UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

	FORM 10-Q	
(Mark One) ☑ QUARTERLY REPORT PURSUANT TO SE	ECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934	
For the quarterly period ended: June 30, 2004	• /	
	OR	
☐ TRANSITION REPORT PURSUANT TO SE	ECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934	
For the transition period from to		
	Commission File Number: 0-11412	
	Exact name of registrant as specified in its charter)	
Arizona (State or other jurisdiction of incorporation or organization)	86-0411215 (I.R.S. Employer Identification No.)	
131 South Clark Drive, Tempe, Arizona (Address of principal executive offices)	85281 (Zip Code)	
Registrant's te	elephone number, including area code: 480-967-5146	
	erts required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceded to file such reports), and (2) has been subject to such filing requirements for the past 90	eding
Indicate by check mark whether the registrant is an accelerated filer	(as defined in Rule 12b-2 of the Exchange Act). ☐ Yes 🗵 No	
Shares of Comm	non Stock outstanding as of August 10, 2004: 2,705,121	

AMTECH SYSTEMS, INC. AND SUBSIDIARIES TABLE OF CONTENTS

	- I age
PART I. FINANCIAL INFORMATION	
Item 1. Condensed Consolidated Financial Statements	
Condensed Consolidated Balance Sheets June 30, 2004 (Unaudited) and September 30, 2003	3
Condensed Consolidated Statements of Operations (Unaudited) Three and Nine Months Ended June 30, 2004 and 2003	4
Condensed Consolidated Statements of Cash Flows (Unaudited) Nine Months Ended June 30, 2004 and 2003	5
Notes to Condensed Consolidated Financial Statements (Unaudited)	6
Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations	
Caution Regarding Forward-Looking Statements	12
Documents to Review In Connection With Management's Discussion and Analysis of Financial Condition and Results of Operations	12
Results of Operations	12
Liquidity and Capital Resources	17
Critical Accounting Policies	19
Impact of Recently Issued Accounting Pronouncements	19
Item 3. Quantitative and Qualitative Disclosures About Market Risk	20
Item 4. Controls and Procedures	20
PART II. OTHER INFORMATION	
Item 6. Exhibits and Reports on Form 8-K	21
SIGNATURES SIGNATURES	22
EXHIBIT INDEX	23

AMTECH SYSTEMS, INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED BALANCE SHEETS

		June 30, 2004	S	September 30, 2003
		(Unaudited)		
ASSETS				
CURRENT ASSETS:				
Cash and cash equivalents	\$	6,944,402	\$	7,453,069
Accounts receivable (less allowance for doubtful accounts of \$194,000 at June 30, 2004 and \$176,000 at September 30, 2003)		3,237,877		3,005,128
Inventories		4,455,045		3,893,886
Deferred income taxes		1,045,000		980,000
Income taxes receivable		607,000		460,000
Prepaid expenses		208,608		193,615
Total current assets		16,497,932		15,985,698
PROPERTY, PLANT AND EQUIPMENT - net		1,398,709		1,503,074
DEFERRED INCOME TAXES - LONG TERM		59,000		150,000
GOODWILL		727,837		727,837
OTHER ASSETS - net		134,077		32,433
	\$	18,817,555	\$	18,399,042
LIABILITIES AND STOCKHOLDERS' EQUITY				
CURRENT LIABILITIES:				
Accounts payable	\$	1,265,636	\$	1,221,327
Accrued compensation and related taxes		500,658		626,426
Accrued warranty expense		148,375		321,300
Deferred profit		908,162		534,082
Customer deposits		199,893		226,959
Other accrued liabilities		691,063		329,061
Total current liabilities		3,713,787		3,259,155
LONG-TERM OBLIGATIONS	_	471,614		640,490
	_			
STOCKHOLDERS' EQUITY:				
Preferred stock; no specified terms; 100,000,000 shares authorized; none issued		_		_
Common stock; \$0.01 par value; 100,000,000 shares authorized; shares issued and outstanding: 2,705,121 at June 30, 2004 and 2,698,421 at September 30, 2003		27.051		26.984
Additional paid-in capital		12,887,986		12,873,039
Accumulated other comprehensive income		462.264		194,338
Retained earnings		1,254,853		1,405,036
Total stockholders' equity		14,632,154	_	14,499,397
	\$	18,817,555	\$	18,399,042

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

AMTECH SYSTEMS, INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS For the Three and Nine Months Ended June 30, 2004 and 2003 (Unaudited)

	Three Month	Three Months Ended June 30,		nded June 30,
	2004	2003	2004	2003
Net revenues	\$ 4,834,950	\$ 3,621,596	\$ 14,387,144	\$ 13,398,421
Cost of sales	3,735,243	2,592,907	10,510,655	10,446,099
Gross margin	1,099,707	1,028,689	3,876,489	2,952,322
Selling, general and administrative	1,363,599	1,095,591	3,711,106	3,362,441
Research and development	109,719	128,116	376,008	387,381
•				
Operating loss	(373,611)	(195,018)	(210,625)	(797,500)
Interest income (expense), net	4,051	15,027	6,442	30,177
Loss before income taxes	(369,560)	(179,991)	(204,183)	(767,323)
Income tax benefit	(120,000)	(59,000)	(54,000)	(262,000)
NET LOSS	\$ (249,560)	\$ (120,991)	\$ (150,183)	\$ (505,323)
LOSS PER SHARE:				
Basic loss per share	\$ (.09)	\$ (.04)	\$ (.06)	\$ (.19)
Weighted average shares outstanding	2,702,313	2,694,689	2,701,029	2,691,087
Diluted loss per share	\$ (.09)	\$ (.04)	\$ (.06)	\$ (.19)
Weighted average shares outstanding	2,702,313	2,694,689	2,701,029	2,691,087

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

AMTECH SYSTEMS, INC. AND SUBSIDIARIES CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

For the Nine Months Ended June 30, 2004 and 2003

(Unaudited)

	2004	2003
OPERATING ACTIVITIES		
Net loss	\$ (150,183)	\$ (505,323)
Adjustments to reconcile net loss to net cash used in operating activities:	ψ (100,100)	ψ (000,0 <u>2</u> 0)
Depreciation and amortization	326.111	377,275
Provision for doubtful accounts	12,642	12,984
Deferred income taxes	26,000	(174,000)
Changes in operating assets and liabilities:	20,000	(17.,000)
Accounts receivable	(161,551)	(3,546)
Inventories	(469,436)	(1,199,566)
Prepaid expenses and other assets	(123,667)	(174,100)
Accounts payable	(5,673)	256,892
Accrued liabilities and customer deposits	(59,756)	1,420,525
Deferred profit	354,890	(348,034)
Income taxes receivable/payable	(140,056)	(474,880)
meome wites receivable purpose	(110,050)	(17 1,000)
Net cash used in operating activities	(390,679)	(811,773)
INVESTING ACTIVITIES		
Purchases of property, plant and equipment	(175,223)	(119,652)
Net cash used in investing activities	(175,223)	(119,652)
FINANCING ACTIVITIES		
Common stock issued	15,014	9,096
Borrowings on mortgage loan	13,014	252,360
Borrowings on mortgage toan		232,300
Net cash provided by financing activities	15.014	261,456
rect cash provided by inflationing activities	15,014	201,430
EFFECT OF EXCHANGE RATE CHANGES ON CASH	42,221	208,559
NET DECREASE IN CASH AND CASH EQUIVALENTS	(508,667)	(461,410)
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD	7,453,069	8,045,663
CASH AND CASH EQUIVALENTS, END OF PERIOD	\$ 6,944,402	\$ 7,584,253
0.1011.11.12 0.1011.24011.11.22.11.10, 2.112 01 1.21.10.2	 	,,001,200
Supplemental Cash Flow Information:		
Cash paid during the period for:		
Interest expense	\$ 20,486	\$ 30,177
Income taxes paid, net	\$ 62,000	\$ 347,000
· · · · · · · · · · · · · · · · · · ·	- 02,000	

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 NINE MONTHS ENDED JUNE 30, 2004 (UNAUDITED)

(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation – The accompanying unaudited condensed consolidated financial statements include the accounts of Amtech Systems, Inc., an Arizona corporation ("Amtech"), and its wholly-owned subsidiaries, P. R. Hoffman Machine Products, Inc. ("P. R. Hoffman") based in the United States, and Tempress Systems, Inc. ("Tempress") based in The Netherlands (collectively, the "Company"). All significant intercompany balances and transactions have been eliminated in consolidation.

The accompanying unaudited condensed consolidated financial statements have been prepared pursuant to the rules and regulations of the Securities and Exchange Commission (the "SEC"), and consequently do not include all disclosures normally required by accounting principles generally accepted in the United States of America. In the opinion of management, all adjustments necessary to present fairly the financial position, results of operations and cash flows for the periods presented have been made.

Certain information and footnote 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 the Company's Annual Report on Form 10-K for the fiscal year ended September 30, 2003.

The consolidated results of operations for the three and nine months ended June 30, 2004 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.

Reclassifications – In order to more accurately reflect research and development expenditures, the Company reclassified \$44,000 and \$141,000 of expenses previously reflected as cost of sales to research and development in the three and nine months ended June 30, 2003, respectively.

Deferred Profit – The components of deferred profit are as follows:

	June 30, 2004	September 30, 2003
Deferred Revenues	\$ 908,162	\$ 626,265
Deferred Costs	_	92,183
		
	\$ 908,162	\$ 534,082

Concentrations of Credit Risk – As of June 30, 2004, receivables from two customers comprised 27% and 15%, respectively, of accounts receivable. In addition, 35% of the work-in-process inventory ("WIP") at June 30, 2004 is attributable to a single customer. The systems ordered by that customer are part of a five-system order, which began shipping during the second quarter of 2004. The remaining system ordered by this customer is currently scheduled to ship during the first quarter of 2005. An additional 18% of WIP is attributable to another single customer. The system ordered by that customer shipped during the fourth quarter of 2004.

Inventories – The components of inventories are as follows:

	June 30, 2004	September 30, 2003
Purchased parts and raw materials	\$ 2,449,318	\$ 2,391,270
Work-in-process	1,485,343	1,011,717
Finished goods	520,384	490,899
	\$ 4,455,045	\$ 3,893,886

Stock-Based Compensation – The Company accounts for its employee stock-based compensation plans under Statement of Financial Accounting Standards ("SFAS") No. 123, "Accounting for Stock-Based Compensation." SFAS No. 123 permits companies to record employee stock-based transactions using the intrinsic value method in accordance with Accounting Principles Board ("APB") Opinion No. 25, "Accounting for Stock Issues to Employees," under which no compensation cost is recognized and the pro forma effects on earnings and earnings per share are disclosed as if the fair value approach had been adopted. The Company's employee stock-based compensation plans are summarized in the table below:

Name of Plan	Shares Authorized	Plan Expiration
Director Stock Purchase Agreements (pre-1996)	15,000	90 days after board member termination
Non-Employee Directors Stock Option Plan	100,000	December 21, 2005
Amended and Restated 1995 Stock Option Plan and 1995 Stock Bonus Plan	160,000	October 5, 2005
1998 Employee Stock Option Plan	500,000	January 30, 2008

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 ten years from the date of grant, with the most recent grant expiring in 2014. Under the terms of the 1995 Stock Option Plan, nonqualified stock options may also be issued. Options issued by the Company vest at the rate of 20%-33% per year. As of June 30, 2004, the Company had 179,000 options available for issuance under the plans.

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

	Nine Months Ended June 30,				
	2004		2003	2003	
	Options	Weighted Average Exercise Price	Options	Weighted Average Exercise Price	
Outstanding at beginning of period	405,217	\$ 4.70	434,567	\$ 4.78	
Granted	55,000	5.84	16,000	3.11	
Exercised	(6,700)	2.24	(6,750)	1.35	
Forfeited	(3,500)	3.91	(9,333)	6.57	
Outstanding at end of period	450,017	4.88	434,484	4.73	
•					
Exercisable at end of period	273,317	\$ 4.39	216,284	\$ 4.03	
Weighted average fair value of options granted during the period	\$ 2.67		\$ 1.03		

The Company has recognized no compensation expense, as all options have been granted with an exercise price equal to, or greater than, the fair value of the common stock on the date of grant. No adjustment has been made for the non-transferability of the options, or for the risk of forfeiture at the time of issuance. Forfeitures of unvested options are instead recorded as incurred. The fair value of each option grant has been estimated as of the date of grant using the Black-Scholes option pricing model with the following weighted average assumptions:

	Nine Months F	Nine Months Ended June 30,		
	2004	2003		
Risk free interest rate	3.71% to 4.74%	3.65% to 3.71%		
Expected life	4 to 6 years	4 years		
Dividend rate	0%	0%		
Expected volatility	40% to 53%	32% to 44%		

The following table illustrates the pro-forma effect on net loss and on the loss per share, as if the Company had applied the fair value recognition provisions of SFAS No. 123:

	Thr	Three Months Ended June 30,		Months Ended June 30,	led	
	2004	2003	2004	20	003	
Net loss, as reported	\$ (249,56	0) \$ (120,991)	\$ (150,183)	\$ (50	05,323)	
Compensation expense, net of tax	54,56	, , , ,	, , , ,		54,491	
Net loss, pro forma	\$ (304,12	1) \$ (172,665)	\$ (312,680)	\$ (65	9,814)	
Basic Loss Per Share:						
As reported	\$ (.0	9) \$ (.04	\$ (.06)	\$	(.19)	
Pro forma	(.1	(.06)	(.12)		(.25)	
Diluted Loss Per Share:						
As reported	\$ (.0	9) \$ (.04)	\$ (.06)	\$	(.19)	
Pro forma	(.1	1) (.06	$) \qquad \qquad (.12)$		(.25)	

The following summarizes information about stock options outstanding at June 30, 2004:

Options Outstanding			Options Exercisable		
Range of Exercise Prices	Number Outstanding	Remaining Contractual Life	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
\$1.13 – 1.49	70,017	2.60	\$ 1.13	70,017	\$ 1.13
1.50 - 1.99	9,000	4.66	1.50	9,000	1.50
2.00 - 3.24	11,600	8.19	2.88	4,334	2.79
3.25 - 4.24	8,500	8.01	3.25	4,000	3.25
4.25 – 5.49	86,900	5.35	4.43	53,500	4.41
5.50 - 6.49	98,000	8.28	5.83	29,800	5.83
6.50 - 6.99	166,000	6.73	6.54	102,666	6.55
	450,017			273,317	

Other Significant Accounting Policies – For further discussion of Amtech's significant accounting policies, see "Item 2: Management's Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies" and the Company's audited consolidated financial statements and notes thereto contained in its Annual Report on Form 10-K for the fiscal year ended September 30, 2003.

Impact of Recently Issued Accounting Pronouncements – For discussion of the impact of recently issued accounting pronouncements, see "Item 2: Management's Discussion and Analysis of Financial Condition and Results of Operations – Impact of Recently Issued Accounting Pronouncements."

(2) LOSS PER SHARE

Loss per share (EPS) is calculated as follows:

		Three Months Ended June 30,		Nine Months Ended June 30,	
	2004	2003	2004	2003	
Net loss	\$ (249,560)	\$ (120,991)	\$ (150,183)	\$ (505,323)	
Weighted average shares outstanding:					
Common stock Common stock equivalents (1)	2,702,313	2,694,689	2,701,029 —	2,691,087 —	
	2.702.212	2 (04 (80	2.701.020	2 (01 007	
Diluted shares	2,702,313	2,694,689	2,701,029	2,691,087	
Loss Per Share:					
Basic	\$ (.09)	\$ (.04)	\$ (.06)	\$ (.19)	
Diluted	(.09)	(.04)	(.06)	(.19)	

⁽¹⁾ The number of common stock equivalents is calculated using the treasury stock method and the average market price during the period. For the three and nine months ended June 30, 2004, options and warrants on 509,317 shares are excluded from the EPS calculations, as they are antidilutive due to the net loss in each of the periods. For the three and nine months ended June 30, 2003, options and warrants on 493,784 shares are excluded from the EPS calculations, as they are antidilutive due to the net loss in each of the periods.

(3) COMPREHENSIVE INCOME

		Three Months Ended June 30,		Nine Months Ended June 30,	
	2004	2003	2004	2003	
Net loss, as reported	\$ (249,560)	\$ (120,991)	\$ (150,183)	\$ (505,323)	
Foreign currency translation adjustment Minimum pension liability adjustment	(21,608) 119,986	146,991 —	147,940 119,986	440,469 —	
Comprehensive income (loss)	\$ (151,182)	\$ 26,000	\$ 117,743	\$ (64,854)	

(4) BUSINESS SEGMENT INFORMATION

The Company classifies its products into two core business segments. The semiconductor equipment segment designs, manufactures and markets semiconductor wafer processing and handling equipment used in the fabrication of integrated circuits. Also included in the 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 the Company's business segments is as follows:

		Three Months Ended June 30,		hs Ended 30,
	2004	2003	2004	2003
Net revenues:				
Semiconductor equipment	\$ 3,462,557	\$ 2,216,132	\$ 9,923,777	\$ 9,456,073
Polishing supplies	1,372,393	1,405,464	4,463,367	3,942,348
	\$ 4,834,950	\$ 3,621,596	\$ 14,387,144	\$ 13,398,421
Operating income (loss):				
Semiconductor equipment	\$ (426,741)	\$ (214,226)	\$ (248,411)	\$ (748,316)
Polishing supplies	53,130	19,208	37,786	(49,184)
Total operating loss	(373,611)	(195,018)	(210,625)	(797,500)
Interest income, net	4,051	15,027	6,442	30,177
				
Loss before income taxes	\$ (369,560)	\$ (179,991)	\$ (204,183)	\$ (767,323)

(5) SUBSEQUENT EVENT

On July 1, 2004, Amtech acquired certain semiconductor horizontal diffusion furnace operations and assets in the United States and Europe from Kokusai Semiconductor Equipment Corporation ("KSEC") and its affiliate Kokusai Electric Europe, GmbH. At the closing, Amtech paid \$3.3 million in cash and assumed an estimated \$0.3 million in liabilities. Amtech is also obligated to make future payments to KSEC of up to \$1.0 million based upon the future consumption of inventories transferred under the acquisition agreements. Amtech paid the cash consideration in connection with the acquisition with available cash and cash equivalents. For KSEC's fiscal years ended March 31, 2003 and 2004, the acquired operations had estimated sales to non-affiliates of approximately \$7.5 million and \$11.0 million, respectively. The acquired business will operate as Bruce Technologies, Inc., a wholly-owned subsidiary of Amtech.

The assets acquired principally consist of intellectual property and technology, customer lists, customer contracts, inventories and other tangible property used in connection with the acquired business. Liabilities assumed include obligations under certain contracts, leases and purchase orders, and warranty claims for certain products and services under warranty as of the date of the acquisition. The purchase price allocation is currently in process. Preliminary information suggests the following allocation:

Inventories	\$2,200,000
Intangible assets	1,272,000
Property, plant and equipment	80,000
Liabilities assumed	(260,000)
Cash Paid at Closing	\$3,292,000

ITEM2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Caution Regarding Forward-Looking Statements

Certain information contained or incorporated by reference in this Quarterly Report on Form 10-Q is forward-looking in nature. All statements included or incorporated by reference in this Report, or made by the management of Amtech Systems, Inc. and its subsidiaries ("Amtech"), other than statements of historical fact, are hereby identified as "forward-looking statements" (as such term is defined in Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended). Examples of forward-looking statements include statements regarding our future financial results, operating results, business strategies, projected costs, products under development, competitive positions and plans and objectives of Amtech and our management for future operations. In some cases, forward-looking statements can be identified by terminology such as "may," "will," "should," "would," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continue," or the negative of these terms or other comparable terminology. Any expectations based on these forward-looking statements are subject to risks and uncertainties and other important factors, including those discussed in the section entitled "Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations – Trends, Risks and Uncertainties" in Amtech's Annual Report on Form 10-K for the fiscal year ended September 30, 2003. These and many other factors could affect our future operating results and financial condition, and could cause actual results to differ materially from expectations based on forward-looking statements made in this document or elsewhere by us or on our behalf. Unless noted otherwise, all references to a year apply to our fiscal year, which ends on September 30th. All references to "we," "our," "us," or "Amtech" refer to Amtech Systems, Inc. and its subsidiaries.

Documents to Review in Connection with Management's Discussion and Analysis of Financial Condition and Results of Operations

This discussion should be read in conjunction with the Condensed Consolidated Financial Statements and Notes presented in this Quarterly Report on Form 10-Q and the Audited Consolidated Financial Statements and Notes and the section entitled "Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations – Trends, Risks and Uncertainties" in our Annual Report on Form 10-K for the fiscal year ended September 30, 2003 for a more complete understanding of our financial position and results of operations for the three and nine month periods ended June 30, 2004. This discussion should also be read in conjunction with the Current Reports on Form 8-K filed by Amtech during 2004, which discuss the details of the acquisition of the semiconductor horizontal diffusion furnace operations and assets from Kokusai Semiconductor Equipment Corporation.

Results of Operations

We develop, manufacture, market and service wafer and semiconductor fabrication equipment and related parts, supplies and services on a worldwide basis. The products offered are grouped into two business segments: the semiconductor equipment segment, which offers horizontal diffusion furnaces, processing/robotic equipment for diffusion furnaces, related spare parts and manufacturing support services to semiconductor fabricators and silicon wafer

manufacturers; and the polishing supplies segment, which offers supplies, including carriers and templates, and equipment for lapping and polishing, which are some of the last steps in the fabrication of silicon wafers. Demand for our products can change significantly from period to period as a result of numerous factors, including, but not limited to, changes in: 1) global and regional economic conditions; 2) supply and demand for semiconductors or, more specifically, capacity utilization and production volume of manufacturers of semiconductors, silicon wafers, solar cells and microelectrical mechanical systems ("MEMS"); and 3) the profitability and capital resources of those manufacturers. For this and other reasons, our results of operations for past periods may not necessarily be indicative of future operating results.

Our business has historically been subject to cyclical industry conditions. As a result, we have experienced significant fluctuations in our quarterly new orders and net revenues, both within and across years. Examples of these significant fluctuations are the large swings in revenues and income between the first and second quarters of 2004 and the third and fourth quarters of 2003. Demand for semiconductor and silicon wafer manufacturing equipment and related consumable products has also been volatile as a result of sudden changes in semiconductor supply and demand and other factors in both semiconductor devices and wafer fabrication processes. Our orders tend to be more volatile than our revenues, as any change in demand is reflected immediately in orders booked, which are net of cancellations, while revenues tend to be recognized over multiple quarters as a result of procurement and production lead times and the deferral of certain revenues under our revenue recognition policies. Customer delivery schedules on large system orders, and the timing of revenue recognition under our accounting policies, can also add to this volatility.

Net Revenues. Our net revenues for the three months ended June 30, 2004 were \$4.8 million, compared to \$3.6 million for the three months ended June 30, 2003, an increase of 34%. We experienced a decrease of \$0.8 million, or 14%, from the \$5.6 million in net revenues for the three months ended March 31, 2004. Net revenues for the nine months ended June 30, 2004 were \$14.4 million, compared to \$13.4 million for the nine months ended June 30, 2003, an increase of 7%.

Net revenues of the semiconductor equipment segment increased 56% to \$3.5 million during the third quarter of 2004, compared to the third quarter of 2003. This increase is the result of the May 2004 delivery of two systems that are part of a multi-system order, which is comprised of the shipment of five systems to a single European customer. Two systems under this order shipped in January 2004, two systems shipped in May 2004 and the final system is currently scheduled to ship during the first quarter of 2005. Also contributing to the revenue increase in the third quarter of 2004 is the significantly decreased level of revenues from shipments in the third quarter of 2003. This increase in shipments over the prior period was partially offset by a \$0.6 million increase in the deferral of revenue under our accounting policies in the third quarter of 2004, as compared to the third quarter of 2003. Net revenues of this segment decreased \$0.3 million, or 9%, during the third quarter of 2004, as compared to the second quarter of 2004. This decrease is due to the \$0.4 million increase in deferred revenues, as shipments between the two periods increased slightly to \$3.9 million. Net revenues of this segment increased 5% to \$9.9 million during the first nine months of 2004, compared to the first nine months of 2003. This increase was primarily the result of the factors discussed above regarding the increased revenues in the third quarter of 2004.

Net revenues of the polishing supplies segment decreased 2% (or \$33,000) to \$1.4 million during the third quarter of 2004, compared to the third quarter of 2003. Net revenues of this segment decreased \$0.5 million, or 25%, during the third quarter of 2004, as compared to the second quarter of 2004. This decrease is primarily the result of the machine sales during the second quarter of 2004 (including the first sale of our new Model 5400 machine), which were not repeated during the third quarter. Net revenues of this segment increased 13% to \$4.5 million during the first nine months of 2004, compared to the first nine months of 2003. This increase is the result of increased machine sales in 2004 (as noted above) and a higher level of insert carrier sales, which have increased more than 25% from the same period in 2003 as a result of increased demand from customers for this type of carrier.

The following table reflects new orders⁽¹⁾, shipments and net revenues for each quarter during the current fiscal year and also for our prior two fiscal years, and the backlog as of the end of those periods, on a consolidated basis, as well as for each of our two business segments.

		Fisc	al Quarter		Eimal	Semi-	
	First	Second	Third	Fourth	Fiscal Year To- Date	conductor Equipment Segment	Polishing Supplies Segment
				(dollars in thous	ands)		
2004:				(at the state of t			
New orders (1)	\$ 3,684	\$ 4,038	\$ 4,129	\$ —	\$ 11,851	\$ 7,404	\$ 4,447
Shipments	3,744	5,697	5,232	_	14,673	10,210	4,463
Net revenues	3,921	5,631	4,835	_	14,387	9,924	4,463
Ending backlog	7,408	5,815	5,109	_	5,109	3,953	1,156
2003:							
New orders (1)	\$ 2,165	\$ 6,477	\$ 7,498	\$3,027	\$ 19,167	\$ 13,495	\$ 5,672
Shipments	4,165	4,785	3,396	6,267	18,613	13,313	5,300
Net revenues	4,329	5,448	3,622	6,035	19,434	14,134	5,300
Ending backlog	5,748	6,777	10,653	7,645	7,645	6,473	1,172
2002 :							
New orders (1)	\$ 2,213	\$ 519	\$ 6,132	\$ 5,626	\$ 14,490	\$ 9,404	\$ 5,086
Shipments	4,373	3,983	4,189	4,925	17,470	12,348	5,122
Net revenues	5,457	5,577	4,447	5,052	20,533	15,411	5,122
Ending backlog	10,711	5,653	7,338	7,912	7,912	7,112	800

⁽¹⁾ Orders are net of cancellations and also include the change in the U.S. dollar value of orders recorded in Euros by our semiconductor equipment segment.

While net new orders during the third quarter of 2004 were at their highest level since the third quarter of 2003, net new orders for the first nine months of 2004 declined by \$4.3 million (or 27%) compared to the same period in 2003. We believe that interest in our products remains strong, as evidenced by increased levels of quotation activity and customer meetings. However, management believes that this shortfall in year-to-date net new orders will not be eliminated before the end of the 2004 fiscal year. As demonstrated by our history presented in the table above (particularly the four quarters of 2003), order levels have been, and are expected to remain, volatile, at least until there is consistent evidence of improvement in the segment of the semiconductor equipment industry that we serve. A significant portion of that volatility is due to the high sales value of the diffusion furnace systems sold by our semiconductor equipment segment, where one large system or multi-system order can cause a large spike in the orders for a particular quarter. We believe the fact that new orders for each of first three quarters of 2004 were lower than the quarterly average orders booked during 2003 is attributable to such volatility.

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

	Ende	Three Months Ended June 30,		Nine Months Ended June 30,	
	2004	2003	2004	2003	
Net revenues	100.0%	100.0%	100.0%	100.0%	
Cost of sales	77.3	71.6	73.1	78.0	
Gross margin	22.7	28.4	26.9	22.0	
Selling, general and administrative expenses	28.2	30.3	25.8	25.1	
Research and development	2.2	3.5	2.6	2.9	
Operating loss	(7.7)%	(5.4)%	(1.5)%	(6.0)%	

Gross Margin. Consolidated gross margin for the three months ended June 30, 2004 was \$1.1 million (23% of net revenues), compared to \$1.0 million (28% of net revenues) for the three months ended June 30, 2003, an increase of 7%. Consolidated gross margin for the nine months ended June 30, 2004 was \$3.9 million (27% of net revenues), compared to \$3.0 million (22% of net revenues) for the nine months ended June 30, 2003, an increase of 31%.

In the third quarter of 2004, the gross margin of our semiconductor equipment segment decreased to 21% of net revenues, compared to 32% in the third quarter of 2003. This decrease is primarily the result of the \$0.6 million increase in the value of orders that had not been accepted, resulting in an increased deferral of revenues and gross margin in the third quarter of 2004 (discussed above). This decrease in revenue causes a significant reduction in our gross margin percentage, as the revenue deferred relates primarily to pending installations (generally 10-20% of an order's value), which have a significantly higher gross margin. This installation revenue will be recognized at the time the applicable systems are installed and accepted. The gross margin for this segment increased to 29% of net revenues during the first nine months of 2004, compared to 23% during the first nine months of 2003. The gross margin in 2003 was lower due to a very competitive pricing environment, particularly in the Asian markets. The increase in gross margin in 2004 is also attributable to increased production activity, which resulted in the absorption of an additional \$0.5 million of manufacturing labor and overhead costs into work-in-process inventory ("WIP") during the first nine months of 2004 and also caused a \$0.5 million increase in WIP compared to September 30, 2003, primarily for the multi-system order discussed above. These increases were partially offset by a \$0.7 million increase in the value of orders that had not been accepted, resulting in an increased deferral of revenues and gross margin during the first nine months of 2004.

Also impacting the gross margin of the semiconductor equipment segment in 2004 are the excess costs we have recorded on the pending sale of our first small batch vertical diffusion furnace. The projected future costs to build this initial system have significantly exceeded the contracted selling price. As a result, we recognized an additional \$181,000 (3.7% of net revenues) and \$315,000 (2.2% of net revenues) of expense during the three and nine months ended June 30, 2004, respectively, to reflect the increase in the projected losses on this contract. We also recognized an additional \$39,000 of expense in the fourth quarter of 2003 for the projected cost overruns on this project. Actual results for this project could differ from our

estimates. These amounts (\$354,000 in total) represent the total projected cost overruns for this initial system, and have been recorded as cost of sales. We believe that the engineering and development of this project have progressed to a point that we do not anticipate any further significant increases in the projected loss or actual costs of this project. This system is currently scheduled to ship in the first quarter of 2005. At the date of customer acceptance on this system, we will recognize the full amount of the contracted revenues, with no resulting gross margin due to the cost overruns discussed above. However, if this system is not accepted by the customer, it will have a material adverse effect on our financial position and results of operations.

In the third quarter of 2004, the gross margin of our polishing supplies segment increased to 26% of net revenues, compared to 22% in the third quarter of 2003. The gross margin for this segment increased to 22% of net revenues in the first nine months of 2004, compared to 20% in the first nine months of 2003. These increases are the result of increased operating efficiencies in this segment in 2004.

Our gross margin has significantly fluctuated in the past, and will continue to fluctuate in the future, based on several factors including, but not limited to, the severity and duration of industry cycles, the timing of equipment installations and customers acceptances, product mix and overhead absorption levels. The timing of revenue recognition has 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 installation, generally 10-20% of the order, is recognized in a later period, because the latter revenue has a significantly higher gross margin.

Selling, General and Administrative Expenses. Consolidated selling, general and administrative expenses for the three months ended June 30, 2004 and 2003 were \$1.4 million (28.2% of net revenues) and \$1.1 million (30.3% of net revenues), respectively. Consolidated selling, general and administrative expenses for the nine months ended June 30, 2004 and 2003 were \$3.7 million (25.8% of net revenues) and \$3.4 million (25.1% of net revenues), respectively. The increased expenses in 2004 are the result of additional sales personnel in our semiconductor equipment segment and increased travel and trade show exhibition costs.

Research and Development Expenses. During the three months ended June 30, 2004 and 2003, research and development expenses were fairly consistent at \$0.1 million. During the nine months ended June 30, 2004 and 2003, research and development expenses were also fairly consistent at \$0.4 million. In order to more accurately reflect research and development expenditures, we reclassified \$44,000 and \$141,000 of expenses previously reflected as cost of sales to research and development in the three and nine months ended June 30, 2003, respectively. The reclassified costs primarily relate to the development engineering personnel in our semiconductor equipment segment, which were not separately tracked until 2001. In 2004, development of the small batch vertical diffusion furnace accounted for most of these expenses.

Operating Loss. Our operating loss for the third quarter of 2004 was \$0.4 million, or (7.7)% of net revenues, compared to an operating loss of \$0.2 million, or (5.4)% of net revenues, for the third quarter of 2003. Our operating loss for the first nine months of 2004 was \$0.2 million, or (1.5)% of net revenues, compared to an operating loss of \$0.8 million, or (6.0)% of net revenues, for the same period of 2003. The fluctuations in our operating losses are a result of the changes in gross margin and selling, general and administrative expenses discussed above.

Income Tax Benefit. During the third quarter of 2004, we recorded an income tax benefit of \$120,000, compared to \$59,000 during the third quarter of 2003. The effective income tax rate, stated as a percentage of our loss before taxes, was 32% in the third quarter of 2004, compared to 33% in the third quarter of 2003. During the first nine months of 2004, we recorded an income tax benefit of \$54,000, compared to \$262,000 during the first nine months of 2003. The effective income tax rate was 26% in the first nine months of 2004, compared to 34% in the first nine months of 2003. The lower effective tax rate in 2004 is due to the impact of permanent differences between financial reporting and taxable income, primarily non-deductible meals and entertainment expenses. Our future effective income tax rate depends on various factors, such as tax legislation, the geographic composition of our pre-tax income, the level of expenses that are not deductible for tax purposes and the effectiveness of our tax planning strategies.

Net Loss. As a result of the operating results described above, our net loss for the third quarter of 2004 was \$0.2 million, or \$(.09) per diluted share, compared to a net loss for the third quarter of 2003 of \$0.1 million, or \$(.04) per diluted share. Our net loss for the first nine months of 2004 was \$0.2 million, or \$(.06) per diluted share, compared to a net loss for the first nine months of 2003 of \$0.5 million, or \$(.19) per diluted share.

Backlog. At June 30, 2004, our order backlog totaled \$5.1 million, a decrease of 12% from the \$5.8 million backlog at March 31, 2004. Three customers, two in Europe and one in Asia, accounted for 38% of the \$5.1 million backlog as of June 30, 2004. These customers' orders are currently scheduled to ship during the fourth quarter of 2004 and the first quarter of 2005. Our backlog at June 30, 2004 does not include that of the operations we acquired from Kokusai Semiconductor Equipment Corporation on July 1, 2004. The orders included in our backlog are generally credit approved customer purchase orders usually scheduled to ship in the next 12 months. The backlog also includes revenues deferred pursuant to our revenue recognition policies derived from orders that have already been shipped, but which have not met the criteria for recognition. We schedule production of our systems based on order backlog and customer commitments. However, customers may delay the delivery of products or cancel orders suddenly and without sufficient notice, subject to possible cancellation penalties. Due to possible customer changes in delivery schedules and cancellations of orders, our backlog at any particular date is not necessarily indicative of actual sales for any succeeding period. Delays in delivery schedules and/or a reduction of backlog during any particular reporting period could have a material adverse effect on our business, financial position and results of operations. In addition, our backlog does not provide any assurance that we will realize a profit from those orders, or indicate in which period revenue will be recognized.

Liquidity and Capital Resources

At June 30, 2004 and September 30, 2003, cash and cash equivalents were \$6.9 million and \$7.5 million, respectively. Our ratio of current assets to current liabilities was 4.4:1 at June 30, 2004 and 4.9:1 at September 30, 2003. We continue to believe that we have sufficient available liquidity and capital resources for our existing operations and expansion plans.

During the nine months ended June 30, 2004, cash and cash equivalents decreased by \$0.4 million due to the net cash used in operating activities. A total of \$0.3 million in non-cash adjustments for depreciation and amortization and a \$0.4 million increase in deferred profit on systems awaiting installation and/or customer acceptance represented the major cash inflows.

These cash inflows were offset by our net loss of \$0.2 million, a \$0.5 million increase in inventories, a \$0.2 million increase in accounts receivable and a \$0.1 million increase in prepaid expenses and other assets (primarily legal and accounting costs capitalized in connection with the aforementioned acquisition). The increase in inventories is primarily comprised of the previously discussed \$0.5 million increase in WIP. The increase in accounts receivable is a result of the timing of system shipments near the end of the third quarter of 2004, for which payments had not yet been received.

Investing activities consisted of software, computer and equipment purchases, which totaled \$0.2 million during the nine months ended June 30, 2004. Financing activities and the effect of exchange rates on cash were not significant in 2004.

At June 30, 2004, our principal sources of liquidity consisted of \$6.9 million of cash and cash equivalents. Since the only lien on our assets is a \$0.5 million mortgage loan, we believe that significant amounts of additional liquidity are available from various financing sources. We believe that we have sufficient liquidity for our current operations and for at least certain elements of our growth strategy. One element of our growth strategy is the development of new products, such as the proposed new small batch vertical model for our diffusion furnace line.

Another element of our growth strategy is the acquisition of product lines or businesses that complement our existing product lines and business. In this regard, we recently completed the acquisition of certain semiconductor horizontal diffusion furnace operations and assets in the United States and Europe from Kokusai Semiconductor Equipment Corporation ("KSEC") and its affiliate Kokusai Electric Europe, GmbH. At the closing, we paid \$3.3 million in cash and assumed an estimated \$0.3 million in liabilities. We are also obligated to make future payments to KSEC of up to \$1.0 million based upon the future consumption of inventories transferred under the acquisition agreements. We paid the cash consideration in connection with the acquisition with available cash and cash equivalents. The acquisition is expected to result in increased profitability and to contribute to an increase in our share of the horizontal furnace market and in our brand recognition. For KSEC's fiscal years ended March 31, 2003 and 2004, the acquired operations had estimated sales to non-affiliates of approximately \$7.5 million and \$11.0 million, respectively. The acquired business will operate as Bruce Technologies, Inc., a wholly-owned subsidiary of Amtech. There can be no assurance that we will be able to successfully integrate this acquisition into our existing operations, or that the acquired business will achieve operating results similar to its previous levels.

Our available cash and cash equivalents after completing the aforementioned acquisition transaction are expected to be sufficient for existing operations and for planned research and development for at least the next 12 months. However, significant unplanned development of new products or the completion of additional significant acquisitions would require additional capital resources that are expected to be obtained from one or more sources of financing, such as a private placement, a public offering, working capital loans or term loans from banks or other financial institutions, equipment leasing, mortgage financing and internally generated cash flow from operations. There can be no assurance of the availability or sufficiency of these or any other source of funding for those purposes.

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 financial statements requires us to make estimates and assumptions that affect the reported amount of assets and liabilities at the date of the financial statements, the 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.

On an on-going basis, we evaluate our estimates and judgments, including those related to revenue recognition, inventory valuation, accounts receivable collectibility, 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 also 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 the section entitled "Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations – Trends, Risks and Uncertainties" in our Annual Report on Form 10- K for the fiscal year ended September 30, 2003.

We continually review our business activities to determine which of our policies meet these criteria. 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, 2003 affect the more 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 nine months ended June 30, 2004.

Impact of Recently Issued Accounting Pronouncements

In December 2003, the SEC issued Staff Accounting Bulletin ("SAB") No. 104 ("SAB 104"), "Revenue Recognition," which superceded SAB No. 101 ("SAB 101"), "Revenue Recognition in Financial Statements." SAB 104's primary purpose is to rescind certain accounting guidance contained in SAB 101 related to multiple element revenue arrangements, which were superceded as a result of the issuance of Emerging Issues Task Force Issue 00-21 "Revenue Arrangements with Multiple Deliverables" ("EITF 00-21"). The adoption of SAB 104 did not have an effect on our revenue recognition policies, as such policies were already in accordance with SAB 104 and EITF 00-21. However, depending on the circumstances and contract terms of large multi-system orders, SAB 104 and EITF 00-21 may increase the amount of revenue deferred to periods subsequent to shipment and add to the volatility in our revenues.

ITEM3. 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 operation in The Netherlands, a component of the semiconductor equipment segment, conducts business primarily in the Euro and the U.S. dollar. The functional currency of our Netherlands operation is the Euro. The functional currency for all other operating units is the U.S. dollar.

We estimate that more than 90% of our transactions are denominated in one of our two functional currencies or currencies that have fixed exchange rates with one of our functional currencies. As of June 30, 2004, 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 nine months ended June 30, 2004 and 2003. Our investment in and advances to our Netherlands operation totaled \$3.2 million as of June 30, 2004. A 10% change in the value of the Euro relative to the U.S. dollar would cause an approximately \$0.3 million foreign currency translation adjustment, a type of other comprehensive income (loss), which would be a direct adjustment to our stockholders' equity.

When the value of the Euro increases relative to the value of the U.S. dollar, as it has during 2004 and most of 2003, our operation in The Netherlands becomes less competitive outside the European market, as it must raise prices to those customers that normally make purchases in U.S. dollars, in order to maintain the same profit margins. When this occurs, this operation attempts to have transactions denominated in the Euro and to increase its purchases denominated in U.S. dollars, which become less expensive. When the value of the Euro declines relative to the value of the U.S. dollar, our operation in The Netherlands can be more competitive against United States based equipment suppliers, as the cost of purchases denominated in U.S. dollars becomes more expensive. Because it is difficult to predict the volume of U.S. dollar denominated transactions arising from our Netherlands operation, we do not hedge against the effects of exchange rate changes on future transactions. The Euro was at a relatively high value relative to the U.S. dollar at June 30, 2004, leaving our Netherlands operation at a competitive disadvantage compared to other suppliers based in the United States and increasing the risk of an unfavorable foreign currency translation adjustment, which would be a direct adjustment to stockholders' equity and included in comprehensive income (loss).

ITEM4. CONTROLS AND PROCEDURES

Our management, including our Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), has carried out an evaluation of the effectiveness of our disclosure controls and procedures in place as of June 30, 2004, 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 adequate to ensure material information, and other information requiring disclosure, is identified and communicated on a timely basis.

There have been no significant changes in our internal controls over financial reporting or in other factors that have materially affected, or are reasonably likely to materially affect, those controls subsequent to the date this evaluation was carried out, including any corrective actions with regard to significant deficiencies and material weaknesses.

PART II. OTHER INFORMATION

Item6. Exhibits and Reports on Form 8-K

(a) Exhibits

See the Exhibit Index on page 23 for the listing of exhibits that are filed as part of this Quarterly Report on Form 10-Q.

- (b) Reports on Form 8-K
 - (1) On May 4, 2004, we filed a Current Report on Form 8-K including the press release that was issued announcing the signing of the definitive agreement with KSEC to acquire KSEC's BTI semiconductor horizontal diffusion furnace operations and assets in the United States and Europe.
 - (2) On July 7, 2004, we filed a Current Report on Form 8-K including the press release that was issued announcing the closing of the acquisition of KSEC's BTI semiconductor horizontal diffusion furnace operations and assets in the United States and Europe.
 - (3) On July 15, 2004, we filed a Current Report on Form 8-K regarding the closing of the acquisition of KSEC's BTI semiconductor horizontal diffusion furnace operations and assets in the United States and Europe.

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: August 10, 2004

Robert T. Hass Vice President – Finance, Chief Financial Officer and Director (Principal Financial Officer)

EXHIBIT INDEX

Exhibit Number	Description	Page or Method of Filing
10.1	Asset Purchase Agreement, dated May 3, 2004, by and between KSEC and the Company.	(1)
10.2	Amendment, dated June 25, 2004, to the Asset Purchase Agreement by and between KSEC and the Company.	(1)
10.3	Amendment, dated July 1, 2004, to the Asset Purchase Agreement by and between KSEC and the Company.	(1)
10.4	Asset Purchase Agreement, dated May 3, 2004, by and between KEE and the Company.	(1)
10.5	Amendment, dated June 25, 2004, to the Asset Purchase Agreement by and between KEE and the Company.	(1)
21	Subsidiaries of the Registrant	*
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.	*

^{*} Filed herewith.

⁽¹⁾ Incorporated by reference to Amtech's Current Report on Form 8-K, filed with the Securities and Exchange Commission on July 15, 2004.

Subsidiaries of the Registrant

Tempress Systems, Inc. – Incorporated under the laws of the State of Texas.

P.R. Hoffman Machine Products, Inc. – Incorporated under the laws of the State of Arizona.

 $\label{eq:Bruce Technologies} Bruce\ Technologies,\ Inc.-Incorporated\ under the\ laws\ of\ the\ State\ of\ Massachusetts.$

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.;
- 2. Based on my knowledge, this quarterly report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this quarterly report, fairly present in all material respects the financial position, results of operations and cash flows of the registrant as of, and for, the periods presented in this quarterly report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) 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 quarterly report is being prepared;
- (b) 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
- (c) 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 fiscal 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.
- 5. The registrant's other certifying officers 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.

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

I, Robert T. Hass, certify that:

- 1. I have reviewed this Quarterly Report on Form 10-Q of Amtech Systems, Inc.;
- 2. Based on my knowledge, this quarterly report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this quarterly report, fairly present in all material respects the financial position, results of operations and cash flows of the registrant as of, and for, the periods presented in this quarterly report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) 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 quarterly report is being prepared;
- (b) 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
- (c) 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 fiscal 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.
- 5. The registrant's other certifying officers 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/ Robert T. Hass

Robert T. Hass Vice President – Finance and Chief Financial Officer Amtech Systems, Inc.

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 June 30, 2004, 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

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 June 30, 2004, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Robert T. Hass, Vice President – Finance and 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/ Robert T. Hass

Robert T. Hass Vice President – Finance and Chief Financial Officer