	(59)	(89)
Excess tax benefit of stock options	9	-
Net cash provided by (used in) financing activities	<u>105</u>	<u>(537)</u>
<b>Effect of Exchange Rate Changes on Cash</b>	<u>(754)</u>	<u>120</u>
<b>Net Increase (Decrease) in Cash and Cash Equivalents</b>	<u>847</u>	<u>(328)</u>
<b>Cash and Cash Equivalents, Beginning of Period</b>	<u>42,298</u>	<u>37,501</u>
<b>Cash and Cash Equivalents, End of Period</b>	<u>\$ 43,145</u>	<u>\$ 37,173</u>
<b>Supplemental Cash Flow Information:</b>		
Interest paid	\$ 29	\$ 14
Income tax refunds	\$ 21	\$ 379
Income tax payments	\$ 637	\$ 530
<b>Supplemental Non-cash Financing Activities:</b>		
Transfer inventory to capital equipment	\$ -	\$ 116
Intangible assets funded with current liabilities	\$ -	\$ 200

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, 2010 AND 2009**  
**(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, primarily in Asia, the United States and Europe. In addition, the Company provides semiconductor manufacturing support services.

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 consolidated results of operations for the three and six month periods ended March 31, 2010, are not necessarily indicative of the results to be expected for the full 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>March 31, 2010</b>	<b>September 30, 2009</b>
	<b>(dollars in thousands)</b>	
Deferred revenues	\$ 4,614	\$ 6,904
Deferred costs	723	2,177
Deferred profit	<u>\$ 3,891</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 March 31, 2010, one customer accounted for 20% of accounts receivable.

**Restricted Cash** – Restricted cash of \$5.1 million and \$1.5 million as of March 31, 2010 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 of the product. These amounts are generally billed upon final customer acceptance. The majority of these amounts are offset by balances included in deferred profit. As of March 31, 2010, the unbilled and other includes \$1.8 million of Value Added Tax (VAT) receivables at our Netherlands operations. These are taxes that we have paid to our vendors that will be refunded to the Company by the government.

**Inventories** – Inventories are stated at the lower of cost or net realizable value. Costs for approximately 90% 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>March 31, 2010</b>	<b>September 30, 2009</b>
	<b>(dollars in thousands)</b>	
Purchased parts and raw materials	\$ 9,278	\$ 7,550
Work-in-process	8,669	3,277
Finished goods	<u>2,622</u>	<u>2,628</u>
	<u>\$ 20,569</u>	<u>\$ 13,455</u>

**Note Receivable** – Note Receivable consists of a short-term note receivable from one of the Company’s technology partners. The note is collateralized by the intellectual property of the technology partner and is personally guaranteed by the CEO of the technology partner. As additional security, the CEO of our technology partner has pledged a portion of his ownership interest in the company. Interest accrues at 4.5% annually. The first interest payment was due and received by the Company in April 2010. The loan matures on June 30, 2010.



**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>March 31, 2010</b>	<b>September 30, 2009</b>
	(dollars in thousands)	
Land, building and leasehold improvements	\$ 7,643	\$ 7,124
Equipment and machinery	4,740	4,295
Furniture and fixtures	3,513	3,404
	<u>15,896</u>	<u>14,823</u>
Accumulated depreciation and amortization	(6,645)	(6,346)
	<u>\$ 9,251</u>	<u>\$ 8,477</u>

**Goodwill** – Goodwill is not subject to amortization, but is 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>March 31, 2010</b>	<b>September 30, 2009</b>
		(dollars in thousands)	
Non-compete agreements	8 years	\$ 164	\$ 178
Customer lists	10 years	866	940
Technology	10 years	1,718	1,863
Licenses	10 years	1,500	1,500
Other	2-10 years	89	96
		<u>4,337</u>	<u>4,577</u>
Accumulated amortization		(978)	(749)
		<u>\$ 3,359</u>	<u>\$ 3,828</u>

**Warranty** – A limited warranty is provided free of charge, generally for periods of 12 to 24 months, for 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>Six Months Ended March 31,</b>	
	<b>2010</b>	<b>2009</b>
(dollars in thousands)		
Beginning balance	\$ 1,429	\$ 1,155
Warranty expenditures	(267)	(323)
Provision	172	374
Ending balance	<u>\$ 1,334</u>	<u>\$ 1,206</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. In the second quarter of fiscal 2009, the Company's shareholders approved an amendment to our 2007 Employee Stock Incentive Plan and our Non-Employee Directors Stock Option Plan to authorize an additional 900,000 and 150,000, shares respectively. Our stock-based compensation plans are summarized in the table below:

Name of Plan	Shares	Shares	Options Outstanding	Plan Expiration
	Authorized	Available		
2007 Employee Stock Incentive Plan	1,400,000	901,337	343,488	Apr. 2017
1998 Employee Stock Option Plan	500,000	-	308,682	Jan. 2008
Non-Employee Directors Stock Option Plan	350,000	151,600	110,000	Jul. 2015
		<u>1,052,937</u>	<u>762,170</u>	

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

	<b>Three Months Ended March 31,</b>		<b>Six Months Ended March 31,</b>	
	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>
(dollars in thousands, except per share amounts)				
Effect on income (loss) before income taxes (1)	\$ (193)	\$ (167)	\$ (570)	\$ (333)
Effect on income taxes	57	39	170	70
Effect on net income (loss)	<u>\$ (136)</u>	<u>\$ (128)</u>	<u>\$ (400)</u>	<u>\$ (263)</u>

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

Stock options issued under the terms of the plans have, or will have, an exercise price equal to or greater than the fair market value of the common stock at the date of the option grant and expire no later than 10 years from the date of grant, with the most recent grant expiring in 2019. Options issued by the Company vest over 1 to 5 years.

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

	<b>Six Months Ended March 31,</b>			
	<b>2010</b>		<b>2009</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	486,803	\$ 8.39
Granted	102,000	6.44	183,000	3.75
Exercised	(25,608)	6.04	-	-
Forfeited	(5,625)	5.47	(1,000)	7.00
Outstanding at end of period	<u>762,170</u>	<u>\$ 6.99</u>	<u>668,803</u>	<u>\$ 7.12</u>
Exercisable at end of period	<u>436,358</u>	<u>\$ 7.21</u>	<u>317,226</u>	<u>\$ 7.23</u>
Weighted average fair value of options granted during the period	\$ 3.97		\$ 2.25	

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

	<b>Six Months Ended March 31,</b>	
	<b>2010</b>	<b>2009</b>
Risk free interest rate	2.57%	1.84%
Expected life	6 years	6 years
Dividend rate	0%	0%
Volatility	68%	66%
Forfeiture rate	6%	7%

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 zero and 20,000 options granted during the three months ended March 31, 2010 and 2009, respectively; and 102,000 and 183,000 options granted for the six months ended March 31, 2010 and 2009, respectively. Total fair value of options granted was approximately \$405,000 for the six months ended March 31, 2010. Total fair value of options granted for the three and six months ended March 31, 2009 were \$38,000 and \$411,000, respectively.

The Company awards 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.

Restricted stock transactions and outstanding are summarized as follows:

	<b>Six Months Ended March 31,</b>			
	<b>2010</b>		<b>2009</b>	
	<b>Awards</b>	<b>Weighted Average Grant Date Fair Value</b>	<b>Awards</b>	<b>Weighted Average Grant Date Fair Value</b>
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 zero restricted shares awarded during the three months ended March 31, 2010 and 2009, respectively. There were 24,000 and 100,000 restricted shares awarded during the six months ended March 31, 2010 and 2009, respectively. Total fair value of restricted shares awarded was approximately \$0.1 million and \$0.4 million for the six months ended March 31, 2010 and 2009, 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 March 31, 2010 and 2009, respectively, are included in selling, general and administrative expenses. Shipping expenses of \$0.5 million and \$0.3 million for the six months ended March 31, 2010 and 2009, respectively, are included in selling, general and administrative expenses.

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

	<b>Three Months Ended</b>		<b>Six Months Ended</b>	
	<b>March 31,</b>		<b>March 31,</b>	
	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>
	<b>(dollars in thousands)</b>		<b>(dollars in thousands)</b>	
Research and development	\$ 644	\$ 247	\$ 1,205	\$ 540
Grants earned	(419)	(95)	(483)	(164)
Net research and development	<u>\$ 225</u>	<u>\$ 152</u>	<u>\$ 722</u>	<u>\$ 376</u>

## 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 March 31, 2010, 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 March 31, 2010, 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 March 31, 2010 and September 30, 2009, the Company accrued \$0.1 million for potential interest and penalties.

## 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.

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 and six months ended March 31, 2010, options for 149,000 and 267,000 shares, respectively, and 14,000 and 4,125 restricted stock award shares, respectively, are excluded from the diluted EPS calculations because they are anti-dilutive. For the three and six months ended March 31, 2009, options for 664,000 and 655,000 shares, respectively, and 40,000 and 30,500 restricted stock award shares, respectively, are excluded from the diluted EPS calculations because they are anti-dilutive.

	Three Months Ended		Six Months Ended	
	March 31,		March 31,	
	2010	2009	2010	2009
<b>Basic Earnings Per Share Computation</b>				
Net income (loss) available to common stockholders	\$ 206	\$ (2,012)	\$ 285	\$ (1,153)
Weighted Average Shares Outstanding:				
Common stock	9,018	9,057	8,995	9,078
Basic earnings (loss) per share	\$ 0.02	\$ (0.22)	\$ 0.03	\$ (0.13)
<b>Diluted Earnings Per Share Computation</b>				
Net income (loss)	\$ 206	\$ (2,012)	\$ 285	\$ (1,153)
Weighted Average Shares Outstanding:				
Common stock	9,018	9,057	8,995	9,078
Common stock equivalents (1)	221	-	161	-
Diluted shares	9,239	9,057	9,156	9,078
Diluted earnings (loss) per share	\$ 0.02	\$ (0.22)	\$ 0.03	\$ (0.13)

(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)

	Three Months Ended		Six Months Ended	
	March 31,		March 31,	
	2010	2009	2010	2009
<b>(dollars in thousands)</b>				
Net income (loss), as reported	\$ 206	\$ (2,012)	\$ 285	\$ (1,153)
Foreign currency translation adjustment	(2,173)	(2,337)	(2,821)	(2,728)
Comprehensive loss	\$ (1,967)	\$ (4,349)	\$ (2,536)	\$ (3,881)

#### 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 small portion 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:

	Three Months Ended		Six Months Ended	
	March 31,		March 31,	
	2010	2009	2010	2009
	(dollars in thousands)		(dollars in thousands)	
<b>Net Revenues:</b>				
Solar and semiconductor equipment	\$ 14,540	\$ 9,341	\$ 28,515	\$ 25,474
Polishing supplies	1,537	1,563	3,019	3,302
	<u>\$ 16,077</u>	<u>\$ 10,904</u>	<u>\$ 31,534</u>	<u>\$ 28,776</u>
<b>Operating income (loss):</b>				
Solar and semiconductor equipment (1)	\$ 220	\$ (2,536)	\$ 187	\$ (1,130)
Polishing supplies	202	(42)	362	(70)
	<u>422</u>	<u>(2,578)</u>	<u>549</u>	<u>(1,200)</u>
Interest and other income (expense), net	(76)	(14)	(74)	47
Income (loss) before income taxes	<u>\$ 346</u>	<u>\$ (2,592)</u>	<u>\$ 475</u>	<u>\$ (1,153)</u>

(1) Includes the impairment losses of \$1,682 in Fiscal 2009 related to the Bruce Technologies intangible assets and goodwill.

	March 31,	September 30,
	2010	2009
	(dollars in thousands)	
<b>Identifiable Assets:</b>		
Solar and semiconductor equipment	\$ 103,849	\$ 88,617
Polishing supplies	4,559	3,909
	<u>\$ 108,408</u>	<u>\$ 92,526</u>
<b>Goodwill:</b>		
Solar and semiconductor equipment	\$ 4,064	\$ 4,408
Polishing supplies	728	728
	<u>\$ 4,792</u>	<u>\$ 5,136</u>

## 6. Major Customers and Foreign Sales

During the three months ended March 31, 2010, three customers, individually, represented 16%, 12% and 11% of net revenues. During the six months ended March 31, 2010, two customers, individually, represented 21% and 18% of net revenues. During the three months ended March 31, 2009, two customers, individually, represented 25% and 12% of net revenues. During the six months ended March 31, 2009, two customers, individually, represented 24% and 12% of net revenues.

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

	Six Months Ended March 31,	
	2010	2009
<b>Total North America</b>	<b>10%</b>	<b>24%</b>
China	57%	15%
Taiwan	7%	34%
Other	7%	6%
<b>Total Asia</b>	<b>71%</b>	<b>55%</b>
<b>Total Europe</b>	<b>19%</b>	<b>21%</b>
	<b>100%</b>	<b>100%</b>

## 7. Commitments and Contingencies

**Purchase Obligations** – As of March 31, 2010, we had purchase obligations in the amount of \$27.7 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.

**Leases** – On, April 1, 2010, the Company entered into a new operating lease for a building located in Vaassen, The Netherlands. The lease is for two years and the Company is required to make quarterly lease payments of \$30,000. This building is being used as manufacturing facilities for our Tempres operations.

In fiscal 2010, the Company extended the lease of warehouse space in Vaassen, the Netherlands and expanded the space. The original lease expired on October 31, 2011 and was extended to March 31, 2013. The lease payments increased from \$20,000 per quarter to \$30,000 per quarter due to the expansion.

**License agreement** – The Company entered into amendments with PST Co., LTD (PST) to both the PSG (Phosphosilicate glass) license and the PECVD (plasma enhanced chemical vapor deposition) license to expand the licenses to include one future model of the PSG dry etch systems and three future models of the PECVD system. These amendments to the licenses require the Company to pay additional license fees upon successful achievement of the agreed upon specifications of each of the four new models. The four payments range from three hundred million South Korean Won (KRW), approximately \$230,000, to one billion KRW, approximately \$780,000, for maximum total payments of approximately \$1,420,000. Such payments will be recorded as additional intangibles, the cost of which will be amortized over the life of the license.

**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.



## 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 solar and semiconductor 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 and also offers PECVD (plasma enhanced chemical vapor deposition) and PSG (phosphosilicate glass) equipment.

Our polishing supplies and equipment segment is a leading supplier of wafer polishing carriers to manufacturers of silicon wafers. The polishing segment also manufactures polishing templates, steel carriers and double-sided polishing and lapping machines for fabricators of LED, optics, quartz, ceramics and metal parts, and for 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.

Due to the nature of the capital equipment markets that we serve, our revenues, gross margins and operating results have historically fluctuated on a quarterly basis. Our contracts typically include holdbacks of 10-20% of revenue, which are recognized at the time of customer acceptance.

## 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, 2010	March 31, 2009	March 31, 2010	March 31, 2009
Net revenue	100%	100%	100%	100%
Cost of goods sold	71%	78%	70%	71%
Gross margin	29%	22%	30%	29%
Operating expenses:				
Selling, general and administrative	26%	28%	25%	26%
Restructuring charge	0%	16%	0%	6%
Research and Development	1%	2%	3%	1%
Total operating expenses	27%	46%	28%	33%
Income (loss) from operations	2%	-24%	2%	-4%
Interest income (expense), net	0%	0%	0%	0%
Income (loss) before income taxes	2%	-24%	2%	-4%
Income tax expense (benefit)	1%	-6%	1%	0%
Net Income (loss)	1%	-18%	1%	-4%

## 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 system 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				Six Months Ended			
	March	March	Inc.	%	March	March	Inc.	%
	31, 2010	31, 2009			31, 2010	31, 2009		
Solar and Semiconductor								
Equipment Segment	\$ 14,540	\$ 9,341	\$ 5,199	56%	\$ 28,515	\$ 25,474	\$ 3,041	12%
Polishing Supplies Segment	1,537	1,563	(26)	(2%)	3,019	3,302	(283)	(9%)
<b>Total Net Revenue</b>	<b>\$ 16,077</b>	<b>\$ 10,904</b>	<b>\$ 5,173</b>	<b>47%</b>	<b>\$ 31,534</b>	<b>\$ 28,776</b>	<b>\$ 2,758</b>	<b>10%</b>

Net revenue for the quarter ended March 31, 2010 increased \$5.2 million, or 47%, compared to the quarter ended March 31, 2009. Revenue from the solar and semiconductor equipment segment increased \$5.2 million, or 56%, due to significantly higher shipments to the solar industry, partially offset by lower shipments to the semiconductor industry and a decrease in recognition of previously deferred revenue. Within the solar and semiconductor equipment segment, net revenue from the solar market was \$10.9 million for the three months ended March 31, 2010, a \$6.4 million or 139% increase from the three months ended March 31, 2009.

Net revenue for the six months ended March 31, 2010 increased by \$2.8 million, or 10%, compared to the six months ended March 31, 2009. Revenue from the solar and semiconductor equipment segment increased \$3.0 million, or 12% due, in part, to improvement in economic activity since the first half of fiscal 2009. The decrease of \$0.3 million, or 9%, in net revenue from the Polishing Supplies Segment is due to a significant decrease in machine sales, partially offset by increased demand for templates and carriers.

## Backlog and Orders

Our order backlog as of March 31, 2010 and 2009 was \$87.2 million and \$34.7 million, respectively. Our backlog as of March 31, 2010 includes approximately \$81.6 million of orders from our solar industry customers, compared to \$32.6 million at March 31, 2009. New orders booked in the quarter ended March 31, 2010 were \$34.0 million compared to \$5.8 million in the second quarter of fiscal 2009. New orders booked in the six-month periods ended March 31, 2010 and 2009 were \$93.3 million and \$16.7 million, respectively. As the majority of the backlog is denominated in euros, the strengthening of the dollar during the first half of fiscal 2010 and 2009 resulted in a reduction in backlog of approximately \$6.6 million and \$4.2 million, respectively.

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

As of March 31, 2010, one customer accounts for 44% of our order backlog.

### 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				Six Months Ended			
	March 31,	March 31,	Inc.	%	March 31,	March 31,	Inc.	%
	2010	2009	(Dec.)		2010	2009	(Dec.)	
	(dollars in thousands)				(dollars in thousands)			
Solar and Semiconductor								
Equipment Segment	\$ 4,176	\$ 2,067	\$ 2,109	102%	\$ 8,311	\$ 7,845	\$ 466	6%
Polishing Supplies Segment	532	290	242	83%	997	598	399	67%
<b>Total Gross Profit</b>	<b>\$ 4,708</b>	<b>\$ 2,357</b>	<b>\$ 2,351</b>	<b>100%</b>	<b>\$ 9,308</b>	<b>\$ 8,443</b>	<b>\$ 865</b>	<b>10%</b>
Gross Margin	29%	22%			30%	29%		

Gross profit for the three months ended March 31, 2010 increased \$2.4 million or 100% versus the three months ended March 31, 2009. The increase was driven primarily by higher volumes which resulted in more efficient capacity utilization, partially offset by lower recognition of previously deferred profit. We recognized \$0.3 million of previously deferred profit, net of deferrals, for the quarter ended March 31, 2010, compared to a net recognition of \$0.5 million of profit for the quarter ended March 31, 2009. Gross profit and gross margins in the Polishing Supplies Segment were positively impacted by favorable product mix as volumes of higher-margin carriers and templates increased while sales of polishing machines, which generally carry a lower gross margin, decreased.

Gross profit for the six months ended March 31, 2010 increased \$0.9 million or 10% versus the six months ended March 31, 2009. We recognized \$0.5 million of previously deferred profit, net of deferrals, for the six months ended March 31, 2010, compared to a net deferral of \$0.3 million of profit for the six months ended March 31, 2009.

### *Selling, General and Administrative*

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

Segment	Three Months Ended				Six Months Ended			
	March 31,	March 31,	Inc.	%	March 31,	March 31,	Inc.	%
	2010	2009	(Dec.)		2010	2009	(Dec.)	
	(dollars in thousands)				(dollars in thousands)			
Solar and Semiconductor								
Equipment Segment	\$ 3,731	\$ 2,769	\$ 962	35%	\$ 7,402	\$ 6,916	\$ 486	7%
Polishing Supplies Segment	330	332	(2)	(1%)	635	669	(34)	(5%)
<b>Total SG&amp;A</b>	<b>\$ 4,061</b>	<b>\$ 3,101</b>	<b>\$ 960</b>	<b>31%</b>	<b>\$ 8,037</b>	<b>\$ 7,585</b>	<b>\$ 452</b>	<b>6%</b>
Percent of net revenue	26%	28%			25%	26%		

Selling, general and administrative (SG&A) expenses for the three months ended March 31, 2010 increased \$1.0 million, or 31% compared to the three months ended March 31, 2009. SG&A expenses include \$0.2 million of stock-based compensation expense in the three months ended March 31, 2010 and 2009. The increase in SG&A expenses was due primarily to increases in commissions related to higher revenues generated in regions where third party sales agents are utilized and compensation expense.

For the six months ended March 31, 2010, SG&A increased \$0.5 million or 6% compared to the six month period ended March 31, 2009. SG&A expenses include \$0.6 million and \$0.3 million of stock-based compensation expense for the six months ended March 31, 2010 and 2009, respectively. The increase in SG&A is due to increased compensation expense.

### *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; materials and supplies used in those activities; and product prototyping.

Research and	Three Months Ended				Six Months Ended			
	March 31,	March 31,	Inc.	%	March 31,	March 31,	Inc.	%
	2010	2009	(Dec.)		2010	2009	(Dec.)	
	(dollars in thousands)				(dollars in thousands)			
Development Expense	\$ 644	\$ 247	\$ 397	161%	\$ 1,205	\$ 540	\$ 665	123%
Grants Earned	(419)	(95)	(324)	341%	(483)	(164)	(319)	194%
<b>Net Research and Development</b>	<b>\$ 225</b>	<b>\$ 152</b>	<b>\$ 73</b>	<b>48%</b>	<b>\$ 722</b>	<b>\$ 376</b>	<b>\$ 346</b>	<b>92%</b>

Research and development spending in fiscal 2010 has increased significantly from spending in fiscal 2009 due to increased research in the technology of solar (photovoltaic) cell manufacturing to increase cell efficiency. We receive reimbursements through governmental research and development grants which are netted against these expenses. As we have increased our research and development activity, we have also increased our efforts to receive grants to fund this research. As a result, the amount of grants earned in fiscal 2010 has significantly increased.

### ***Income Taxes***

For the three months ended March 31, 2010 and 2009, we recorded income tax expense (benefit) of \$0.1 million and (\$0.6) million, for effective tax rates of 41% and (22%), respectively. During the six months ended March 31, 2010 and 2009, we recorded income tax expense of \$0.2 million and zero. The effective tax rates used in calculating the income tax provision for the six months ended March 31, 2010 and 2009 were 40% and 0%, respectively, based upon estimates of annual income, annual permanent differences, changes in the valuation allowance and statutory tax rates for fiscal 2010 and 2009 for the various jurisdictions in which we operate. The effective tax rate for the six months ended March 31, 2009 was negatively impacted by an increase in the valuation allowance and permanent differences between financial income and taxable income, which were higher in relation to the pre-tax loss. Without these adjustments a tax benefit would have been recorded for the period.

### ***Liquidity and Capital Resources***

At March 31, 2010 and September 30, 2009, cash and cash equivalents were \$43.1 million and \$42.3 million, respectively. Restricted cash increased \$3.6 million due to receipt of customer deposits requiring a bank guarantee. Our working capital was \$54.4 million as of March 31, 2010 and \$55.9 million as of September 30, 2009. The increase in cash was primarily provided by cash from operations of \$4.6 million, discussed below. This was offset by purchases of property, plant and equipment of \$2.1 million and an investment in a short term note receivable of \$1.0 million. Our ratio of current assets to current liabilities decreased to 2.5:1 as of March 31, 2010 from 4.1:1 as of September 30, 2009. The decline in our current ratio was due to the simultaneous increase in our current assets and current liabilities as we ramped up inventory purchases to meet the growing order backlog. Current assets increased \$16.3 million while current liabilities increased \$17.7 million; or a ratio of 0.9:1. The increase in customer orders is expected to result in higher operating levels and a significant reduction in cash due to increases in inventories and receivables 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 \$4.6 million for the six months ended March 31, 2010, compared to \$1.5 million provided by such activities for the six months ended March 31, 2009. During the six months ended March 31, 2010 cash was primarily generated by customer deposits received with orders and an increase in accounts payable. These increases were offset by an increase in restricted cash due to customers requiring bank guarantees for their deposits; an increase in inventory necessary to fulfill our backlog of orders; an increase in account receivable due to a high concentration of shipments at the end of the quarter; as well as an increase in vendor prepayments to take advantage of available discounts. In the first six months of fiscal 2009, cash was generated by decreases in accounts receivable and current restricted cash as well as earnings from operations, adjusted for non-cash charges, partially offset by decreases in accounts payable, accrued liabilities and customer deposits, and increases in inventories.

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

Our investing activities for the six months ended March 31, 2010 and 2009 used \$3.1 million and \$1.4 million respectively. In the first six months of fiscal 2010 the company had capital expenditures of \$2.1 million, including land in the Netherlands adjacent to our current manufacturing facilities for \$1.0 million in the second quarter of 2010. We plan to use this land to expand our current facilities due to our rapid growth. The remainder of the capital expenditures was for machinery and equipment and infrastructure due to our capacity expansion, primarily at our Netherlands location. In the second quarter of fiscal 2010, we provided a \$1.0 million short-term loan to one of our technology partners. The loan carries an annual interest rate of 4.5%, with the first interest payment due on April 1, 2010 and the remainder of the interest and principal to be paid on June 30, 2010. The loan is collateralized by the intellectual property of our technology partner and is guaranteed by its CEO. The CEO of our technology partner pledged as significant portion of his ownership interest in the company as additional security. The first interest payment was received in April 2010. For the six months ended March 31, 2009, capital expenditures amounted to \$0.8 million primarily for machinery and equipment and we made \$0.6 million of payments for our licensing agreements with PST.

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

For the six months ended March 31, 2010, \$0.1 million of cash was provided by financing activities. The primary source of cash received was proceeds from the issuance of common stock through the exercise of stock options. This compares to \$0.5 million of cash used in the first six months of fiscal 2009 primarily due to the purchase of common stock under our stock repurchase program.

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

As of March 31, 2010, 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 September 30, 2009 have been changes in purchase obligations, new building lease and additional obligations related to newly licensed products (See Note 7 of the Condensed Consolidated Financial Statements). 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 Part I, Item 1A of our Annual Report on Form 10-K for the year ended September 30, 2009. We believe the following critical accounting policies affect 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, 2009 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, 2010.

#### **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 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, the primary 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 March 31, 2010, we did not hold any stand-alone or separate derivative instruments. We incurred net foreign currency transaction losses of \$0.2 million and less than \$0.1 million respectively during the six months ended March 31, 2010 and 2009. As of March 31, 2010, our foreign subsidiaries had \$1.5 million of assets (cash, receivables and prepaid assets) 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 \$0.2 million. As of March 31, 2010, we had \$3.6 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 \$0.4 million.

We incurred a foreign currency translation loss of \$2.8 million and \$2.7 million during the six months ended March 31, 2010 and 2009, respectively. Our net investment in and advances to our foreign operations totaled \$42.9 million as of March 31, 2010. A 10% change in the value of the euro relative to the U.S. dollar would cause approximately a \$4.3 million foreign currency translation adjustment, a type of other comprehensive income (loss), which would be a direct adjustment to our stockholders' equity.

During six months ended March 31, 2010 and 2009, our European operations transacted U.S. dollar denominated sales and purchases of \$0.2 million and \$0.6 million, respectively. As of March 31, 2010, 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 March 31, 2010, purchase commitments denominated in a currency other than the function currency of our transacting operation totaled \$3.1 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 no more than \$0.3 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, 2010, 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 three months ended March 31, 2010 that has materially affected, or is reasonably likely to materially affect, its internal control over financial reporting.

## PART II. OTHER INFORMATION

### Item 1A. Risk Factors

The most significant risk factors applicable to Amtech are described in Part I, Item 1A (Risk Factors) of Amtech's Annual Report on Form 10-K for the fiscal year ended September 30, 2009 (our "2009 Form 10-K"). There have been no material changes to the risk factors previously disclosed on our 2009 Form 10-K.

### Item 6. Exhibits

10.1	Amtech Systems, Inc. Non-Employee Directors Stock Option Plan, as amended through March 11, 2010.	*
10.2	Amtech Systems, Inc. 2007 Employee Stock Incentive Plan, as amended through March 11, 2010 .	*
10.3	Amended and Restated Employment Agreement between the Company and Jong S. Whang.	*
10.4	Amended and Restated Change of Control and Severance Agreement between the Company 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	**

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\* Incorporated by reference to the Company's report on Form 8-K, filed with the Securities and Exchange on March 17, 2010.

\*\* 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 11, 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>
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\* Incorporated by reference to the Company's report on Form 8-K, filed with the Securities and Exchange on March 17, 2010.

\*\* Filed herewith.

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 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/ Jong S. Whang

Jong S. Whang

President and Chief Executive Officer

Amtech Systems, Inc.

Date: May 11, 2010

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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 have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

By /s/ Bradley C. Anderson

Bradley C. Anderson  
Chief Financial Officer  
Amtech Systems, Inc.  
Date: May 11, 2010

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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, 2010, 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: May 11, 2010

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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, 2010, 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: May 11, 2010

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