ROLLWAGEN JOHN A

Form 4 June 17, 2010

FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

OMB Number:

Check this box if no longer subject to Section 16. Form 4 or

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF **SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section may continue. 30(h) of the Investment Company Act of 1940

1(b).

(Last)

1.Title of

Security

(Instr. 3)

Form 5

obligations

(Print or Type Responses)

See Instruction

1. Name and Address of Reporting Person * **ROLLWAGEN JOHN A**

2. Issuer Name and Ticker or Trading

Symbol

PARTNERRE LTD [PRE]

Issuer

5. Relationship of Reporting Person(s) to

(First) (Middle)

(Street)

3. Date of Earliest Transaction

(Month/Day/Year)

X_ Director 10% Owner Officer (give title Other (specify

(Check all applicable)

1693 SABAL PALM DRIVE 06/15/2010

4. If Amendment, Date Original

Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check

Applicable Line)

X Form filed by One Reporting Person Form filed by More than One Reporting

(Instr. 4)

Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

below)

BOCA RATON, FL 33432

(City) (State) (Zip)

2. Transaction Date 2A. Deemed

4. Securities (Month/Day/Year) Execution Date, if TransactionAcquired (A) or

5. Amount of Securities Beneficially Owned

6. Ownership 7. Nature of Form: Direct Indirect (D) or Indirect Beneficial Ownership

OMB APPROVAL

Expires:

response...

Estimated average

burden hours per

3235-0287

January 31,

2005

0.5

(Month/Day/Year) (Instr. 8) (Instr. 3, 4 and 5)

(Month/Day/Year)

Code

Following Reported Transaction(s) (Instr. 3 and 4)

Code V Amount (D) Price

Disposed of (D)

(A)

or

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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SEC 1474 (9-02)

(Instr. 4)

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Conversion Security or Exercise (Instr. 3) Price of

3. Transaction Date 3A. Deemed (Month/Day/Year) Execution Date, if

5. Number 4. Transaction of Derivative Expiration Date Code Securities (Instr. 8) Acquired

6. Date Exercisable and (Month/Day/Year)

7. Title and Amount of 8. I **Underlying Securities** (Instr. 3 and 4)

1

De

Sec

(In

Derivative (A) or Security Disposed of (D)

(Instr. 3, 4, and 5)

Code V (A) (D) Date Expiration Title Amount
Exercisable Date or

Number

of Shares

Restricted

Share \$ 0 06/15/2010 A 1,023 06/15/2015 (1) Common Shares 1,023

Units

Reporting Owners

Reporting Owner Name / Address Relationships

Director 10% Owner Officer Other

ROLLWAGEN JOHN A 1693 SABAL PALM DRIVE X BOCA RATON, FL 33432

Signatures

Amanda E. Sodergren as Attorney-in-Fact For: John A
Rollwagen

06/17/2010

**Signature of Reporting Person Date

Explanation of Responses:

- * If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) Restricted Share Units are issued under the PartnerRe Ltd. 2003 Non-Employee Directors Share Plan. Restricted Share Units will vest 100% on the fifth anniversary of the date of Grant.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number. -height: 120%; font-size: 10pt; "> 27

Reporting Owners 2

Results of Operations

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

| | Years Ende | ed September 3 | 0, | |
|--|------------|----------------|---------|---|
| | 2013 | 2012 | 2011 | |
| Net revenue | 100.0 | % 100.0 | % 100.0 | % |
| Cost of sales | 77.1 | % 73.0 | % 62.8 | % |
| Write-down of inventory | 10.5 | % 12.7 | % 0.5 | % |
| Losses on inventory purchase commitments | _ | % 3.0 | % — | % |
| Gross margin | 12.4 | % 11.3 | % 36.7 | % |
| Selling, general and administrative | 48.4 | % 28.3 | % 17.6 | % |
| Impairment and restructuring charges | 2.5 | % 6.7 | % — | % |
| Research and development | 19.0 | % 16.8 | % 2.3 | % |
| Expense related to reacquired shares | _ | % — | % 1.2 | % |
| Operating income (loss) | (57.5 |)% (40.5 |)% 15.6 | % |
| Interest and other income, net | 0.5 | % — | % — | % |
| Income (loss) before income taxes | (57.0 |)% (40.5 |)% 15.6 | % |
| Income tax provision (benefit) | 5.3 | % (6.5 |)% 6.6 | % |
| Net income (loss) | (62.3 |)% (34.0 |)% 9.0 | % |
| Add: net loss attributable to noncontrolling interest | 4.7 | % (5.6 |)% 0.3 | % |
| Net income (loss) attributable to Amtech Systems, Inc. | (57.6 |)% (28.4 |)% 9.3 | % |
| | | | | |

Fiscal 2013 compared to Fiscal 2012

Net Revenue

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

| Years Ended | |
|---|------|
| September 30, | |
| Segment 2013 2012 Inc (Dec) % | |
| (dollars in thousands) | |
| Solar and semiconductor equipment segment \$26,368 \$73,102 \$(46,734) (6 | 4)% |
| Polishing supplies segment 8,430 8,437 (7) — | - % |
| Total net revenue \$34,798 \$81,539 \$(46,741) (5 | 7)% |

Net revenue for the years ended September 30, 2013 and 2012 were \$34.8 million and \$81.5 million, respectively; a decrease of \$46.7 million or 57%. Revenue from the solar and semiconductor equipment segment decreased 64% due to the continued supply / demand imbalance in the solar market as well as the fiscal 2013 cyclical downturn in our semiconductor customers' capital equipment purchases. Net revenue from the solar market was \$17.4 million and \$44.2 million in fiscal 2013 and 2012, respectively; a 61% decrease. It is difficult to predict when the solar market will improve, but we expect the downturn to continue into 2014. Demand for products from our polishing supplies segment was consistent from fiscal 2012 to fiscal 2013.

Backlog and Orders

Our backlog as of September 30, 2013 and 2012 was \$26.8 million and \$18.7 million, respectively. Our backlog as of September 30, 2013 included approximately \$17.1 million of orders and deferred revenue from our solar industry customers compared to \$13.8 million as of September 30, 2012. New orders booked in fiscal 2013 were \$43.6 million compared to \$40.9 million in fiscal 2012. As the majority of the backlog is denominated in Euros, the strengthening of the Euro during fiscal 2013 resulted in an increase in backlog of approximately \$0.9 million. At the end of fiscal 2013, two customers individually accounted for 53% and 13% of our total backlog, respectively. At the end of fiscal 2012, one customer accounted for 10% of our total backlog. Our order pipeline has remained slow with the exception of a large recent order for n-type cell technology and PECVD equipment.

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 subsequent periods, nor is backlog any assurance that we will realize revenue or 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. We have excluded from reported backlog approximately \$25.7 million of customer orders that have not been cancelled, but are not expected to ship in the next twelve months.

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 or spare parts and the cost of service and support to customers for warranty, installation and paid service calls. Gross margin is gross profit as a percent of net revenue.

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

| | Years End | led | | |
|---|------------------------|---------|-----------------|--|
| | September 30, | | | |
| Segment | 2013 | 2012 | Inc (Dec) % | |
| | (dollars in thousands) | | | |
| Solar and semiconductor equipment segment | \$1,583 | \$6,458 | \$(4,875) (75)% | |
| Polishing supplies segment | 2,730 | 2,735 | (5) — % | |
| Total gross profit | \$4,313 | \$9,193 | \$(4,880) (53)% | |

Gross profit for the years ended September 30, 2013 and 2012 was \$4.3 million and \$9.2 million respectively; a decrease of \$4.9 million or 53%. Gross margin for fiscal 2013 and 2012 was 12% and 11%, respectively, due primarily to inventory write-downs and losses on inventory purchase commitments of \$3.7 million and \$12.8 million in fiscal 2013 and 2012, respectively. The margins were also adversely affected by a significant reduction in manufacturing capacity utilization due to the cyclical decline in demand for our products. These items were only partially offset by the higher gross margins realized from the significant portion of net revenue resulting from recognition of previously deferred revenue upon customer acceptance. In fiscal 2013, we had a net recognition of previously-deferred profit of \$7.5 million compared to \$16.1 million in fiscal 2012. Gross profit on products from our polishing supplies segment was consistent from fiscal 2012 to fiscal 2013.

Selling, General and Administrative Expenses

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

| | Years Ende | ed | | | |
|--|------------------------|----------|-----------|-------|----|
| | September 30, | | | | |
| Segment | 2013 | 2012 | Inc (Dec) | % | |
| | (dollars in thousands) | | | | |
| Solar and semiconductor equipment segment | \$13,737 | \$20,861 | \$(7,124 |) (34 |)% |
| Polishing supplies segment | 3,093 | 2,194 | 899 | 41 | % |
| Total selling, general and administrative expenses | \$16,830 | \$23,055 | \$(6,225 |) (27 |)% |

Total selling, general and administrative (SG&A) expenses for the years ended September 30, 2013 and 2012 were \$16.8 million and \$23.1 million respectively, a decrease of \$6.2 million or 27%. The decrease in SG&A expenses was due, in part, to lower commissions and shipping expenses related to lower revenues and also reflects significant company-wide cost control initiatives to reduce salaries, professional fees, travel and insurance expense. Partially offsetting the decrease in SG&A expenses is an increase in stock compensation expense to \$2.5 million in fiscal 2013 from \$1.8 million in fiscal 2012. The increase in stock compensation expense is due to the June 2013 acceleration of vesting and the cancellation of certain stock options.

Impairment and Restructuring Charges

Restructuring charges for the year ended September 30, 2013 were \$0.9 million. There were no impairment charges in fiscal 2013. The company's cost-cutting efforts in fiscal 2013 included reductions-in-force which resulted in restructuring charges related primarily to severance costs. Impairment charges for the year ended September 30, 2012 were \$5.4 million. In our periodic assessment of long-lived assets in the fourth quarter of fiscal 2012, we identified an impairment of the goodwill in two of our reporting units that serve the solar equipment market resulting in a \$4.7 million impairment charge, due primarily to the supply / demand imbalance in the solar equipment market. Also, in fiscal 2012, a \$0.7 million impairment charge was recorded for assets related to a product development project.

Research and Development

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

| | Years End | led | | |
|------------------------------|-------------|------------|----------|---|
| | September | r 30, | | |
| | 2013 | 2012 | 2011 | |
| | (dollars in | thousands) | | |
| Research and development | \$8,459 | \$14,723 | \$7,362 | |
| Grants earned | (1,865 |) (1,029 |) (1,578 |) |
| Net research and development | \$6,594 | \$13,694 | \$5,784 | |

Research and development costs (net of grants earned) for the fiscal year ended September 30, 2013 decreased \$7.1 million compared to fiscal 2012. Decreased spending in research and development relates primarily to reduced activity and cost control efforts in solar research. We receive reimbursements through governmental research and development grants which are netted against these expenses. The increase in grants earned resulted primarily from grant funding for development of the solar ion implanter.

As described in Note 6 to the Consolidated Financial Statements included in this filing, our Kingstone subsidiary has entered into an agreement for the development of ion implanters for a non-solar application in China. Depending on its progress, this development project may result in a significant increase in research and development expenses.

Income Tax Provision

Our effective tax rate was negative (9%) in fiscal 2013 and 16% in 2012. The effective tax rate is the ratio of total income tax expense (benefit) to pre-tax income (loss). The negative effective tax rate in fiscal 2013 was due primarily to establishing an allowance on all deferred tax assets related to The Netherlands income taxes. The valuation allowance was recorded due to cumulative losses in The Netherlands. The effective tax rate in 2012 was lower than the 34% U.S. tax rate primarily due to the valuation allowance on net operating losses in China (related to the ion implant research and development) and the 25% tax rate applicable to the losses in The Netherlands.

The Financial Accounting Standards require that a valuation allowance be established when it is "more likely than not" that all or a portion of deferred tax assets will not be realized. A review of all available positive and negative evidence needs to be considered, including a company's performance, the market environment in which the company operates and the length of carryback and carryforward periods. According to those standards, it is difficult to conclude that a valuation allowance is not needed when the negative evidence includes cumulative losses in recent years. Therefore, cumulative losses weigh heavily in the overall assessment. As a result of the review, we concluded during fiscal 2013 that it was appropriate to establish a full valuation allowance for net deferred tax assets in the Netherlands and China, where cumulative losses have been incurred. Available tax planning strategies cause us to believe that it is more likely than not that the deferred tax assets related to the United States tax jurisdiction will be realized despite cumulative losses there.

Our future effective income tax rate depends on various factors, such as the amount of income (loss) in each tax jurisdiction, tax regulations governing each region, non-tax deductible expenses incurred as a percent of pre-tax income and the effectiveness of our tax planning strategies. At the end of 2011 we restructured our European operations to lower the tax rate on the Netherlands operations from 35% to a marginal rate of 25% and to as low as 5% on income derived from qualified new technologies, as we intend to permanently reinvest future Dutch earnings in our foreign operations. The effect of the restructure on our tax rate depends on the amount of income or loss earned in the Netherlands, as well as the portion of such income that can be demonstrated to have been derived from qualified new technologies, as well as the factors mentioned above.

Fiscal 2012 compared to Fiscal 2011

Net Revenue

Net revenue for the years ended September 30, 2012 and 2011 were \$81.5 million and \$246.7 million, respectively; a decrease of \$165.2 million or 67%. Revenue decreased primarily due to significantly lower capital expenditures for equipment by our customers as they curtailed capacity expansion plans during the industry downturn, partially offset by increased recognition of previously-deferred revenue. Net revenue from the solar market was \$44.2 million and \$211.9 million in fiscal 2012 and 2011, respectively; a 79% decrease. Net revenue from all other markets served was \$37.3 million in fiscal 2012 compared to \$34.8 million in fiscal 2011, an increase of 7%, due primarily to increased demand from the semiconductor and LED markets.

Backlog

Our backlog as of September 30, 2012 and 2011 was \$18.7 million and \$85.9 million, respectively. Our backlog as of September 30, 2012 included approximately \$13.8 million of orders and deferred revenue from our solar industry

customers compared to \$71.2 million as of September 30, 2011. New orders booked in fiscal 2012 were \$40.9 million compared to \$239.8 million in fiscal 2011. As the majority of the backlog is denominated in Euros, the weakening of the Euro during fiscal 2012 resulted in a decrease in backlog of approximately \$3.7 million. At the end of fiscal 2012, one customer accounted for 10% of our total backlog. At the end of fiscal 2011, two customers individually accounted for 22% and 10% of our total backlog, respectively. In fiscal 2012, \$5.7 million of customer orders were canceled. These orders were not in our September 30, 2011 reported backlog as they were previously expected to ship beyond twelve months.

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 subsequent periods, nor is backlog any assurance that we will realize revenue or profit from completing these orders. Our backlog also includes revenue deferred pursuant to our revenue recognition policy, derived from orders that have already been shipped but which have not met the criteria for revenue recognition.

Gross Profit

Gross profit for the years ended September 30, 2012 and 2011 was \$9.2 million and \$90.7 million respectively; a decrease of \$81.5 million or 90%. Gross margin for fiscal 2012 and 2011 was 11% and 37%, respectively. In fiscal 2012, our cost of goods sold includes \$12.8 million of costs for inventory write-downs and losses on inventory purchase commitments. These losses resulted from the industry downturn and the overall decrease in manufacturing activities. Lower gross profit and gross margins were also negatively impacted by lower sales volumes which resulted in less efficient capacity utilization. These lower profits were partially offset by higher recognition of previously-deferred profit. In fiscal 2012, we had a net recognition of previously-deferred profit of \$16.1 million compared to a net profit deferral of \$16.6 million in fiscal 2011.

Selling, General and Administrative Expenses

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

Total selling, general and administrative (SG&A) expenses for the year ended September 30, 2012 were \$23.1 million or 28% of net revenue. For the year ended September 30, 2011, SG&A expenses were \$43.7 million or 18% of net revenue. SG&A expenses include \$1.8 million and \$1.5 million of stock-based compensation expense for fiscal 2012 and 2011, respectively. The decrease in SG&A expenses was primarily due to lower commissions and shipping costs related to lower revenues and company-wide cost reduction initiatives.

Impairment and Restructuring Charges

Impairment charges for the year ended September 30, 2012 were \$5.4 million. There were no impairment or restructuring charges in fiscal 2011.

The Company conducted its periodic assessment of long-lived assets in the fourth quarter of fiscal 2012. The Company identified an impairment of the goodwill in two of its reporting units that serve the solar equipment market resulting in a \$4.7 million impairment charge, due primarily to the supply / demand imbalance in the solar equipment market. The Company also recorded \$0.7 million in fiscal 2012 for an impairment charge for assets related to a product development project.

Research and Development

| | Years Ended September 3 | | | |
|--------------------------|----------------------------|-----------|---------|---|
| | 2012 | 2011 | 2010 | |
| | (dollars in the | nousands) | | |
| Research and development | \$14,723 | \$7,362 | \$2,986 | |
| Grants earned | (1,029 |) (1,578 |) (868 |) |

Net research and development

\$13,694

\$5,784

\$2,118

Research and development costs for the fiscal year ended September 30, 2012 increased \$7.9 million compared to fiscal 2011. Increased investment in research and development relates primarily to development of a solar ion implanter. Additional investments were made in the development of other technologies and processes for solar cell manufacturing to increase throughput and cell efficiency. We receive reimbursements through governmental research and development grants which are netted against these expenses.

Expense Related to Reacquired Shares

In fiscal 2011, an expense of \$2.9 million was recorded in connection with the repurchase of Amtech shares for cash, such shares being those issued in the acquisition of Kingstone. In September 2011, the Company agreed to amend the original stock purchase agreement, to repurchase the shares for cash in the amount of \$4.1 million, \$2.9 million in excess of market value of those shares on the day of the repurchase, in order to protect Amtech's reputation as an acquirer of new technologies and businesses.

Income Tax Provision

Our effective tax rate was approximately 16% in fiscal 2012 and 42% in 2011. The effective tax rate is the ratio of total income tax expense (benefit) to pre-tax income (loss). The effective tax rate in 2012 was lower than in 2011and the 34% U.S. tax rate primarily due to the valuation allowance on net operating losses related to the ion implant research and development and the 25% tax rate applicable to the losses in The Netherlands.

Liquidity and Capital Resources

As of September 30, 2013 and 2012, cash and cash equivalents were \$37.2 million and \$46.7 million, respectively. As of September 30, 2013 and 2012, restricted cash was \$5.1 million and \$4.6 million, respectively. Restricted cash increased due to the receipt of funds in fiscal 2013 for the non-solar ion implant development project, partially offset by a decrease in customer deposits requiring bank guarantees collateralized by cash. Our working capital was \$42.9 million as of September 30, 2013 and \$58.8 million as of September 30, 2012. The decline in working capital results primarily from the net loss in 2013. The decrease in cash was primarily cash used in operating activities of \$10.0 million discussed below and \$0.2 million of cash used in investing activities discussed below. Our ratio of current assets to current liabilities was 2.0:1 as of September 30, 2013 compared to 2.4:1 as of September 30, 2012.

See information below regarding payments expected as a result of contractual obligations. We have never paid dividends on our Common Stock. Our present policy is to apply cash to investments in product development, acquisitions or expansion; consequently, we do not expect to pay dividends on Common Stock in the foreseeable future. We believe that our current cash and other sources of liquidity discussed below are adequate to support operations for at least the next 12 months.

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

| | Fiscal Years Ended September 30, | | | |
|---|----------------------------------|-------------|------------|---|
| | 2013 | 2012 | 2011 | |
| | (dollars in | thousands) | | |
| Net cash provided by (used in) operating activities | \$(9,953 |) \$(12,438 |) \$15,426 | |
| Net cash used in investing activities | \$(178 |) \$(1,542 |) \$(6,238 |) |
| Net cash provided by (used in) financing activities | \$(238 |) \$(4,108 |) \$2,058 | |

Cash Flows from Operating Activities

Cash used in operating activities was \$10.0 million and \$12.4 million in fiscal years 2013 and 2012, respectively. Cash provided by our operating activities was \$15.4 million in fiscal 2011. During fiscal 2013, cash declined due to losses from operations, adjusted for non-cash charges. Significant sources of cash in fiscal 2013 were primarily collections of accounts receivable and customer deposits. Partially offsetting the sources were income tax payments of approximately \$8.7 million and decreases in liabilities such as deferred profit, accounts payable and other accruals. During fiscal 2012, uses of cash in operating activities resulted primarily from decreases in liabilities such as deferred profit, accrued income taxes, accounts payable and other accruals, partially offset by collections of accounts receivable. During fiscal 2011, cash was generated by earnings from operations, adjusted for non-cash charges. Additional cash was generated by increases in current liabilities, such as deferred profit, accrued income taxes and accrued compensation.

These increases in fiscal 2011 were partially offset by increases in inventory and accounts receivable resulting from the record volume of shipments.

Cash Flows from Investing Activities

Investing activities in fiscal 2013 and 2012 decreased significantly due primarily to the solar and semiconductor industry downturn. During fiscal 2013, 2012 and 2011, capital expenditures were \$0.2 million, \$1.3 million and \$5.2 million respectively. Fiscal 2011 investments in fixed assets included the purchase of the existing corporate office building as well as capital investments in The Netherlands and France to support our growth and expansion. Also, during fiscal 2011, investing activities included the \$1.1 million cash portion of the acquisition of a 55 percent interest in Kingstone.

Cash Flows from Financing Activities

In fiscal 2013, there were few financing activities. In fiscal 2012, cash was used to repurchase shares related to the Kingstone acquisition. In fiscal 2011, cash provided by financing activities was \$2.1 million, consisting primarily of proceeds from employee exercises of stock options and the related tax benefits.

Off-Balance Sheet Arrangements

As of September 30, 2013, we 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 and Commercial Commitments

We had the following contractual obligations and commercial commitments as of September 30, 2013:

| Contractual obligations | Total | Less than 1 year | 1-3 years | 3-5 years | More than 5 years |
|-----------------------------------|----------------|------------------|-------------|-----------|-------------------|
| | (dollars in th | ousands) | | | |
| Operating lease obligations: | | | | | |
| Buildings | \$2,418 | \$968 | \$838 | \$409 | \$203 |
| Office equipment | 90 | 72 | 13 | 5 | _ |
| Vehicles | 433 | 206 | 218 | 9 | _ |
| Total operating lease obligations | 2,941 | 1,246 | 1,069 | 423 | 203 |
| Purchase obligations | 12,322 | 12,322 | _ | _ | _ |
| Total | \$15,263 | \$13,568 | \$1,069 | \$423 | \$203 |
| Other commercial obligations: | | | | | |
| Bank guarantees | \$2,851 | \$2,851 | \$ — | _ | _ |

Our Kingstone subsidiary has an obligation to raise \$6.1 million by July 2014 to meet its commitment to the project funding described in Note 6 to the Consolidated Financial Statements included in Item 8 of this filing. These commitments have been omitted from the table, as Amtech has no obligation or plan to fund Kingstone's commitments under this agreement.

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 and inventory purchase commitments, accounts receivable collectability, warranty and impairment of long-

lived assets. We base our estimates and judgments on historical experience, expectations regarding the future and on various other factors that we believe to be reasonable under the circumstances. The results of these estimates and judgments form the basis for making conclusions about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

A critical accounting policy is one that is both important to the presentation of our financial position and results of operations, and requires management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. These uncertainties are discussed in "ITEM 1A. RISK FACTORS." We believe the following critical accounting policies affect the more significant judgments and estimates used in the preparation of our consolidated financial statements.

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

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

For our equipment business, transactions where legal title passes to the customer upon shipment, we recognize revenue upon shipment for those products where the customer's defined specifications have been met with at least two similarly configured systems and processes for a comparably situated customer. However, a portion of the revenue associated with certain installation-related tasks, equal to the greater of the relative fair value of those tasks or the portion of the contract price contingent upon their completion, generally 10%-20% of the system's selling

- (1) price (the "holdback"), and directly related costs, if any, are deferred and recognized as income when the tasks are completed. Since we defer only those costs directly related to installation or other unit of accounting not yet delivered and the portion of the contract price is often considerably greater than the fair market value of those items, our policy at times will result in deferral of profit that is disproportionate in relation to the deferred revenue. When this is the case, the gross margin recognized in one period will be lower and the gross margin reported in a subsequent period will improve.
 - For products where the customer's defined specifications have not been met with at least two similarly configured systems and processes, the revenue and directly related costs are deferred at the time of shipment and later recognized at the time of customer acceptance or when this criterion has been met. We have, on occasion,
- (2) experienced longer than expected delays in receiving cash from certain customers pending final installation or system acceptance. If some of our customers refuse to pay the final payment, or otherwise delay final acceptance or installation, the deferred revenue would not be recognized, adversely affecting our future cash flows and operating results.
- (3) Sales of polishing supplies generally do not include process guarantees, acceptance criteria or holdbacks; therefore, the related revenue is generally recorded upon transfer of title which is generally at time of shipment.
- (4) Sales of spare parts and consumables are recognized upon shipment, as there are no post shipment obligations other than standard warranties.
- Service revenue is recognized upon performance of the services requested by the customer. Revenue related to (5) service contracts is recognized ratably over the period of the contract or in accordance with the terms of the contract, which generally coincides with the performance of the services requested by the customer.

Income Taxes. The calculation of tax liabilities involves significant judgment in identifying uncertain tax positions and estimating the amount of deferred tax assets that will be realized in the future and the impact of uncertainties in the application of complex tax laws. Resolution of these uncertainties in a manner inconsistent with our expectations could have a material impact on our operations and financial condition.

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

In fiscal 2013, 2012 and 2011, judgment was also exercised in determining the appropriate accounting for income taxes in connection with the reorganization of our Netherlands operations and estimating the appreciated value of certain intangibles that we transferred between taxing jurisdictions and the related tax on those transfers.

Inventory Valuation and Inventory Purchase Commitments. We value our inventory at the lower of cost or net realizable value. Costs for approximately 80% of inventory are determined on an average cost basis with the remainder determined on a first-in, first-out (FIFO) basis. We regularly review inventory quantities and record a write-down to net realizable value for excess and obsolete inventory. The write-down is primarily based on historical inventory usage adjusted for expected changes in product demand and production requirements. Our industry is characterized by customers in highly cyclical industries, rapid technological changes, frequent new product developments and rapid product obsolescence. Changes in demand for our products and product mix could result in further write-downs.

We must order components for our products and build inventory in advance of product shipments through issuance of purchase orders based on projected demand. These commitments typically cover our requirements for periods ranging from 30 to 180 days or longer when there a significant increase in demand or lead-times from suppliers. These purchase commitments may result in accepting delivery of components not needed to meet current demand. We accrue for estimated cancellation fees related to component orders that have been cancelled or are expected to be cancelled, and for excess inventories that will likely result in our taking delivery of ordered inventory items in excess of our projected needs. If there is an abrupt and substantial decline in demand for one or more of our products, an unanticipated change in technological requirements for any of our products, or a change in our suppliers' practice of not enforcing purchase commitments, we may be required to record additional charges for these items. This would negatively impact gross margin in the period when the charges are recorded.

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

Warranty. We provide a limited warranty, generally for 12 to 24 months, to our customers. A provision for the estimated cost of providing warranty coverage is recorded upon acceptance of all systems. On occasion, we have been required and may be required in the future to provide additional warranty coverage to ensure that the systems are ultimately accepted or to maintain customer goodwill. While our warranty costs have historically been within our expectations and we believe that the amounts accrued for warranty expenditures are sufficient for all systems sold through September 30, 2013, we cannot guarantee that we will continue to experience a similar level of predictability with regard to warranty costs. In addition, technological changes or previously unknown defects in raw materials or components may result in more extensive and frequent warranty service than anticipated, which could result in an increase in our warranty expense.

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

We first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. As a result of our qualitative assessment, we determined that the polishing segment required no further impairment testing. If the qualitative factors indicate that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, we perform a two-step impairment test of goodwill and indefinite-lived intangible assets. In the first step, we estimate the fair value of the reporting unit and compare it to its carrying value. When the carrying value exceeds the fair value of the reporting unit, the second step is performed to measure the amount of the impairment loss, if any. In the second step, the amount of the impairment loss is the excess of the carrying amount of the goodwill and other intangibles not subject to amortization over their implied fair value. The methods used to estimate fair value of the reporting unit for the purpose of determining the implied fair value of goodwill include the market approach and discounted cash flows, as follows:

One valuation methodology used is to determine the multiples of market value of invested capital ("MVIC") of similar public companies to their revenue for the last twelve months ("LTM") and next twelve months ("NTM"), and apply those multiples to the revenue for the comparable periods of the reporting unit being tested for impairment. This approach provides the closest estimate to quoted market prices that are readily available. However, we generally give less weight to this method, because the market value of the minority interest of public companies may not be relevant to the fair value of our wholly-owned reporting units, which are not public companies. Also, MVIC to revenue for the LTM uses a historical value in the calculation, while the market values tend to be forward looking. MVIC of revenue for the NTM involves the use of projections for both the comparable companies and the reporting unit.

Another market approach that we sometimes use is based upon prices paid in merger and acquisition transactions for other companies in the same industry, again applying the MVIC to revenue of those companies to the historical ii. and projected revenue of the reporting unit. When we use both market prices determined as described in (i), above, and prices paid in merger and acquisition transactions, we weight them to determine an indicated value under the market approach.

As stated, we also use discounted cash flows as an indication of a third-party market price for the reporting unit in an arms-length transaction. This method requires projections of EBITDA (earnings before interest, taxes, iii. depreciation and amortization) and applying an appropriate discount rate based on the weighted average cost of capital for the reporting unit.

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

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

Stock-Based Compensation. The Company measures compensation costs relating to share-based payment transactions based upon the grant-date fair value of the award. Those costs are recognized as expense over the requisite service period, which is generally the vesting period. The benefits of tax deductions in excess of recognized compensation

cost are reported as cash flow from financing activities rather than as cash flow from operating activities.

Impact of Recently Issued Accounting Pronouncements

For discussion of the impact of recently issued accounting pronouncements, see "Item 8: Financial Statements and Supplementary Data" under Footnote 1 "Summary of Significant Accounting Policies" under "Impact of Recently Issued Accounting Pronouncements".

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Foreign Currency Risk

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

During fiscal 2013 and 2012, we did not hold any stand-alone or separate derivative instruments. We incurred net foreign currency transaction losses of less than \$0.1 million in fiscal 2013 and fiscal 2012. As of September 30, 2013, our foreign subsidiaries had \$1.5 million of assets (cash and receivables) denominated in U.S. dollars, rather than their functional currency. A 10% change in the value of the functional currency relative to the non-functional currency would result in a gain or loss of \$0.2 million. As of the end of fiscal 2013, our foreign subsidiaries had \$4.6 million of accounts payable, consisting primarily of amounts owed to our U.S. companies, denominated in U.S. dollars. Even though 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 \$0.5 million. Our net investment in and long-term advances to our foreign operations totaled \$43.0 million as of September 30, 2013. A 10% change in the value of the Euro relative to the U.S. dollar would cause an 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. In fiscal 2013, we recognized a net other comprehensive gain of \$2.2 million from translation adjustments.

During fiscal 2013 and 2012, U.S. dollar denominated sales of our European operations were \$1.5 million and \$1.1 million, respectively. As of September 30, 2013, sales commitments denominated in a currency other than the functional currency of our transacting operation were \$0.6 million. Our lead-times to fulfill these commitments generally range between 13 and 26 weeks. A 10% change in the relevant exchange rates between the time the order was taken and the time of shipment would cause our gross profit on such orders to be \$0.1 million greater or less than expected on the date the order was taken. As of September 30, 2013, purchase commitments denominated in a currency other than the functional currency of our transacting operation totaled \$0.5 million. A 10% change in the relevant exchange rates between the time the purchase order was placed and the time the order is received would not cause our cost of such items to be significantly greater or less than expected on the date the purchase order was placed.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The following documents are filed as part of this Annual Report on Form 10-K:

| Financial Statements | |
|--|-----------|
| Report of Independent Registered Public Accounting Firm | <u>40</u> |
| Consolidated Balance Sheets: September 30, 2013 and 2012 | <u>41</u> |
| Consolidated Statements of Operations: Years ended September 30, 2013, 2012 and 2011 | 42 |
| Consolidated Statements of Comprehensive Income (Loss); Years ended September 30, 2013, 2012, and 2011 | <u>43</u> |
| G 111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 4 |

Consolidated Statements of Stockholders' Equity: Years ended September 30, 2013, 2012 and 2011 <u>44</u>

Consolidated Statements of Cash Flows: Years ended September 30, 2013, 2012 and 2011 <u>45</u>

Notes to Consolidated Financial Statements

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<u>46</u>

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of

AMTECH SYSTEMS, INC.

We have audited the accompanying consolidated balance sheets of Amtech Systems, Inc. and subsidiaries (the "Company") as of September 30, 2013 and 2012, and the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows for each of the years in the three-year period ended September 30, 2013. The Company's management is responsible for these consolidated financial statements. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of September 30, 2013 and 2012, and the results of their operations and their cash flows for each of the years in the three-year period ended September 30, 2013, in conformity with U.S. generally accepted accounting principles.

/s/ MAYER HOFFMAN MCCANN P.C.

Phoenix, Arizona December 11, 2013

PART I FINANCIAL INFORMATION

ITEM 1. Consolidated Financial Statements

AMTECH SYSTEMS, INC. AND SUBSIDIARIES

| ANTECH STSTEMS, INC. AND SUBSIDIANIES | | |
|---|---------------|---------------|
| Consolidated Balance Sheets | | |
| (in thousands except share data) | | |
| Assets | September 30, | September 30, |
| Assets | 2013 | 2012 |
| Current Assets | | |
| Cash and cash equivalents | \$37,197 | \$46,726 |
| Restricted cash | 5,134 | 4,644 |
| Accounts receivable | | |
| Trade (less allowance for doubtful accounts of \$638 and \$517 at | 4,829 | 7,486 |
| September 30, 2013 and September 30, 2012, respectively) | | |
| Unbilled and other | 3,194 | 10,807 |
| Inventories | 22,001 | 25,670 |
| Deferred income taxes | 1,330 | 3,460 |
| Refundable income taxes | 7,580 | _ |
| Other | 2,930 | 2,650 |
| Total current assets | 84,195 | 101,443 |
| | | |
| Property, Plant and Equipment - Net | 11,066 | 12,387 |
| Deferred income taxes - Long Term | 1,260 | 470 |
| Other Assets - Long Term | 2,443 | 2,271 |
| Intangible Assets - Net | 3,502 | 4,096 |
| Goodwill | 8,481 | 8,355 |
| Total Assets | \$110,947 | \$129,022 |
| | | |
| Liabilities and Stockholders' Equity | | |
| Current Liabilities | | |
| Accounts payable | \$5,472 | \$5,780 |
| Accrued compensation and related taxes | 3,778 | 5,311 |
| Accrued warranty expense | 1,454 | 2,687 |
| Deferred profit | 3,067 | 10,236 |
| Customer deposits | 11,253 | 3,958 |
| Other accrued liabilities | 10,140 | 7,499 |
| Income taxes payable | 6,170 | 7,140 |
| Total current liabilities | 41,334 | 42,611 |
| Income Taxes Payable Long-term | 2,810 | 2,360 |
| Total Liabilities | 44,144 | 44,971 |
| | | |
| Commitments and Contingencies | | |
| | | |

September 30, 2012, respectively

Preferred stock; 100,000,000 shares authorized; none issued

Common stock; \$0.01 par value; 100,000,000 shares authorized; shares issued

and outstanding: 9,550,809 and 9,483,588 at September 30, 2013 and

Stockholders' Equity

95

| Additional paid-in capital | 79,610 | 77,377 |
|--|-----------|------------|
| Accumulated other comprehensive loss | (4,556 |) (6,817) |
| Retained earnings (deficit) | (8,004 |) 12,065 |
| Total Stockholders' Equity | 67,146 | 82,720 |
| Noncontrolling interest | (343 |) 1,331 |
| Total Equity | 66,803 | 84,051 |
| Total Liabilities and Stockholders' Equity | \$110,947 | \$129,022 |

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

AMTECH SYSTEMS, INC. AND SUBSIDIARIES

Consolidated Statements of Operations (in thousands, except per share data)

| | Years Ended September 30, | | |
|---|---------------------------|------------|-----------|
| | 2013 | 2012 | 2011 |
| Revenue, net of returns and allowances | \$34,798 | \$81,539 | \$246,705 |
| Cost of sales | 26,833 | 59,511 | 154,881 |
| Write-down of inventory | 3,652 | 10,380 | 1,167 |
| Losses on inventory purchase commitments | _ | 2,455 | _ |
| Gross profit | 4,313 | 9,193 | 90,657 |
| Selling, general and administrative | 16,830 | 23,055 | 43,739 |
| Research and development | 6,594 | 13,694 | 5,784 |
| Impairment and restructuring charges | 883 | 5,428 | _ |
| Expense related to reacquired shares | _ | _ | 2,855 |
| Operating income (loss) | (19,994) | (32,984) | 38,279 |
| Interest and other income, net | 147 | 66 | 30 |
| Income (loss) before income taxes | (19,847) | (32,918) | 38,309 |
| Income tax provision (benefit) | 1,860 | (5,320) | 16,190 |
| Net income (loss) | (21,707) | (27,598) | 22,119 |
| Add: net loss attributable to noncontrolling interest | 1,638 | 4,567 | 763 |
| Net income (loss) attributable to Amtech Systems, Inc. | \$(20,069) | \$(23,031) | \$22,882 |
| Income (Loss) Per Share: | | | |
| Basic income (loss) per share attributable to Amtech shareholders | \$(2.11) | \$(2.43) | \$2.41 |
| Weighted average shares outstanding | 9,529 | 9,471 | 9,480 |
| Diluted income (loss) per share attributable to Amtech shareholders | \$(2.11) | \$(2.43) | \$2.34 |
| Weighted average shares outstanding | 9,529 | 9,471 | 9,764 |
| | | | |

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

AMTECH SYSTEMS, INC. AND SUBSIDIARIES

Consolidated Statements Of Comprehensive Income (Loss) (in thousands)

| | Years Ended September 30, | | | | |
|--|---------------------------|-------------|------------|---|--|
| | 2013 | 2012 | 2011 | | |
| Net income (loss) | \$(21,707 |) \$(27,598 |) \$22,119 | | |
| Foreign currency translation adjustment | 2,225 | (4,853 |) (1,136 |) | |
| Comprehensive income (loss) | (19,482 |) (32,451 |) 20,983 | | |
| Comprehensive loss attributable to noncontrolling interest | 1,674 | 4,681 | 803 | | |
| Comprehensive income (loss) attributable to Amtech Systems, Inc. | \$(17,808 |) \$(27,770 |) \$21,786 | | |

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

AMTECH SYSTEMS, INC. AND SUBSIDIARIES

Consolidated Statements Of Stockholders' Equity (in thousands)

| Balance at | Number of Shares | | Additional tPaid- In Capital | Accumula Other Comprehe Income (Loss) | | Retained ve Earnings | Total Stockhold Equity | ers | , Non-cont Interest | roll | in¶gotal Equity | |
|---|------------------|-------|------------------------------------|---|---|----------------------------|------------------------------|-----|------------------------|------|----------------------|---|
| September 30, 2010 Net income | 9,210 | \$ 92 | \$72,919 | \$ (982 |) | \$12,214 22,882 | \$ 84,243 22,882 | | \$ — (763 |) | \$84,243 22,119 | |
| Translation adjustment | | | | (1,096 |) | | (1,096 |) | (40 |) | (1,136 |) |
| Deferred tax asset recorded due to legal reorganization | | | 4,025 | | | | 4,025 | | | | 4,025 | |
| Acquired interest in | 153 | 2 | 3,833 | | | | 3,835 | | 6,815 | | 10,650 | |
| Kingstone Share repurchase | (153) | (2) | (1,223) | | | | (1,225 |) | | | (1,225 |) |
| Tax benefit of stock | | ` , | 855 | | | | 855 | | | | 855 | |
| compensation Stock compensation | | | | | | | | | | | | |
| expense | L | | 1,470 | | | | 1,470 | | | | 1,470 | |
| Restricted shares | 43 | _ | | | | | _ | | | | _ | |
| released Stock options | | | | | | | | | | | | |
| exercised | 178 | 2 | 1,328 | | | | 1,330 | | | | 1,330 | |
| Balance at | | | | | | | | | | | | |
| September 30, 2011 Net income | 9,431 | \$ 94 | \$83,207 | \$ (2,078 |) | \$35,096 (23,031) | \$ 116,319 (23,031 | | \$ 6,012 (4,567 | ` | \$122,331 (27,598 | |
| Translation | | | | / 4.53 0 | | (23,031) | |) | | , | |) |
| adjustment | | | | (4,739 |) | | (4,739 |) | (114 |) | (4,853 |) |
| Write-off of foreign tax | | | (7.505 | | | | (7.505 | , | | | (7.505 | |
| credits due to legal reorganization | | | (7,595) | | | | (7,595 |) | | | (7,595 |) |
| Stock compensation | l | | 1 = 62 | | | | 1 = 60 | | | | . = | |
| expense | | | 1,763 | | | | 1,763 | | | | 1,763 | |
| Restricted shares | 52 | 1 | (1) | | | | _ | | | | _ | |
| released Stock options | | | , | | | | | | | | | |
| exercised | 1 | _ | 3 | | | | 3 | | | | 3 | |
| Balance at | | | | | | | | | | | | |
| September 30, 2012 Net loss | 9,484 | \$95 | \$77,377 | \$ (6,817 |) | \$12,065 (20,069) | \$ 82,720 (20,069 |) | \$ 1,331 (1,638 |) | \$84,051 (21,707 |) |
| Translation adjustment | | | | 2,261 | | | 2,261 | | (36 |) | 2,225 | |
| Tax deficiency of | | | (264 | | | | (264 |) | | | (264 | ` |
| stock compensation | | | (264) | | | | |) | | | (264 | J |
| | | | 2,472 | | | | 2,472 | | | | 2,472 | |

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| Stock compensatio | n | | | | | | | | |
|----------------------------------|-------|------|----------|-----------|-------------|-----------|---------|---|----------|
| expense | | | | | | | | | |
| Restricted shares | 59 | 1 | 1 | | | 2 | | | 2 |
| released | | | | | | | | | |
| Stock options exercised | 8 | _ | 24 | | | 24 | | | 24 |
| Balance at September 30, 2013 | 9,551 | \$96 | \$79,610 | \$ (4,556 |) \$(8,004) | \$ 67,146 | \$ (343 |) | \$66,803 |

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

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

| Operating Activities Net income (loss) Net income (loss) Sez, 119 | | Year Ended | September 30, | |
|--|---|------------|---------------|------------|
| Net income (loss) S(21,707 S(27,598 S) \$22,119 | | 2013 | 2012 | 2011 |
| Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities: Depreciation and amortization Write-down of inventory Jeffectation and amortization Jeffectation and and a section and a secti | Operating Activities | | | |
| cash provided by (used in) operating activities: Depreciation and amortization 2,667 2,858 2,814 Write-down of inventory 3,652 10,380 1,167 Loss on inventory purchase commitments — 2,455 — Provision for allowance for doubtful accounts 169 300 139 Deferred income taxes 1,368 3,781 (635) Impairment of long-lived assets — 5,428 — Non-cash share based compensation expense 2,472 1,763 1,470 Changes in operating assets and liabilities: Use of the contract of the contra | Net income (loss) | \$(21,707 |) \$(27,598 |) \$22,119 |
| cash provided by (used in) operating activities: Depreciation and amortization 2,667 2,858 2,814 Write-down of inventory 3,652 10,380 1,167 Loss on inventory purchase commitments — 2,455 — Provision for allowance for doubtful accounts 169 300 139 Deferred income taxes 1,368 3,781 (635) Impairment of long-lived assets — 5,428 — Non-cash share based compensation expense 2,472 1,763 1,470 Changes in operating assets and liabilities: Use of the contract of the contra | Adjustments to reconcile net income (loss) to net | | | |
| Depreciation and amortization 2,667 2,858 2,814 Write-down of inventory 3,652 10,380 1,167 Loss on inventory purchase commitments — 2,455 — Provision for allowance for doubtful accounts 169 300 139 Deferred income taxes 1,368 3,781 (635) Impairment of long-lived assets — 5,428 — Some parting assets and liabilities: Non-cash share based compensation expense 2,472 1,763 1,470 Changes in operating assets and liabilities: Change in restricted cash (326) 1,781 (274) Accounts receivable 10,629 23,700 (21,399) Inventories (221) (2,130) (14,194) Accrued income taxes (7,818) (15,543) (13,744) Accrued income taxes (7,818) (15,543) (1,740) Accrued liabilities and customer deposits (495) (2,807) (3,644) Accrued liabilities and customer deposits 7,489 (5,387) 5,137 Deferred profit (7,472) (16,096) (16,632) Net cash provided by (used in) operating activities (9,953) (12,438) 15,426 Investing Activities Purchases of property, plant and equipment (178) (1,306) (5,183) Investment in acquisitions, net of cash — | | | | |
| Write-down of inventory Loss on inventory purchase commitments 3,652 10,380 1,167 Loss on inventory purchase commitments — 2,455 — Provision for allowance for doubtful accounts 169 300 139 Deferred income taxes 1,368 3,781 (635) Impairment of long-lived assets — 5,428 — Non-cash share based compensation expense 2,472 1,763 1,470 Changes in operating assets and liabilities: — 5,428 — Changes in operating assets and liabilities: — 2,472 1,763 1,470 Accounts receivable 10,629 23,700 (21,399) Accounts receivable 10,629 23,700 (21,399) Accrued income taxes (7,818 (15,543) 7,834 Prepaid expenses and other assets (360) 4,677 (1,740) Accrued income taxes (7,818 (15,543) 7,834 Prepaid expenses and other assets (360) 4,677 (1,740) | | 2,667 | 2,858 | 2,814 |
| Loss on inventory purchase commitments | | 3,652 | 10,380 | 1,167 |
| Provision for allowance for doubtful accounts 169 300 139 Deferred income taxes 1,368 3,781 (635) Impairment of long-lived assets 5,428 Non-cash share based compensation expense 2,472 1,763 1,470 Changes in operating assets and liabilities: Change in restricted cash (326) 1,781 (274) Accounts receivable 10,629 23,700 (21,399) Inventories (221) (2,130) (14,194) Accrued income taxes (7,818) (15,543) 7,834 Prepaid expenses and other assets (360) 4,677 (1,740) Accrued income taxes (7,818) (15,543) 7,834 Prepaid expenses and other assets (360) 4,677 (1,740) Accrued liabilities and customer deposits 7,489 (5,387) 5,137 Deferred profit (7,472) (16,096) 16,632 Net cash provided by (used in) operating activities (9,953) (12,438) 15,426 Investing Activities (178) (1,306) (5,183) Investment in acquisitions, net of cash (1,055) Other (236) Net cash used in investing activities (178) (1,542) (6,238) Financing Activities (264) (256) Payments on long-term obligations (31) (127) Excess tax benefit (deficiency) of stock compensation (264) (256) (628) Payments on long-term obligations (31) (127) Excess tax benefit (deficiency) of stock compensation (264) (256) (628) Net Increase (Decrease) in Cash and Cash Equivalents (9,529) (20,656) 10,618 Cash and Cash Equivalents, Beginning of Year (4,726 67,382 56,764 (258 67,382 56,764 (258 67,382 56,764 (258 67,382 56,764 (258 67,382 56,764 (258 67,382 56,764 (258 67,382 56,764 | · · | <u> </u> | 2,455 | <u> </u> |
| Impairment of long-lived assets | · · | 169 | 300 | 139 |
| Non-cash share based compensation expense 2,472 1,763 1,470 | Deferred income taxes | 1,368 | 3,781 | (635) |
| Change in restricted cash (326) 1,781 (274) Accounts receivable 10,629 23,700 (21,399) Inventories (221) (2,130) (14,194) Accrued income taxes (7,818) (15,543) 7,834 Prepaid expenses and other assets (360) 4,677 (1,740) Accounts payable (495) (2,807) (3,644) Accrued liabilities and customer deposits 7,489 (5,387) 5,137 Deferred profit (7,472) (16,096) 16,632 Net cash provided by (used in) operating activities (9,953) (12,438) 15,426 Investing Activities Purchases of property, plant and equipment (178) (1,306) (5,183) Investment in acquisitions, net of cash — — (1,055) Other — (236) — Payments on long-term obligations (178) (1,542) (6,238) Financing Activities — (4,080 <t< td=""><td>Impairment of long-lived assets</td><td>_</td><td>5,428</td><td>_</td></t<> | Impairment of long-lived assets | _ | 5,428 | _ |
| Change in restricted cash (326) 1,781 (274) Accounts receivable 10,629 23,700 (21,399) Inventories (221) (2,130) (14,194) Accrued income taxes (7,818) (15,543) 7,834 Prepaid expenses and other assets (360) 4,677 (1,740) Accounts payable (495) (2,807) (3,644) Accrued liabilities and customer deposits 7,489 (5,387) 5,137 Deferred profit (7,472) (16,096) 16,632 Net cash provided by (used in) operating activities (9,953) (12,438) 15,426 Investing Activities Purchases of property, plant and equipment (178) (1,306) (5,183) Investment in acquisitions, net of cash — — (1,055) Other — (236) — Payments on long-term obligations (178) (1,542) (6,238) Financing Activities — (4,080 <t< td=""><td>Non-cash share based compensation expense</td><td>2,472</td><td>1,763</td><td>1,470</td></t<> | Non-cash share based compensation expense | 2,472 | 1,763 | 1,470 |
| Accounts receivable | Changes in operating assets and liabilities: | | | |
| Accounts receivable | Change in restricted cash | (326 |) 1,781 | (274) |
| Accrued income taxes Prepaid expenses and other assets (360) 4,677 (1,740) Accounts payable (495) (2,807) (3,644) Accrued liabilities and customer deposits 7,489 (5,387) 5,137 Deferred profit (7,472) (16,096) 16,632 Net cash provided by (used in) operating activities (9,953) (12,438) 15,426 Investing Activities Purchases of property, plant and equipment (178) (1,306) (5,183) Investment in acquisitions, net of cash — — (1,055) Other — (236) — Net cash used in investing activities (178) (1,542) (6,238) Financing Activities Proceeds from issuance of common stock, net 26 3 1,330 Repurchase of common stock, net 26 3 1,330 Repurchase of common stock — (4,080) — Payments on long-term obligations — (31) (127) Excess tax benefit (deficiency) of stock compensation (264) — 855 Net cash provided by (used in) financing activities (238) (4,108) 2,058 Effect of Exchange Rate Changes on Cash 840 (2,568) (628) Net Increase (Decrease) in Cash and Cash Equivalents (9,529) (20,656) 10,618 Cash and Cash Equivalents, Beginning of Year 46,726 67,382 56,764 Cash and Cash Equivalents, End of Year \$37,197 \$46,726 \$67,382 Supplemental Cash Flow Information: Income tax refunds 18 \$1,115 \$282 Income tax payments 8,678 5,030 8,451 Supplemental Non-cash Financing Activities: | | 10,629 | 23,700 | (21,399) |
| Prepaid expenses and other assets (360) 4,677 (1,740) Accounts payable (495) (2,807) (3,644) Accrued liabilities and customer deposits 7,489 (5,387) 5,137 Deferred profit (7,472) (16,096) 16,632 Net cash provided by (used in) operating activities (9,953) (12,438) 15,426 Investing Activities Purchases of property, plant and equipment (178) (1,306) (5,183) Investment in acquisitions, net of cash — — (1,055) Other — (236) — Net cash used in investing activities (178) (1,542) (6,238) Financing Activities (178) (1,542) (6,238) Proceeds from issuance of common stock, net 26 3 1,330 Repurchase of common stock — (4,080) — Payments on long-term obligations — (31) (127) Excess tax benefit (defriciency) of stock compensation | Inventories | (221 |) (2,130 |) (14,194 |
| Accounts payable | Accrued income taxes | (7,818 |) (15,543 |) 7,834 |
| Accrued liabilities and customer deposits 7,489 (5,387) 5,137 Deferred profit (7,472) (16,096) 16,632 Net cash provided by (used in) operating activities (9,953) (12,438) 15,426 Investing Activities Purchases of property, plant and equipment (178) (1,306) (5,183) Investment in acquisitions, net of cash — (1,055) Other — (236) — Net cash used in investing activities (178) (1,542) (6,238) Financing Activities Proceeds from issuance of common stock, net 26 3 1,330 Repurchase of common stock — (4,080) — Payments on long-term obligations — (31) (127) Excess tax benefit (deficiency) of stock compensation (264) — 855 Net cash provided by (used in) financing activities (238) (4,108) 2,058 Effect of Exchange Rate Changes on Cash 840 (2,568) (628) Net Increase (Decrease) in Cash and Cash Equivalents (9,529) (20,656) 10,618 Cash and Cash Equivalents, Beginning of Year 46,726 67,382 56,764 Cash and Cash Equivalents, End of Year \$37,197 \$46,726 \$67,382 Supplemental Cash Flow Information: Income tax refunds \$18 \$1,115 \$282 Income tax payments \$6,030 8,451 Supplemental Non-cash Financing Activities: | Prepaid expenses and other assets | (360 |) 4,677 | (1,740) |
| Deferred profit | Accounts payable | (495 |) (2,807 |) (3,644 |
| Net cash provided by (used in) operating activities 15,426 | Accrued liabilities and customer deposits | 7,489 | (5,387 |) 5,137 |
| Investing Activities Purchases of property, plant and equipment (178) (1,306) (5,183) (1,055 | Deferred profit | (7,472 |) (16,096 |) 16,632 |
| Purchases of property, plant and equipment (178) (1,306) (5,183) Investment in acquisitions, net of cash — — (1,055) Other — (236) — Net cash used in investing activities (178) (1,542) (6,238) Financing Activities (178) (1,542) (6,238) Financing Activities 26 3 1,330 Repurchase of common stock — (4,080) — Payments on long-term obligations — (31) (127) Excess tax benefit (deficiency) of stock compensation (264) — 855 Net cash provided by (used in) financing activities (238) (4,108) 2,058 Effect of Exchange Rate Changes on Cash 840 (2,568) (628) Net Increase (Decrease) in Cash and Cash Equivalents (9,529) (20,656) 10,618 Cash and Cash Equivalents, Beginning of Year 46,726 67,382 56,764 Cash and Cash Flow Information: Income tax refunds | Net cash provided by (used in) operating activities | (9,953 |) (12,438 |) 15,426 |
| Investment in acquisitions, net of cash Other | Investing Activities | | | |
| Other — (236) — Net cash used in investing activities (178) (1,542) (6,238) Financing Activities — (4,080) — Proceeds from issuance of common stock, net 26 3 1,330 Repurchase of common stock — (4,080) — Payments on long-term obligations — (31) (127) Excess tax benefit (deficiency) of stock compensation (264) — 855 Net cash provided by (used in) financing activities (238) (4,108) 2,058 Effect of Exchange Rate Changes on Cash 840 (2,568) (628) Net Increase (Decrease) in Cash and Cash Equivalents (9,529) (20,656) 10,618 Cash and Cash Equivalents, Beginning of Year 46,726 67,382 56,764 Cash and Cash Flow Information: — \$37,197 \$46,726 \$67,382 Supplemental Cash Flow Information: — \$18 \$1,115 \$282 Income tax payments 8,678 5,030 8,451 <td>Purchases of property, plant and equipment</td> <td>(178</td> <td>) (1,306</td> <td>) (5,183</td> | Purchases of property, plant and equipment | (178 |) (1,306 |) (5,183 |
| Net cash used in investing activities Financing Activities Proceeds from issuance of common stock, net Repurchase of common stock Payments on long-term obligations Excess tax benefit (deficiency) of stock compensation Net cash provided by (used in) financing activities Effect of Exchange Rate Changes on Cash Net Increase (Decrease) in Cash and Cash Equivalents Cash and Cash Equivalents, Beginning of Year Cash and Cash Equivalents, End of Year Supplemental Cash Flow Information: Income tax refunds Income tax payments Net Cash Financing Activities: (178 (178 (178 (178 (178 (178 (178 (178 (178 (178 (178 (174 (174 (175 (175 (24 (4,080 (24 (31 (31 (127)) (127 (31 (127)) 855 Net Cash provided by (used in) financing activities (238 (4,108 (2,568 (4,108 (2,568 (4,108 (2,568 (4,108 (2,568 (628)) (628) Net Increase (Decrease) in Cash and Cash Equivalents (9,529 (20,656 (31 (4,108 (2,568 (628)) (628) Net Increase (Decrease) in Cash and Cash Equivalents (9,529 (20,656 (31 (4,108 (2,568)) (628) Net Increase (Decrease) in Cash and Cash Equivalents (9,529 (9,529 (20,656 (31 (4,108)) (628) (628) Net Increase (Decrease) in Cash and Cash Equivalents (9,529 (9,529 (20,656 (31 (4,108 (2,568 (628)) (628) Net Increase (Decrease) in Cash and Cash Equivalents (9,529 (9,529 (9,656 (10,618 (628) (628) (628) Net Increase (Decrease) in Cash and Cash Equivalents (9,529 (9,529 (9,656 (67,382 56,764 Cash and Cash Equivalents, End of Year (837,197 (846,726 (87,382 (867,382 (87, | Investment in acquisitions, net of cash | _ | _ | (1,055) |
| Financing Activities Proceeds from issuance of common stock, net Repurchase of common stock Repurchase of common stock Payments on long-term obligations Excess tax benefit (deficiency) of stock compensation Net cash provided by (used in) financing activities Effect of Exchange Rate Changes on Cash Net Increase (Decrease) in Cash and Cash Equivalents Cash and Cash Equivalents, Beginning of Year Cash and Cash Equivalents, End of Year Supplemental Cash Flow Information: Income tax refunds Income tax payments Supplemental Non-cash Financing Activities: | Other | _ | (236 |) — |
| Proceeds from issuance of common stock, net Repurchase of common stock Payments on long-term obligations Excess tax benefit (deficiency) of stock compensation Net cash provided by (used in) financing activities Effect of Exchange Rate Changes on Cash Net Increase (Decrease) in Cash and Cash Equivalents Cash and Cash Equivalents, Beginning of Year Cash and Cash Equivalents, End of Year Supplemental Cash Flow Information: Income tax refunds Income tax payments Supplemental Non-cash Financing Activities: | Net cash used in investing activities | (178 |) (1,542 |) (6,238 |
| Repurchase of common stock Payments on long-term obligations — (31) (127) Excess tax benefit (deficiency) of stock compensation Net cash provided by (used in) financing activities (238) (4,108) 2,058 Effect of Exchange Rate Changes on Cash Net Increase (Decrease) in Cash and Cash Equivalents (9,529) (20,656) 10,618 Cash and Cash Equivalents, Beginning of Year Cash and Cash Equivalents, End of Year Say,197 \$46,726 \$67,382 Supplemental Cash Flow Information: Income tax refunds Income tax payments 8,678 \$5,030 8,451 Supplemental Non-cash Financing Activities: | Financing Activities | | | |
| Payments on long-term obligations Excess tax benefit (deficiency) of stock compensation Net cash provided by (used in) financing activities Effect of Exchange Rate Changes on Cash Net Increase (Decrease) in Cash and Cash Equivalents Cash and Cash Equivalents, Beginning of Year Cash and Cash Equivalents, End of Year Supplemental Cash Flow Information: Income tax refunds Income tax payments Supplemental Non-cash Financing Activities: | | 26 | 3 | 1,330 |
| Excess tax benefit (deficiency) of stock compensation Net cash provided by (used in) financing activities (238) (4,108) 2,058 Effect of Exchange Rate Changes on Cash Net Increase (Decrease) in Cash and Cash Equivalents (9,529) (20,656) 10,618 Cash and Cash Equivalents, Beginning of Year 46,726 67,382 56,764 Cash and Cash Equivalents, End of Year \$37,197 \$46,726 \$67,382 Supplemental Cash Flow Information: Income tax refunds \$18 \$1,115 \$282 Income tax payments \$8,678 5,030 8,451 Supplemental Non-cash Financing Activities: | Repurchase of common stock | _ | (4,080 |) — |
| Net cash provided by (used in) financing activities Effect of Exchange Rate Changes on Cash Net Increase (Decrease) in Cash and Cash Equivalents Cash and Cash Equivalents, Beginning of Year Cash and Cash Equivalents, End of Year Cash and Cash Equivalents, End of Year Supplemental Cash Flow Information: Income tax refunds Income tax payments Supplemental Non-cash Financing Activities: | Payments on long-term obligations | _ | (31 |) (127 |
| Effect of Exchange Rate Changes on Cash Net Increase (Decrease) in Cash and Cash Equivalents (9,529) (20,656) 10,618 Cash and Cash Equivalents, Beginning of Year 46,726 67,382 Cash and Cash Equivalents, End of Year Supplemental Cash Flow Information: Income tax refunds Income tax payments Supplemental Non-cash Financing Activities: | • | , | , | |
| Net Increase (Decrease) in Cash and Cash Equivalents (9,529) (20,656) 10,618 Cash and Cash Equivalents, Beginning of Year 46,726 67,382 56,764 Cash and Cash Equivalents, End of Year \$37,197 \$46,726 \$67,382 Supplemental Cash Flow Information: Income tax refunds \$18 \$1,115 \$282 Income tax payments 8,678 5,030 8,451 Supplemental Non-cash Financing Activities: | Net cash provided by (used in) financing activities | (238 |) (4,108 |) 2,058 |
| Cash and Cash Equivalents, Beginning of Year 46,726 67,382 56,764 Cash and Cash Equivalents, End of Year \$37,197 \$46,726 \$67,382 Supplemental Cash Flow Information: Income tax refunds \$18 \$1,115 \$282 Income tax payments 8,678 5,030 8,451 Supplemental Non-cash Financing Activities: | Effect of Exchange Rate Changes on Cash | 840 | (2,568 |) (628 |
| Cash and Cash Equivalents, End of Year \$37,197 \$46,726 \$67,382 Supplemental Cash Flow Information: Income tax refunds \$18 \$1,115 \$282 Income tax payments \$8,678 5,030 8,451 Supplemental Non-cash Financing Activities: | | (9,529 |) (20,656 |) 10,618 |
| Supplemental Cash Flow Information: Income tax refunds \$18 \$1,115 \$282 Income tax payments \$8,678 5,030 8,451 Supplemental Non-cash Financing Activities: | | 46,726 | | 56,764 |
| Income tax refunds \$18 \$1,115 \$282 Income tax payments 8,678 5,030 8,451 Supplemental Non-cash Financing Activities: | Cash and Cash Equivalents, End of Year | \$37,197 | \$46,726 | \$67,382 |
| Income tax payments 8,678 5,030 8,451 Supplemental Non-cash Financing Activities: | * * | | | |
| Supplemental Non-cash Financing Activities: | Income tax refunds | \$18 | \$1,115 | \$282 |
| ** | * * | 8,678 | 5,030 | 8,451 |
| Transfer inventory to capital equipment — 1,586 — | ** | | | |
| | | _ | 1,586 | _ |
| Issuance of common stock for acquisition of interest in 3,835 | • | _ | _ | 3 835 |
| Kingstone | Kingstone | | | 5,000 |

Repurchase of common stock financed with current liabilities — — 1,225

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

Notes to Consolidated Financial Statements For the Years Ended September 30, 2013, 2012 and 2011

1. Summary of Significant Accounting Policies

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 wafers, primarily for the solar and semiconductor industries. The Company is developing an ion implanter to provide its customers with a more complete solution for their next-generation high-efficiency solar cell production. The Company sells these products to manufacturers of solar cells, silicon wafers, and semiconductors worldwide, particularly in Asia, United States and Europe.

The Company serves niche markets in industries that are experiencing rapid technological advances and which historically have been very cyclical. Therefore, future profitability and growth depend on the Company's ability to develop or acquire and market profitable new products and on its ability to adapt to cyclical trends.

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

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

Change in Accounting Estimate - The Company regularly reviews inventory quantities and inventory purchase commitments and writes down excess and obsolete inventory to its net realizable value, and records a loss for expected purchase order cancellation charges and for excess inventory purchase commitments that cannot be cancelled. The write-down is primarily based on historical inventory usage adjusted for expected changes in product demand and production requirements. Due to a downturn in the solar industry, product demand and production requirements have declined significantly. As the Company began its annual budget review in the fourth quarter of fiscal 2012, it determined that the downturn was expected to continue at least in 2013. As a result, the Company recorded a write-down of inventory of \$10.4 million for the fiscal year ended September 30, 2012. The Company also recorded a loss of \$2.5 million for the fiscal year ended September 30, 2012 on inventory purchase commitments. In fiscal 2012, the inventory write-down and loss on inventory purchase commitments reduced operating income by \$12.8 million, reduced net income attributable to Amtech shareholders by \$9.7 million and increased basic and diluted loss per share by \$1.01 cents per share. In fiscal 2013, the Company determined that the downturn was expected to continue into 2014. As a result, the Company recorded a write-down of inventory of \$3.7 million for fiscal year 2013. The write-down of inventory reduced net income attributable to Amtech shareholders by \$3.7 million and increased basic and diluted loss per share by \$0.39 cents per share.

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

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

For our equipment business, transactions where legal title passes to the customer upon shipment, we recognize revenue upon shipment for those products where the customer's defined specifications have been met with at least (1) two similarly configured systems and processes for a comparably situated customer. However, a portion of the revenue associated with certain installation-related tasks, equal to the greater of the relative fair value of those tasks or the portion of the contract price contingent upon their completion,

generally 10%-20% of the system's selling price (the "holdback"), and directly related costs, if any, are deferred and recognized into income when the tasks are completed. Since we defer only those costs directly related to installation or other unit of accounting not yet delivered and the portion of the contract price is often considerably greater than the fair market value of those items, our policy at times will result in deferral of profit that is disproportionate in relation to the deferred revenue. When this is the case, the gross margin recognized in one period will be lower and the gross margin reported in a subsequent period will improve.

- For products where the customer's defined specifications have not been met with at least two similarly configured systems and processes, the revenue and directly related costs are deferred at the time of shipment and later recognized at the time of customer acceptance or when this criterion has been met. We have, on occasion,
- (2) experienced longer than expected delays in receiving cash from certain customers pending final installation or system acceptance. If some of our customers refuse to pay the final payment, or otherwise delay final acceptance or installation, the deferred revenue would not be recognized, adversely affecting our future cash flows and operating results.
- (3) Sales of polishing supplies generally do not include process guarantees, acceptance criteria or holdbacks; therefore, the related revenue is generally recorded upon transfer of title which is generally at the time of shipment.
- (4) Sales of spare parts and consumables are recognized upon shipment, as there are no post shipment obligations other than standard warranties.
- Service revenue is recognized upon performance of the services requested by the customer. Revenue related to (5) service contracts is recognized ratably over the period of the contract or in accordance with the terms of the contract, which generally coincides with the performance of the services requested by the customer.

Deferred Profit – Revenue deferred pursuant to our revenue 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:

| | September 30, | | | | |
|------------------|------------------------|----------|----------|--|--|
| | 2013 | 2012 | 2011 | | |
| | (dollars in thousands) | | | | |
| Deferred revenue | \$3,371 | \$11,200 | \$29,666 | | |
| Deferred costs | 304 | 964 | 2,058 | | |
| Deferred profit | \$3,067 | \$10,236 | \$27,608 | | |

Cash Equivalents – Cash equivalents in the United States consist of money market mutual funds invested in securities issued by the U.S. Government and its agencies and time deposits. In Europe, cash equivalents consist of money market mutual funds and time deposits. The fair value of the cash equivalents is based on Level One inputs in the fair value hierarchy as defined by ASC No. 820, Fair Value Measurements and Disclosures.

Restricted Cash – Restricted cash of \$5.1 million and \$4.6 million as of September 30, 2013 and 2012, respectively, includes collateral for bank guarantees required by certain customers from whom deposits have been received in advance of shipment and cash received from research and development grants related to our ion implant technology to be used for research and development projects.

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

the probability of collection is remote.

The following is a summary of the activity in the Company's allowance for doubtful accounts:

| | Years Ended September 30, | | | | |
|------------------------------|---------------------------|------------|-------|---|--|
| | 2013 | 2012 | 2011 | | |
| | (dollars in t | thousands) | | | |
| Balance at beginning of year | \$517 | \$246 | \$181 | | |
| Provision | 199 | 271 | 115 | | |
| Write offs | (78 |) — | (50 |) | |
| Balance at end of year | \$638 | \$517 | \$246 | | |

Accounts Receivable - Unbilled and Other – Unbilled and other accounts receivable consist mainly of the contingent portion of the sales price that is not collectible until successful installation of the product. These amounts are generally billed upon final customer acceptance.

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

The Company maintains its cash, cash equivalents and restricted cash in multiple financial institutions. Balances in the United States (approximately 60% of total cash balances) are primarily invested in US Treasuries or are in financial institutions insured by the Federal Deposit Insurance Corporation (FDIC). The remainder of the Company's cash is maintained in banks in The Netherlands, France and China that are uninsured.

As of September 30, 2013, two customers individually represented 18% and 13% of accounts receivable. As of September 30, 2012, two customers individually represented 14% and 12% of accounts receivable. Accounts receivable from Yingli Green Energy (Yingli) was 18% and 14% as of September 30, 2013 and 2012, respectively.

Refer to Note 9, Geographic Regions, for information regarding revenue and assets in other countries subject to fluctuation in foreign currency exchange rates.

Inventories – We value our inventory at the lower of cost or net realizable value. Costs for approximately 80% of inventory are determined on an average cost basis with the remainder determined on a first-in, first-out (FIFO) basis. The components of inventories are as follows:

| | september 50, | september 50, |
|-----------------------------------|-------------------|---------------|
| | 2013 | 2012 |
| | (dollars in thous | sands) |
| Purchased parts and raw materials | \$11,757 | \$19,644 |
| Work-in-process | 7,104 | 2,328 |
| Finished goods | 3,140 | 3,698 |
| | \$22,001 | \$25,670 |
| | | |

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 and amortization are removed from the applicable accounts when disposition occurs and any gain or loss is recognized.

September 30 September 30

Depreciation and amortization is computed using the straight-line method. Depreciation expense was \$2.0 million, \$2.2 million and \$2.1 million in fiscal 2013, 2012 and 2011, respectively. Useful lives for equipment, machinery and leasehold improvements range from three to seven years; for furniture and fixtures from five to ten years; and for buildings twenty years.

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

| | September 30, | September 30, | |
|---|-------------------|---------------|---|
| | 2013 | 2012 | |
| | (dollars in thous | sands) | |
| Land, building and leasehold improvements | \$10,960 | \$10,476 | |
| Equipment and machinery | 7,630 | 7,272 | |
| Furniture and fixtures | 5,685 | 5,458 | |
| | 24,275 | 23,206 | |
| Accumulated depreciation and amortization | (13,209) | (10,819 |) |
| | \$11,066 | \$12,387 | |

Goodwill - Goodwill and intangible assets with indefinite lives are not subject to amortization, but are tested for impairment when it is determined that it is more likely than not that the fair value of a reporting unit or the indefinite-lived intangible asset is less than its carrying amount, typically at the end of the fiscal year, or more frequently if circumstances dictate. In fiscal 2012, the Company recorded a charge for impairment of goodwill in two of its reporting units. See Note 11, "Impairment Charge" for a description of the facts and circumstances leading to the goodwill impairment charge.

The changes in the carrying amount of goodwill for the year ended September 30, 2013 are as follows.

| | Solar and Semiconductor | Polishing Supplies and Equipment | Total | |
|----------------------------------|----------------------------|----------------------------------|----------|---|
| | (dollars in thousa | nds) | | |
| Balance at the beginning of year | | | | |
| Goodwill | \$12,362 | \$728 | \$13,090 | |
| Accumulated impairment losses | (4,735 |) — | (4,735 |) |
| | 7,627 | 728 | 8,355 | |
| Net exchange differences | 126 | _ | 126 | |
| Balance at the end of the year | | | | |
| Goodwill | 12,563 | 728 | 13,291 | |
| Accumulated impairment losses | (4,810 |) — | (4,810 |) |
| | \$7,753 | \$728 | \$8,481 | |
| | | | | |

Intangibles - Intangible assets are capitalized and amortized over their useful life if the life is determinable. If the life is not determinable, amortization is not recorded. Amortization expense related to intangible assets was \$0.6 million, \$0.7 million and \$0.8 million in fiscal 2013, 2012 and 2011, respectively. The aggregate amortization expense for the intangible assets for each of the four succeeding fiscal years is estimated to be \$0.7 million, \$0.6 million, \$0.4 million, \$0.3 million in 2014, 2015, 2016, and 2017. Amortization expense for the four succeeding years does not include \$1.6 million for in-process research and development. The in-process research and development will be amortized over its useful life when it has reached technological feasibility.

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. See Note 11, "Impairment Charge" for a description of the facts and circumstances surrounding the impairment charges for the fiscal year ending September 30, 2012.

The following is a summary of intangibles:

| | Useful Life | Gross Carrying Amount Years End | Accumulate Amortization | Amount | Gross Carrying Amount | Accumulate Amortizatio | Carrying |
|-------------------------------------|-------------|---------------------------------|----------------------------|-----------------|-----------------------------|---------------------------|--------------------|
| | | 2013 | | | 2012 | | |
| | | (dollars in | thousands) | | | | |
| Non-compete agreements | 4-8 years | \$1,065 | \$ (717 |) \$348 | \$1,057 | \$ (468 |) \$589 |
| Customer lists | 10 years | 871 | (532 |) 339 | 828 | (432 |) 396 |
| Technology | 5-10 years | 2,426 | (1,422 |) 1,004 | 2,341 | (1,085 |) 1,256 |
| In-process research and development | (1) | 1,600 | _ | 1,600 | 1,600 | _ | 1,600 |
| Other | 2-10 years | 341 \$6,303 | (130 \$ (2,801 |) 211) \$3,502 | 325 \$6,151 | (70 \$ (2,055 |) 255) \$4,096 |

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

Warranty – A limited warranty is provided free of charge, generally for periods of 12 to 24 months to all purchasers of the Company's new products and systems. Accruals are recorded for estimated warranty costs at the time revenue is recognized. The following is a summary of activity in accrued warranty expense:

| | Years Ended September 30, | | | | |
|-----------------------|---------------------------|----------|----------|---|--|
| | 2013 2012 2011 | | | | |
| | (dollars in thousands) | | | | |
| Beginning balance | \$2,687 | \$2,265 | \$1,843 | | |
| Warranty expenditures | (1,360 |) (1,831 |) (1,199 |) | |
| Reserve provision | 127 | 2,253 | 1,621 | | |
| Ending balance | \$1,454 | \$2,687 | \$2,265 | | |

Research and Development Expenses - Research and development expenses consist of the cost of employees, consultants and contractors who design, engineer and develop new products and processes as well as materials, supplies and facilities used in producing prototypes. Payments received for research and development grants prior to the meeting of milestones are recorded as unearned research and development grant liabilities and included in other accrued liabilities on the balance sheet. When certain contract requirements are met, governmental research and development grants are netted against research and development expenses.

| | Years Ended September 30, | | | | |
|------------------------------|---------------------------|----------|----------|---|--|
| | 2013 | 2011 | | | |
| | (dollars in thousands) | | | | |
| Research and development | \$8,459 | \$14,723 | \$7,362 | | |
| Grants earned | (1,865 |) (1,029 |) (1,578 |) | |
| Net research and development | \$6,594 | \$13,694 | \$5,784 | | |

Shipping Expense – Shipping expenses of \$0.8 million, \$1.7 million and \$5.9 million for fiscal 2013, 2012 and 2011 are included in selling, general and administrative expenses.

Foreign Currency Transactions and Translation – The functional currency of the Company's European operations is the Euro. Net income includes pretax net losses from foreign currency transactions of less than \$0.1 million, less than \$0.1 million and \$0.2 million in fiscal 2013, 2012 and 2011, respectively. The gains or losses resulting from the translation of foreign financial statements have been included in other comprehensive income (loss).

Income Taxes - The Company files consolidated federal income tax returns in the United States for all subsidiaries except those in the Netherlands, France, Hong Kong and China, where separate returns are filed. The Netherlands operations file separate returns in that country and, prior to fiscal 2012, were included in the United States consolidated return. The Company computes deferred income tax assets and liabilities based upon cumulative temporary differences between financial reporting and taxable income, carryforwards available and enacted tax laws. The Company also accrues a liability for uncertain tax positions when it is more likely than not that such tax will be incurred.

Deferred tax assets 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. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management and based on the weight of available evidence, it is more likely than not that a portion or all of the deferred tax asset will not be realized. Each quarter the valuation allowance is re-evaluated.

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 third quarter of fiscal 2013, the Company's Board of Directors approved the acceleration of the vesting of one half of the unvested stock options with an exercise price of \$2.95 and all of the remaining unvested stock options with exercise prices of \$6.15 and \$7.98 per share for approximately 110 employees holding options to purchase approximately 0.4 million shares of common stock. The Company concluded that the modification to the stated vesting provisions was substantive after the Company considered the volatility of its share price and the exercise price of the amended options in relation to recent share values. Because the modification was considered substantive, the remaining unearned compensation expense of \$0.9 million was recorded as an expense in the third quarter of fiscal 2013. The weighted-average exercise price of the options that were accelerated was \$5.77.

Effective June 30, 2013, current and former executive officers of the Company voluntarily cancelled approximately 0.1 million stock options, vested and unvested, that were issued with exercise prices of \$14.79 and \$17.12 per share. At the time of the cancellation, all of the options with an exercise price of \$14.79 were fully vested. The Company recognized the remaining unearned compensation expense of \$0.3 million for the unvested portion of the stock options with an exercise price of \$17.12 per share in the third quarter of fiscal 2013.

Stock-based compensation expense for the fiscal years ended September 30, 2013, 2012 and 2011 reduced the Company's results of operations as follows:

| | Years Ended September 30, | | | |
|--|---------------------------|-------------------|--------------------|--|
| | 2013 2012 2011 | | | |
| | (dollars in t | thousands, except | per share amounts) | |
| Effect on income before income taxes (1) | \$(2,472 |) \$(1,763 |) \$(1,470) | |
| Effect on income taxes | \$512 | \$255 | \$495 | |
| Effect on net income | \$(1,960 |) \$(1,508 |) \$(975) | |

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

The Company awards restricted shares under the existing share-based compensation plans. Our restricted share-awards vest in equal annual installments over a two or 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 employed for the shares granted to fully vest.

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 2022. Options vest over 1 to 4 years. The Company estimates the fair value of stock option awards on the date of grant using the Black-Scholes option pricing model using the following assumptions:

| | Years Ended September 30, | | | | |
|-------------------------|---------------------------|---------|---------|--|--|
| | 2013 | 2012 | 2011 | | |
| Risk free interest rate | 1% | 1% | 2% | | |
| Expected life | 6 years | 6 years | 6 years | | |
| Dividend rate | 0% | 0% | 0% | | |
| Volatility | 70% | 70% | 70% | | |

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

Fair Value of Financial Instruments – Cash, Cash Equivalents and Restricted Cash - The carrying amount of these assets on the Company's Consolidated Balance Sheets approximates their fair value because of the short maturities of these instruments.

Receivables and Payables—The recorded amounts of financial instruments, including Accounts Receivable and Accounts Payable, approximate their fair value because of the short maturities of these instruments.

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

The Company's employees in The Netherlands, approximately 110, participate in a multi-employer union plan Pensioenfonds Metaal en Techniek (PMT), determined in accordance with the collective bargaining agreements effective for the industry in the Netherlands. This collective bargaining agreement has no expiration date. This multiemployer union plan covers approximately 34,000 companies and 1.2 million participants. Amtech's contribution to the multiemployer union plan is less than 5.0% of the total contributions to the plan. The plan monitors its risks on a global basis, not by company or employee, and is subject to regulation by Dutch governmental authorities. By law (the Dutch Pension Act), a multiemployer union plan must be monitored against specific criteria, including the coverage ratio of the plan assets to its obligations. This coverage ratio must exceed 104.3% for the total plan. Every company participating in a Dutch multiemployer union plan contributes a premium calculated as a percentage of its total pensionable salaries, with each company subject to the same percentage contribution rate. The premium can fluctuate yearly based on the coverage ratio of the multiemployer union plan. The pension rights of each employee are based upon the employee's average salary during employment, the years of service, and the participant's age at the time of retirement.

The Company's net periodic pension cost for this multiemployer union plan for any period is the amount of the required contribution for that period. A contingent liability may arise from, for example, possible actuarial losses relating to other participating entities because each entity that participates in a multiemployer union plan shares in the actuarial risks of every other participating entity or any responsibility under the terms of a plan to finance any shortfall in the plan if other entities cease to participate

The coverage ratio of the Dutch multiemployer union plan is 101.5% as of September 30, 2013. Because of the low coverage ratio PMT prepared and executed a "Recovery Plan" which was approved by De Nederlandsche Bank, the Dutch central bank, which is the supervisor of all pension companies in the Netherlands. As a result of the Recovery Plan, the pension rights decreased 6.3% in April 2013 and the employer's premium percentage increased to 16.6% of pensionable wages. The coverage ratio is calculated by dividing the plan assets by the total sum of pension liabilities and is based on actual market interest. If the coverage ratio does not increase to 104.3% by December 31, 2013, pension rights may decrease again. As of September 30, 2013 PMT's total plan assets were \$63.7 billion and the actuarial present value of accumulated plan benefits was \$63.1 billion.

Below is a table of contributions made by the Company to multiemployer pension plans.

| | Contributions | | | |
|--|---------------------------|---------|---------|--|
| | Years Ended September 30, | | | |
| | 2013 | 2012 | 2011 | |
| | (dollars in thousands) | | | |
| Pensioenfonds Metaal en Techniek (PMT) | \$879 | \$1,021 | \$913 | |
| Other plans | 163 | 181 | 192 | |
| Total | \$1,042 | \$1,202 | \$1,105 | |

The Company matches employee funds to the Company's defined contribution plans on a discretionary basis. The match was insignificant in fiscal years 2013, 2012 and 2011.

Reclassifications – Certain reclassifications have been made to prior year financial statements to conform to the current year presentation. Specifically, prepaid income taxes of \$1.4 million and \$4.3 million as of September 30, 2012 and 2011, respectively, were previously stated as a separate line item in current assets, prepaid income taxes, and are now included in the line item, other assets - long term, in the Company's consolidated balance sheets.

Impact of Recently Issued Accounting Pronouncements

In July 2013, the FASB issued ASU No. 2013-11 "Income Taxes (Topic 740)." An unrecognized tax benefit, or a portion of an unrecognized tax benefit, should be presented in the financial statements as a reduction to a deferred tax asset for a net operating loss carryforward, a similar tax loss, or a tax credit carryforward, except as follows. To the extent a net operating loss carryforward, a similar tax loss, or a tax credit carryforward is not available at the reporting date under the tax law of the applicable jurisdiction to settle any additional income taxes that would result from the disallowance of a tax position or the tax law of the applicable jurisdiction does not require the entity to use, and the entity does not intend to use, the deferred tax asset for such purpose, the unrecognized tax benefit should be presented in the financial statements as a liability and should not be combined with deferred tax assets. The assessment of whether a deferred tax asset is available is based on the unrecognized tax benefit and deferred tax asset that exist at the reporting date and should be made presuming disallowance of the tax position at the reporting date. The amendments in this Update are effective for fiscal years, and interim periods within those years, beginning after December 15, 2013. We expect to adopt the amendment effective October 1, 2014. We do not expect that that the adoption will have a material impact on the Company's consolidated financial statements.

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

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

In February 2013, The FASB issued ASU No. 2013-04 "Liabilities (Topic 405)," The guidance in this Update requires an entity to measure obligations resulting from joint and several liability arrangements for which the total amount of

the obligation within the scope of this guidance is fixed at the reporting date, as the sum of the following:

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

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

2. Stock-Based Compensation

Stock-Based Plans –The 2007 Employee Stock Incentive Plan (the "2007 Plan), under which 500,000 shares could be granted, was adopted by the Board of Directors in April 2007, and approved by the shareholders in May 2007. The 1998 Employee Stock Option Plan (the "1998 Plan"), under which 50,000 shares could be granted, was adopted by the Board of Directors in January 1998, and approved by shareholders in March 1998. The number of shares available for options under the 1998 Plan has since been increased to 500,000 shares through authorization by the Board of Directors and approval of shareholders. The 1998 Plan expired in January 2008. The Non-Employee Directors Stock Option Plan was approved by the shareholders in 1996 for issuance of up to 100,000 shares of Common Stock to directors. In July 2005, the Board of Directors authorized, and shareholders approved, an increase in the number of shares available for options under the Non-Employee Directors Stock Option Plan to 200,000 shares. 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.

Stock options issued under the terms of the plans have, or will have, an exercise price equal to or greater than the fair market value of the Common Stock at the date of the option grant and expire no later than 10 years from the date of grant, with the most recent grant expiring in 2022. Options issued by the Company vest over 1 to 4 years. The Company may also grant restricted stock awards under the 2007 Plan.

As of September 30, 2013 and 2012, the unamortized expense related to restricted shares was \$0.4 million and \$0.8 million, respectively, and it is expected to be recognized over two years.

Restricted stock transactions and outstanding are summarized as follows:

| | Years Ended September 30, | | | | | |
|-----------------------|---------------------------|---|----------|---|----------|---|
| | 2013 | | 2012 | | 2011 | |
| | Awards | Weighted Average Grant Date Fair Value | Awards | Weighted Average Grant Date Fair Value | Awards | Weighted Average Grant Date Fair Value |
| Beginning Outstanding | 127,975 | \$9.06 | 120,970 | \$9.42 | 128,751 | \$6.34 |
| Awarded | _ | _ | 60,600 | 7.98 | 35,517 | 17.28 |
| Released | (58,771) | 7.81 | (51,595) | 8.72 | (43,298) | 6.78 |
| Forfeited | (50) | 7.98 | (2,000) | 7.22 | _ | — |
| Ending Outstanding | 69,154 | \$10.13 | 127,975 | \$9.06 | 120,970 | \$9.42 |

Stock-based compensation plans are summarized in the table below:

| Name of Plan | Shares | Shares | Options | Plan |
|--|------------|-----------|-------------|------------|
| Name of Flan | Authorized | Available | Outstanding | Expiration |
| 2007 Employee Stock Incentive Plan | 1,400,000 | 194,142 | 839,004 | Mar. 2020 |
| 1998 Employee Stock Option Plan | 500,000 | _ | 72,710 | Jan. 2008 |
| Non-Employee Directors Stock Option Plan | 350,000 | 65,600 | 147,853 | Mar. 2020 |
| | | 259,742 | 1,059,567 | |

Stock options were valued using the Black-Scholes option pricing model. See Note 1 for further discussion. Stock option transactions and the options outstanding are summarized as follows:

| | Years Ended | September 30 | 0, | | | |
|---|-------------|--|---------|--|-----------|--|
| | 2013 | | 2012 | | 2011 | |
| | Options | Weighted Average Exercise Price | Options | Weighted Average Exercise Price | Options | Weighted Average Exercise Price |
| Outstanding at beginning of period | 891,293 | \$9.37 | 611,384 | \$10.02 | 636,283 | \$7.59 |
| Granted | 312,850 | 2.95 | 285,400 | 7.98 | 155,233 | 16.89 |
| Exercised | (8,450) | 3.08 | (600) | 5.33 | (178,882) | 7.35 |
| Forfeited/canceled | (136,126) | 15.75 | (4,891) | 9.50 | (1,250) | 6.94 |
| Outstanding at end of period | 1,059,567 | 6.71 | 891,293 | \$9.37 | 611,384 | \$10.02 |
| Exercisable at end of period | 874,591 | \$7.13 | 400,638 | \$9.25 | 232,018 | \$8.31 |
| Weighted average grant-date fair value of options granted during the period | \$1.82 | | \$4.95 | | \$10.57 | |

The following tables summarize information for stock options outstanding and exercisable as of September 30, 2013:

| | Options Outstanding | | | |
|-----------------------------|-----------------------|---------------------------------------|---|--|
| Range of Exercise Prices | Number Outstanding | Remaining Contractual Life (in years) | Average Exercise Price | Aggregate Intrinsic Value (in thousands) |
| 2.95-3.00 | 305,050 | 9.2 | \$2.95 | \$1,327 |
| 3.01-7.00 | 271,683 | 5.1 | 5.07 | 606 |
| 7.01-8.00 | 295,920 | 7.9 | 7.94 | _ |
| 8.01-15.00 | 113,087 | 5.9 | 10.49 | _ |
| 15.01-23.00 | 73,827 | 7.1 | 17.54 | _ |
| | 1,059,567 | 7.3 | \$6.71 | \$1,933 |
| Vested and expected | | | | |
| to vest as of | 1,057,477 | 6.7 | \$7.29 | \$1,925 |
| September 30, 2013 | | | | |
| Range of Exercise Prices | | Options Exercisable | cisable Weighted Average Exercise Price | Aggregate Intrinsic Value |
| 207200 | | 4.40.00= | 4207 | (in thousands) |
| 2.95-3.00 | | 149,087 | \$2.95 | \$649 |
| 3.01-7.00 | | 271,683 | 5.07 | 606 |
| 7.01-8.00 | | 295,920 | 7.94 | |
| 8.01-15.00 | | 98,775 | 10.48 | |
| 15.01 - 23.00 | | 59,126 | 17.47 | <u>—</u> |
| | | 874,591 | \$7.13 | \$1,255 |

The aggregate intrinsic value in the tables above represents the total pretax intrinsic value, based on the Company's closing stock price of \$7.30 per share as of September 30, 2013, which would have been received by the option holders had all option holders exercised their options as of that date. The total intrinsic value of stock options exercised during the fiscal years ended September 30, 2013, 2012 and 2011 was less than \$0.1 million, less than \$0.1 million and \$1.3 million, respectively.

3. Earnings Per Share

Basic earnings per share is computed by dividing net income (loss) available to common stockholders by the weighted average number of common shares outstanding for the period. Diluted earnings (loss) per share is computed similarly to basic earnings per share 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, and the numerator is based on net income (loss). In the case of a net loss, diluted earnings per share is calculated in the same manner as basic earnings per share. Options and restricted stock of approximately 1,130,000, 1,020,000 and 145,000 shares are excluded from the fiscal 2013, 2012 and 2011 earnings per share calculations as they are anti-dilutive.

| | 2013 | 2012 | 2011 |
|---|------------------|------------------|-------------------|
| | (dollars in thou | ısands, except p | er share amounts) |
| Basic Earnings Per Share Computation | | | |
| Net income (loss) attributable to Amtech Systems, Inc. | \$(20,069 | \$(23,031) |) \$22,882 |
| Weighted Average Shares Outstanding: | | | |
| Common stock | 9,529 | 9,471 | 9,480 |
| Basic earnings (loss) per share attributable to Amtech shareholders | \$(2.11 | \$(2.43) |) \$2.41 |
| Diluted Earnings Per Share Computation | | | |
| Net income (loss) attributable to Amtech Systems, Inc. | \$(20,069 | \$(23,031) |) \$22,882 |
| Weighted Average Shares Outstanding: | | | |
| Common stock | 9,529 | 9,471 | 9,480 |
| Common stock equivalents (1) | _ | _ | 284 |
| Diluted shares | 9,529 | 9,471 | 9,764 |
| Diluted earnings (loss) per share attributable to Amtech shareholders | \$ \$ (2.11 | \$(2.43) |) \$2.34 |

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

4. Stockholders' Equity

Shareholder Rights Plan – On December 15, 2008, the Company and Computershare Trust Company, N.A., as Rights Agent (the "Rights Agent"), entered into an Amended and Restated Rights Agreement (the "Restated Rights Agreement") which amends and restates the terms governing the previously authorized shareholder rights (each a "Right") to purchase fractional shares of the Company's Series A Participating Preferred Stock ("Series A Preferred") currently attached to each of the Company's outstanding Common Shares, par value \$0.01 per share ("Common Shares"). As amended, each Right entitles the registered holder to purchase from the Company one one thousandth of a share of Series A Preferred at an exercise price of \$51.60 (the "Exercise Price"), subject to adjustment. The Final Expiration Date (as defined in the Restated Rights Agreement) is December 14, 2018.

5. Other Accrued Liabilities

Other accrued liabilities consist of the following:

| | September | September |
|--|----------------|-----------|
| | 30, 2013 | 30, 2012 |
| | (dollars in th | ousands) |
| Unearned research and development grants | \$5,935 | \$1,160 |
| Loss on inventory purchase commitments | 1,289 | 2,422 |
| Other | 2,916 | 3,917 |
| | \$10,140 | \$7,499 |

6. Commitments and Contingencies

Purchase Obligations – As of September 30, 2013, we had unrecorded purchase obligations in the amount of \$12.3 million. 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, canceled or terminated.

Development Project – During the quarter ended June 30, 2013, Shanghai Kingstone Semiconductor Company Ltd. ("Kingstone") entered into an agreement with certain government agencies in Shanghai, China for the purpose of

developing ion implanters for a non-solar application. As of September 30, 2013, Kingstone has begun the first phase of this development project and received the first \$2.6 million of grant funds for the project. Under the arrangement, Kingstone has agreed that by July 2014 it will have in place \$6.1 million of its commitment to the project. The agreement will terminate upon the occurrence of certain events or if the project does not pass the first phase project evaluation. Otherwise, Kingstone has a commitment to provide additional funding to the project by December 2015. Amtech owns 55% of Kingstone Technology Hong King Limited, which owns 100% of Shanghai Kingstone Semiconductor Company Ltd. Amtech has no obligation or plan to fund Kingstone's commitments under this agreement.

Legal Proceedings – The Company and its subsidiaries are defendants from time to time in actions for matters arising out of their business operations. The Company does not believe that any matters or proceedings presently pending will have a material adverse effect on its consolidated financial position, results of operations or liquidity.

Operating Leases – The Company leases buildings, vehicles and equipment under operating leases. Rental expense under such operating leases was \$1.0 million, \$1.4 million, \$1.2 million in fiscal 2013, 2012 and 2011, respectively. As of September 30, 2013, future minimum rental commitments under non-cancelable operating leases with initial or remaining terms of one year or more totaled \$2.9 million, of which \$1.2 million, \$0.7 million, \$0.4 million, \$0.2 million and \$0.2 million is payable in fiscal 2014, 2015, 2016, 2017 and 2018, respectively, and \$0.2 million, thereafter.

7. Major Customers and Foreign Sales

In fiscal 2013, one customer accounted for 20% of net revenue. In fiscal 2012, one customer accounted for 11% of net revenue. In fiscal 2011, two customers individually accounted for 15% and 14% of net revenue. Yingli accounted for 20%, 7% and 15% of our net revenue in fiscal 2013, 2012 and 2011, respectively.

Our net revenues for fiscal 2013, 2012 and 2011 were to customers in the following geographic regions:

| | Years Ended September 30, | | | |
|---------------|---------------------------|-------|-------|---|
| | 2013 | 2012 | 2011 | |
| United States | 20 | % 13 | % 6 | % |
| | | | | |
| Taiwan | 14 | % 9 | % 16 | % |
| China | 39 | % 43 | % 69 | % |
| Other | 11 | % 14 | % 3 | % |
| Total Asia | 64 | % 66 | % 88 | % |
| Germany | 5 | % 8 | % 3 | % |
| Other | 11 | % 13 | % 3 | % |
| Total Europe | 16 | % 21 | % 6 | % |
| | 100 | % 100 | % 100 | % |

8. Business Segments

The Company operates in two segments: the solar and semiconductor equipment segment and the polishing supplies segment. In the solar and semiconductor equipment segment, we are a leading supplier of thermal processing systems, including related automation, parts and services, to the solar/photovoltaic, semiconductor, silicon wafer and MEMS industries and also offer PECVD (plasma-enhanced chemical vapor deposition) equipment. In the polishing supplies segment, the Company produces consumables and machinery for lapping (fine abrading) and polishing of materials, such as sapphire substrates, optical components, silicon wafers, numerous types of crystal materials, ceramics and

metal components.

Information concerning our business segments is as follows:

| N. d. accessors | 2013 | • | otember 30, 2012 ands) | | 2011 | |
|--|---|---------------------------------------|------------------------------|-------|-----------|---|
| Net revenue: | \$26.26 | 0 | ¢72 100 | | ¢222 004 | |
| Solar and semiconductor equipment | \$26,368 | | \$73,102 | | \$233,804 | |
| Polishing supplies and equipment | 8,430 \$24.700 | | 8,437 | | 12,901 | |
| Operating income (less). | \$34,798 | 5 | \$81,539 | | \$246,705 | |
| Operating income (loss): | ¢ (1 4 25 | , , , , , , , , , , , , , , , , , , , | \$ (26.226 | \ | ¢ 46 710 | |
| Solar and semiconductor equipment | \$(14,37 1,282 | (| \$(26,236 | - 1 | \$46,712 | |
| Polishing supplies and equipment | (6,899 | ` | 1,405 | | 3,648 | \ |
| Non-segment related loss | ` ' | | (8,153 | | (12,081 |) |
| | \$(19,99 Vacus and add | · · | \$(32,984 |) | \$38,279 | |
| | Years ended September 30, 2013 2012 2011 | | | | | |
| | | | 201 | 1 | | |
| Capital expenditures: | (dollars in the | ousanus) | | | | |
| Solar and semiconductor equipment | \$98 | \$1,121 | \$5,1 | 106 | | |
| ^ ^ | \$98 80 | 185 | \$3,1 77 | 100 | | |
| Polishing supplies and equipment | \$178 | \$1,306 | | 102 | | |
| Depreciation and amortization expense: | Φ1/0 | \$1,500 | φ3,1 | 103 | | |
| Solar and semiconductor equipment | \$2,501 | \$2,717 | \$2,5 | 580 | | |
| Polishing supplies and equipment | 166 | 141 | φ 2,5 225 | | | |
| 1 offshing supplies and equipment | \$2,667 | \$2,858 | | | | |
| | Ψ2,007 | Ψ2,030 | Ψ 2,0 | 717 | | |
| | Septembe 2013 | r 30, | September 2012 | r 30, | | |
| | | thanaan | | | | |
| Identifiable assets: | (dollars in | mousand | us) | | | |
| | ¢ 106 702 | | ¢ 122 022 | | | |
| Solar and semiconductor equipment Polishing supplies and equipment | \$ 106,723 4,224 | | \$123,923 | | | |
| Folishing supplies and equipment | \$110,947 | | 5,099 \$129,022 | | | |
| Goodwill: | \$110,947 | | \$ 129,022 | | | |
| Solar and semiconductor equipment | \$7,753 | | \$7,627 | | | |
| Polishing supplies and equipment | \$ 7,733 728 | | \$ 7,627 728 | | | |
| rousining supplies and equipment | \$8,481 | | | | | |
| | \$8,481 | | \$8,355 | | | |

9. Geographic Regions

The Company has operations in The Netherlands, United States, France and China. Revenues, operating income (loss) and identifiable assets by geographic region are as follows:

| | Years Ended September 30, | | | | | |
|--------------------------------------|---------------------------|---------|--------------|-----|-----------|---|
| | 2013 | 20 |)12 | | 2011 | |
| | (dollars in the | ousands | s) | | | |
| Net revenue: | | | | | | |
| The Netherlands | \$17,615 | \$4 | 48,294 | | \$195,404 | |
| United States | 11,855 | 27 | 7,638 | | 24,079 | |
| France | 5,328 | 5, | 584 | | 26,347 | |
| China | _ | 23 | 3 | | 875 | |
| | \$34,798 | \$8 | 81,539 | | \$246,705 | |
| | | | | | | |
| Operating income (loss): | | | | | | |
| The Netherlands | \$(11,139 |) \$(| (18,686 |) | \$28,724 | |
| United States | (4,346 |) (1 | ,025 |) | (1,742 |) |
| France | (815 |) (3 | ,041 |) | 12,992 | |
| China | (3,694 |) (1 | 0,232 | | (1,695 |) |
| | \$(19,994 |) \$(| (32,984 |) | \$38,279 | |
| | | | | | | |
| | | As | s of Septemb | oer | 30, | |
| | | 20 | 013 | | 2012 | |
| Net long-lived assets | | | | | | |
| (excluding intangibles and goodwill) | | | | | | |
| The Netherlands | | \$8 | 8,733 | | \$9,555 | |
| United States | | 1, | 160 | | 1,448 | |
| France | | 55 | 52 | | 676 | |
| China | | 62 | 21 | | 708 | |
| | | \$1 | 11,066 | | \$12,387 | |
| | | | | | | |

10. Income Taxes

The components of the provision (benefit) for income taxes are as follows:

| | Year Ended September 30, | | | |
|---------------------------|--------------------------|------------|----------|---|
| | 2013 | 2012 | 2011 | |
| | (dollars in | thousands) | | |
| Current: | | | | |
| United States | \$(150 |) 2,440 | \$800 | |
| Foreign | 800 | (9,380 |) 15,910 | |
| State | (110 |) (90 |) 110 | |
| Total current | 540 | (7,030 |) 16,820 | |
| Deferred: | | | | |
| United States | (290 |) — | (100 |) |
| Foreign | 1,610 | 1,700 | (520 |) |
| State | _ | 10 | (10 |) |
| Total deferred | 1,320 | 1,710 | (630 |) |
| Total provision (benefit) | \$1,860 | \$(5,320 | \$16,190 | , |
| | | | | |

A reconciliation of actual income taxes to income taxes at the expected United States federal corporate income tax rate of thirty-four percent is as follows:

| • | Year Ended September 30, | | | | |
|---|--------------------------|--------------|------------|--|--|
| | 2013 | 2012 | 2011 | | |
| | (dollars in t | | | | |
| Tax provision (benefit) at the U.S. rate | \$(6,750 |) \$(11,190 |) \$13,410 | | |
| Effect of permanent book-tax differences | 970 | 2,010 | 510 | | |
| State tax provision | (110 |) (80 |) 100 | | |
| Valuation allowance for net deferred tax assets | 5,850 | 1,740 | 470 | | |
| Uncertain tax items | 450 | (240 |) 1,620 | | |
| Expiration of foreign net operating loss | _ | 2,320 | 170 | | |
| Difference between U.S. and foreign rates | 1,440 | - | _ | | |
| Other items | 10 | 120 | (90) | | |
| | \$1,860 | \$(5,320 |) \$16,190 | | |

Deferred income taxes 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 tax effects of temporary book-tax differences that give rise to significant portions of the deferred tax assets and deferred tax liability are as follows:

| | Year Ended September 30, | | | | |
|---|--------------------------|-----------|----------|---|--|
| | 2013 | 2012 | 2011 | | |
| | (dollars in t | housands) | | | |
| Deferred tax assets - current: | | | | | |
| Capitalized inventory costs | \$130 | \$90 | 150 | | |
| Inventory write-downs | 620 | 600 | 590 | | |
| Accrued warranty | 200 | 20 | (580 |) | |
| Deferred profits | 800 | 2,510 | 6,820 | | |
| Accruals and reserves not currently deductible | 490 | 240 | 2,580 | | |
| Deferred tax assets - current | \$2,240 | \$3,460 | \$9,560 | | |
| Valuation allowance | (910 |) — | <u>—</u> | | |
| Deferred tax assets - current net of valuation allowance | \$1,330 | \$3,460 | \$9,560 | | |
| Deferred tax assets (liabilities)- non-current: | | | | | |
| Stock option expense | 700 | 470 | 270 | | |
| Book vs. tax basis of acquired assets | (1,130 |) (1,280 |) (760 |) | |
| Foreign and state net operating losses | 9,000 | 3,640 | 850 | | |
| Book vs. tax depreciation and amortization | 60 | 100 | 300 | | |
| Foreign tax credits | 520 | _ | _ | | |
| Other deferred tax assets | (350 |) 140 | 90 | | |
| Total deferred tax assets - non-current | 8,800 | 3,070 | 750 | | |
| Valuation allowance | (7,540 |) (2,600 |) (860 |) | |
| Deferred tax assets (liabilities) - non-current, net of valuation allowance | \$1,260 | \$470 | \$(110 |) | |

Changes in the deferred tax valuation allowance are as follows:

| | Year Ended September 30, | | |
|--------------------------------------|--------------------------|---------|-------|
| | 2013 | 2012 | 2011 |
| | (dollars in thousands) | | |
| Balance at the beginning of the year | \$2,600 | \$860 | \$390 |
| Additions to valuation allowance | 5,850 | 1,740 | 470 |
| Balance at the end of the year | \$8,450 | \$2,600 | \$860 |

Accounting for income taxes requires that a valuation allowance is recognized 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. Each quarter the valuation allowance is re-evaluated.

At September 30, 2013, the Company has net operating loss carryforwards in some states, The Netherlands, China, Hong Kong and France which expire in varying amounts between 2013 and 2021. We have established a valuation allowance on all deferred tax assets related to these foreign and state net operating loss carryforwards, except those in France, as based on the weight of available evidence, it is more likely than not that they will not be realized. Tax payments of \$8.7 million were made and tax refunds of less than \$0.1 million were received during fiscal 2013.

The Company applies the provisions of FASB Interpretation No. 48 ("FIN 48"), "Accounting for Uncertainty in Income Taxes", (now codified as FASB ASC 740, "Income Tax"). In this regard, an uncertain tax position represents the Company's expected treatment of a tax position taken in a filed tax return, or planned to be taken in a future tax return, that has not been reflected in measuring income tax expense for financial reporting purposes. Approximately \$1.8 million of this total represents the amount that, if recognized, would favorably affect our effective income tax rate in future periods.

A reconciliation of the beginning and ending amount of our unrecognized tax benefits is summarized as follows:

| | Year Ended September 30, | | | | |
|--|--------------------------|---------|---------|--|--|
| | 2013 | 2012 | 2011 | | |
| | (dollars in thousands) | | | | |
| Balances at beginning of the year | \$2,360 | \$2,630 | \$1,010 | | |
| Additions (reductions) related to current year tax positions | _ | (390 |) 1,210 | | |
| Additions related to tax positions taken in prior years | 530 | 360 | 450 | | |
| Reductions related to settlements with tax authorities | _ | (240 |) — | | |
| Reductions due to lapse of statute of limitations | (80 |) — | (40) | | |
| Balance at the end of the year | \$2,810 | \$2,360 | \$2,630 | | |

We have classified all of our liabilities for uncertain tax positions as income taxes payable long-term.

We report accrued interest and penalties related to unrecognized tax benefits in income tax expense. We recognized a net expense for interest and penalties of \$0.5 million, \$0.4 million and \$0.2 million for fiscal years 2013, 2012 and 2011, respectively. Income taxes payable long-term on the consolidated balance sheets includes a cumulative accrual for potential interest and penalties of \$1.2 million and \$0.7 million as of September 30, 2013 and 2012 respectively. During fiscal 2012, we recorded a benefit of \$2.4 million, resulting from the reversal of liabilities in taxing jurisdictions where a tax examination was finalized.

The Company does not expect that the amount of our tax reserves for uncertain tax positions will materially change in the next 12 months other than the continued accrual of interest and penalties.

The Company and one or more of its subsidiaries file income tax returns in The Netherlands, Germany, France and other foreign jurisdictions, as well as the U.S. and various states in the U.S. We have not signed any agreements with the Internal Revenue Service, any state or foreign jurisdiction to extend the statute of limitations for any fiscal year. As such, the number of open years is the number of years dictated by statute in each of the respective taxing jurisdictions, but generally is from 3 to 5 years.

These open years contain certain matters that could be subject to differing interpretations of applicable tax laws and regulations as they relate to the amount, timing, or inclusion of revenues and expenses, or the sustainability of income tax positions of the Company and its subsidiaries. During fiscal year 2012, the IRS examination for the fiscal year ending September 30, 2009 was closed without adjustment.

11. Impairment and Restructuring Charge

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 methods used to estimate fair value include the market approach (Level 2) and discounted cash flows (Level 3). The Company gives the greatest weight to the discounted cash flow method. The material estimates and assumptions used in the discounted cash flows method of determining fair value include: projected revenues, material costs and the rates of increase in payroll and other expenses. Projected future cash flows are discounted at a risk-free rate of return adjusted for various risk premiums.

The Company conducted its periodic assessment of long-lived assets in the fourth quarter of fiscal 2012 and identified the need for an impairment charge in two of its reporting units that serve the solar equipment market that is included in the Company's Solar and Semiconductor Segment. The assessment identified the need to record an impairment charge related to goodwill in the amount of \$4.7 million, due primarily to the supply / demand imbalance in the solar equipment market, the expectation that the market downturn would continue into 2013 and the decline in market value of shares of solar companies.

The Company also recorded charges of \$0.7 million in fiscal 2012 for impairment of assets related to license agreements with one of its technology partners. As a result of our technology partner's financial difficulties, their possible inability to service the product and insufficient revenues, management determined that the carrying value of the related assets was not recoverable.

The Company conducted its periodic assessment of long-lived assets in the fourth quarter of fiscal 2013 and determined there was no impairment. The Company recorded restructuring charges of \$0.9 million in fiscal 2013 primarily related to severance costs incurred as a result of the reductions-in-force at certain operations.

12. Selected Quarterly Data (Unaudited)

| | First | | Second | | Third | | Fourth | |
|--|--|---|----------|---|-----------|---|-----------|---|
| | Quarter | | Quarter | | Quarter | | Quarter | |
| Fiscal Year 2013: | (in thousands, except per share amounts) | | | | | | | |
| Revenue | \$9,357 | | \$8,118 | | \$10,398 | | \$6,925 | |
| Gross margin | \$1,378 | | \$2,453 | | \$(2,677 |) | \$3,159 | |
| Provision for income taxes | \$(480 |) | \$(800 |) | \$2,560 | | \$580 | |
| Net loss attributable to Amtech Systems, Inc. | \$(4,194 |) | \$(2,092 |) | \$(12,101 |) | \$(1,682 |) |
| Comprehensive loss attributable to Amtech Systems, Inc. | \$(2,791 |) | \$(3,555 |) | \$(11,387 |) | \$(75 |) |
| Net loss per share attributable to Amtech Systems, Inc.: | | | | | | | | |
| Basic earnings per share | \$(0.44 |) | \$(0.22 |) | \$(1.27 |) | \$(0.18 |) |
| Shares used in calculation | 9,494 | | 9,539 | | 9,539 | | 9,543 | |
| Diluted earnings per share | \$(0.44 |) | \$(0.22 |) | \$(1.27 |) | \$(0.18 |) |
| Shares used in calculation | 9,494 | | 9,539 | | 9,539 | | 9,543 | |
| | | | | | | | | |
| Fiscal Year 2012: | | | | | | | | |
| Revenue | \$24,728 | | \$21,566 | | \$24,300 | | \$10,945 | |
| Gross margin | \$7,201 | | \$4,048 | | \$4,804 | | \$(6,860 |) |
| Provision for income taxes | \$(320 |) | \$(220 |) | \$(1,110 |) | \$(3,670 |) |
| Net loss attributable to Amtech Systems, Inc. | \$(876 |) | \$(5,079 |) | \$(2,965 |) | \$(14,111 |) |
| Comprehensive loss attributable to Amtech Systems, Inc. | \$(4,607 |) | \$(2,877 |) | \$(6,816 |) | \$(13,470 |) |
| Net loss per share attributable to Amtech Systems, Inc.: | | | | | | | | |
| Basic earnings per share | \$(0.09 |) | \$(0.54 |) | \$(0.31 |) | \$(1.49 |) |
| Shares used in calculation | 9,446 | | 9,479 | | 9,479 | | 9,482 | |
| Diluted earnings per share | \$(0.09 |) | \$(0.54 |) | \$(0.31 |) | \$(1.49 |) |
| Shares used in calculation | 9,446 | | 9,479 | | 9,479 | | 9,482 | |

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Conclusion Regarding the Effectiveness of Disclosure 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 as defined in Exchange Act Rules 13a-15(e) and 15(d)-15(e). Based upon that evaluation, our CEO and CFO have concluded that our disclosure controls and procedures in place were effective as of September 30, 2013.

Management's Report on Internal Control Over Financial Reporting

To the Shareholders of Amtech Systems, Inc.,

The management of Amtech Systems, Inc. is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Internal control over financial reporting is a process designed 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.

Because of its inherent limitations, our controls and procedures may not prevent or detect misstatements. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the controls system are met. Because of the inherent limitations in all controls systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected.

Management assessed the effectiveness of our internal control over financial reporting based on the criteria in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on its evaluation under the criteria in Internal Control — Integrated Framework, management concluded that our internal control over financial reporting was effective as of September 30, 2013.

There were no changes in our internal controls over financial reporting that occurred during the year ended September 30, 2013, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

Pursuant to Paragraph G(3) of the General Instructions to Form 10-K, the information required by Part III of Form 10-K are incorporated by reference to Amtech's Definitive Proxy Statement to be filed with the Securities and Exchange Commission in connection with its 2014 Annual Meeting of Stockholders (the "Proxy Statement").

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND GOVERNANCE

The information required by this item is incorporated herein by reference to the Proxy Statement, which will be filed with the Securities and Exchange Commission within 120 days of the end of our fiscal year.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated herein by reference to the Proxy Statement, which will be filed with the Securities and Exchange Commission within 120 days of the end of our fiscal year.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item is incorporated herein by reference to the Proxy Statement, which will be filed with the Securities and Exchange Commission within 120 days of the end of our fiscal year.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item is incorporated herein by reference to the Proxy Statement, which will be filed with the Securities and Exchange Commission within 120 days of the end of our fiscal year.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this item is incorporated herein by reference to the Proxy Statement, which will be filed with the Securities and Exchange Commission within 120 days of the end of our fiscal year.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

- (a)(1) The consolidated financial statements required by this item are set forth on the pages indicated at Item 8.
- All financial statement schedules are omitted because they are either not applicable, or because the required information is shown in the consolidated financial statements or notes thereto.
- (3 Exhibits: The response to this section of Item 15 is included in the Exhibit Index of this Annual Report on Form 10-K and is incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, this report on Form 10-K has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

| SIGNATURE | TITLE | DATE |
|---|--|-------------------|
| * Jong S. Whang | Executive Chairman and Chairman of the Board | December 11, 2013 |
| * Fokko Pentinga | Chief Executive Officer and President (Principal Executive Officer) | December 11, 2013 |
| /s/ Bradley C. Anderson Bradley C. Anderson | Executive Vice President – Finance and Chief Financial Officer (Principal Financial and Accounting Officer) | December 11, 2013 |
| * Michael Garnreiter | Director | December 11, 2013 |
| * Alfred W. Giese | Director | December 11, 2013 |
| * Egbert J.G. Goudena | Director | December 11, 2013 |
| * Robert F. King | Director | December 11, 2013 |
| | | |
| *By: /s/ Bradley C. Anderson Bradley C. Anderson, Attorney-In-Fact** | | |
| **By authority of the power of attorney filed as Exhibit 24 hereto. | | |

EXHIBIT INDEX

| EXHIBIT NO. | DESCRIPTION | METHOD OF FILING |
|----------------|--|---------------------|
| 3.1 | Amended and Restated Articles of Incorporation, as amended through February 6, 2012. Certificate of Designations, Preferences and Privileges of the Series A Convertible | A |
| 3.2 | Preferred Stock (Par Value \$.01 Per Share) of Amtech Systems, Inc., dated as of April 21, 2005. | В |
| 3.3 | Amended and Restated Bylaws of Amtech Systems, Inc., dated as of January 4, 2008. Amended and Restated Rights Agreement dated as of December 15, 2008, by between | С |
| 4.1 | Amtech Systems, Inc. and Computershare Trust Company, N.A., as rights agent, including the form of Certificate of Designation, the form of Rights Certificate and the Summary of Rights attached thereto as Exhibits A, B and C, respectively. | D |
| 4.2 | Form of Accredited Investor Subscription Agreement for the Series A Convertible Preferred Stock. | В |
| 10.1 | Amtech Systems, Inc. 1998 Stock Option Plan, as amended through March 29, 2002. | Е |
| 10.2 | Non-Employee Directors Stock Option Plan, effective July 8, 2005 as amended through March 11, 2010. | F |
| 10.3 | 2007 Employee Stock Incentive Plan of Amtech Systems, Inc., as amended through March 11, 2010. | F |
| 10.4 | Second Amended and Restated Employment Agreement between Amtech Systems, Inc. and Jong S. Whang, dated February 9, 2012. | A |
| 10.5 | Amendment, dated as of July 1, 2012, to the Second Amended and Restated Employment Agreement between Amtech Systems, Inc. and Jong S. Whang, dated as of February 9, 2012. | G |
| 10.6 | Employment Agreement between Amtech Systems, Inc. and Fokko Pentinga, dated June 29, 2012. | Н |
| 10.7 | Amendment, dated as of July 1, 2012, to the Employment Agreement between Amtech Systems, Inc. and Fokko Pentinga, dated as of June 29, 2012. | G |
| 10.8 | Change of Control Severance Agreement, dated as of March 10, 2008 between Amtech Systems, Inc. and Bradley Anderson. | K |
| 10.9 | Amended and Restated Change of Control and Severance Agreement, dated March 11, 2010, between Amtech Systems, Inc. and Robert T. Hass. | F |
| 10.10 | Change of Control and Severance Agreement, dated as of April 25, 2011, between Amtech Systems, Inc. and Jeong Mo Hwang PhD. | I |
| 10.11 | Sale Agreement, dated March 15, 2007, for purchase of manufacturing facility located in Vassen, The Netherlands by Tempress Holdings B.V. from Mr. F. H. Van Berlo. | L |
| 10.12 | Stock Purchase and Sale Agreement, by and among Tempress Holdings, B.V., R2D Ingenierie SAS and the Shareholders of R2D Ingenierie SAS, dated as of October 8, 2007. | M |
| 10.13 | Stock Purchase and Sale Agreement by and among Amtech Systems, Inc., Silicon Jade Limited, Kingstone Technology Hong Kong Limited and the shareholders of Silicon Jade Limited, dated as of January 27, 2011. | N |
| 10.14 | Amendment to the Kingstone Stock Purchase and Sale Agreement, dated as of January 27, 2011, by and among Amtech Systems, Inc., Silicon Jade Limited, effective as of September 30, 2011. | О |
| 10.15 | Second Amendment, dated June 28, 2013, to the Second Amended and Restated Employment Agreement between Amtech Systems, Inc. and Jong S. Whang, dated as of February 9, 2012. | P |

| 10.16 | Second Amendment, dated June 28, 2013, to the Employment Agreement between Amtech Systems, Inc. and Fokko Pentinga, dated as of June 29, 2012. | P |
|-------|--|---|
| 10.17 | Amendment, dated June 28, 2013, to the Change of Control Severance Agreement between Amtech Systems, Inc. and Bradley C. Anderson, dated as of March 10, 2008. | P |
| 10.18 | Employment Agreement and Release between Amtech Systems, Inc. and Robert T. Hass, dated as of June 28, 2013. | P |
| 68 | | |

| 10.19 | Employment Agreement and Release between Amtech Systems, Inc. and Jeong Mo | P |
|---------|--|----|
| | Hwang PhD, dated as of June 28, 2013. | 1 |
| 21.1 | Subsidiaries of the Registrant | * |
| 23.1 | Consent of Independent Registered Public Accounting Firm - Mayer Hoffman McCann P.C. | * |
| 24.1 | Powers of Attorney | * |
| 31.1 | Certification Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as Amended | * |
| 31.2 | Certification Pursuant to Rule 13a-14(a)/15d-14(a) of the Securities Exchange Act of 1934, as Amended | * |
| 32.1 | Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 | * |
| 32.2 | Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 | * |
| 101.INS | XBRL Instance Document | ** |
| 101.SCH | XBRL Taxonomy Extension Schema Document | ** |
| 101.PRE | Taxonomy Presentation Linkbase Document | ** |
| 101.CAL | XBRL Taxonomy Calculation Linkbase Document | ** |
| 101.LAB | XBRL Taxonomy Label Linkbase Document | ** |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase Document | ** |
| | | |

- * Filed herewith.
 - Pursuant to applicable securities laws and regulations, the Company is deemed to have complied with the reporting obligation relating to the submission of interactive data files in such exhibits and is not subject to liability under any anti-fraud provisions or other liability provisions of the federal securities laws as long as the Company has made a good faith attempt to comply with the submission requirements and promptly amends the
- ** interactive data files after becoming aware that the interactive data files fail to comply with the submission requirements. In addition, users of this data are advised that, pursuant to Rule 406T of Regulation S-T, these interactive data files are deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933 or Section 18 of the Securities Exchange Act of 1934 and otherwise are not subject to liability under these sections.
- + Indicates management contract or compensatory plan or arrangement.
- A Incorporated by reference to Amtech's Quarterly Report on Form 10-Q for the quarterly period ended December 31, 2011.
- B Incorporated by reference to Amtech's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 28, 2005.
- C Incorporated by reference to Amtech's Current Report on Form 8-K filed with the Securities and Exchange Commission on January 8, 2008.
- D Incorporated by reference to Amtech's Current Report on Form 8-K filed with the Securities and Exchange Commission on December 15, 2008.
- E Incorporated by reference to Amtech's Form S-8 Registration Statement (related to the 1998 Stock Option Plan), filed with the Securities and Exchange Commission on February 11, 2003.
- F Incorporated by reference to Amtech's Current Report on Form 8-K filed with the Securities and Exchange Commission on March 17, 2010.
- G Incorporated by reference to Amtech's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2012.
- H Incorporated by reference to Amtech's Current Report on Form 8-K filed with the Securities and Exchange Commission on July 6, 2012.
- Incorporated by reference to Amtech's Current Report on Form 8-K, filed with the Securities and Exchange Commission on April 26, 2011.
- J Incorporated by reference to Amtech's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2006.
- K Incorporated by reference to Amtech's Current Report on Form 8-K/A, filed with the Securities and Exchange Commission on December 3, 2012.
- L Incorporated by reference to Amtech's Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2007.
- M Incorporated by reference to Amtech's Current Report on Form 8-K, filed with the Securities and Exchange Commission on October 11, 2007.
- N Incorporated by reference to Amtech's Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2011.
- O Incorporated by reference to Amtech's Annual Report on Form 10-K for the quarterly year ended September 30, 2011.
- P Incorporated by reference to Amtech's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2013.