Registration Statement No. 333-

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

ASPEN TECHNOLOGY, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

04-2739697

(I.R.S. Employer Identification No.)

Ten Canal Park Cambridge, Massachusetts 02141 (617) 949-1000

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

David L. McQuillin President and Chief Executive Officer Aspen Technology, Inc. Ten Canal Park Cambridge, Massachusetts 02141 (617) 949-1000

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Stephen J. Doyle, Esq. Aspen Technology, Inc. Ten Canal Park Cambridge, Massachusetts 02141 Telephone: (617) 949-1000 Telecopy: (617) 949-1727

Mark L. Johnson, Esq.
Hale and Dorr LLP
60 State Street
Boston, Massachusetts 02109
Telephone: (617) 526-6038
Telecopy: (617) 526-5000

Approximate date of commencement of proposed sale to public: From time to time after this Registration Statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o ______

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. o

CALCULATION OF REGISTRATION FEE

Title of Shares to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share(2)	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee
Common Stock, \$0.10 par value per share(3)	8,358,724	\$5.86	\$48,982,123	\$3,963

- Consists of (a) shares issued or issuable upon conversion of Series D-2 convertible preferred stock, \$0.10 par value per share, (b) shares issued or issuable upon the exercise of warrants issued to the initial purchasers of such shares of Series D-2 convertible preferred stock, and (c) pursuant to Rule 416 under the Securities Act of 1933, an indeterminate number of shares of common stock issued or issuable as a result of stock splits, stock dividends, recapitalizations or similar events.
- issuable as a result of stock splits, stock dividends, recapitalizations or similar events.

 Estimated solely for purposes of calculating the registration fee pursuant to Rule 457(c) under the Securities Act and based upon the average of the high and low prices on the Nasdaq National Market
- on October 16, 2003.
 The shares being registered hereby will be accompanied by the registrant's preferred stock purchase rights. Until the occurrence of certain prescribed events, such rights are not exercisable, are evidenced by the certificates for the registrant's common stock, and will be transferred along with and only with the registrant's common stock.

The information in is not complete and may be changed. The selling stockholders named in this prospectus may not sell these securities until the registration statethis prospectusment filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and the selling stockholders named in this prospectus are not soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to completion, dated October 17, 2003

PROSPECTUS

8,358,724 Shares

ASPEN TECHNOLOGY, INC.

Common Stock

This prospectus relates to shares of common stock that may be offered and sold at various times by the selling stockholders identified beginning on page 13 of this prospectus. The offering is not being underwritten. These shares include shares that are issuable from time to time upon conversion of shares of our Series D-2 convertible preferred stock and upon the exercise of warrants by the selling stockholders. We will not receive any proceeds from the sale of the shares.

The selling stockholders identified in this prospectus, or their pledgees, donees, transferees or other successors-in-interest, may offer the shares from time to time through public or private transactions at prevailing market prices, at prices related to prevailing market prices or at privately negotiated prices.

Our common stock is traded on the Nasdaq National Market under the symbol "AZPN." On October 16, 2003, the closing sale price of the common stock on Nasdaq was \$5.80 per share. You are urged to obtain current market quotations for the common stock.

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page 4.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is [

1, 2003

TABLE OF CONTENTS

	Page
Prospectus Summary	3
The Offering	3
Risk Factors	4
Special Note Regarding Forward-Looking Information	13
Use Of Proceeds	14
Selling Stockholders	14
Plan Of Distribution	19
Legal Matters	20
Experts	20
Where You Can Find More Information	21
Incorporation Of Certain Documents By Reference	21

Aspen Technology Inc.'s executive offices are located at Ten Canal Park, Cambridge, Massachusetts 02141, our telephone number is (617) 949-1000 and our Internet address is www.aspentech.com. The information on our Internet website is not incorporated by reference in this prospectus.

"AspenTech" is our trademark. This prospectus also contains trademarks, service marks and trade names of other companies.

We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus. The selling stockholders are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of common stock.

PROSPECTUS SUMMARY

This summary highlights important features of this offering and the information included or incorporated by reference in this prospectus. This summary does not contain all of the information that you should consider before investing in our common stock. You should read the entire prospectus carefully, especially the risks of investing in our common stock discussed under "Risk Factors."

ASPEN TECHNOLOGY, INC.

We are a supplier of integrated software and services to the process industries, which consist of oil and gas, petroleum, chemicals, pharmaceutical and other industries that provide products from a chemical process. The process industries are under pressure to improve their operational productivity, as profit margins have declined steadily over the past two decades. Process manufacturers face a number of significant challenges, including volatile raw materials prices, overcapacity, environmental and regulatory requirements, and managing complex global businesses. To address these challenges we have further developed our products to provide new innovations to our customers and we have developed solutions specifically targeted at the emerging Enterprise Operations Management, or EOM, market.

THE OFFERING

Common Stock offered	8,358,724 shares of common stock are being offered by this prospectus. All of the shares offered by this prospectus are being sold by the selling stockholders. The selling stockholders consist of entities that purchased an aggregate of 63,064 shares of our Series D-2 convertible preferred stock, which shares are initially convertible into an aggregate of 6,306,400 shares of common stock, and related warrants, which are initially exercisable to acquire an aggregate of 2,052,324 shares of common stock.
Use of proceeds	We will not receive any proceeds from the sale of shares in this offering.
Nasdaq National Market symbol	AZPN
	3

3

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below before purchasing our common stock. The risks and uncertainties described below are not the only ones facing our company. Additional risks and uncertainties may also impair our business operations. If any of the following risks actually occur, our business, financial condition or results of operations would likely suffer. In that case, the trading price of our common stock could fall, and you may lose all or part of the money you paid to buy our common stock.

The FTC is challenging our acquisition of Hyprotech.

On August 7, 2003, the Federal Trade Commission, or FTC, announced that it has authorized its staff to file a civil administrative complaint alleging that our acquisition of Hyprotech in May 2002 was anticompetitive and seeking to declare the acquisition in violation of Section 5 of the Federal Trade Commission Act and Section 7 of the Clayton Act. An administrative law judge will adjudicate the complaint in a trial-type proceeding if we do not reach a settlement with the FTC prior to the conclusion of this proceeding. Any decision of the administrative law judge may be appealed to the commissioners of the FTC by either the FTC staff or us.

We can provide no assurance as to the outcome of the FTC's challenge. Because of the length of the appeals process, the outcome of this matter may not be determined for several years. If the FTC were to prevail in this challenge, it could seek to impose a wide variety of remedies, some of which would have a material adverse effect on our ability to continue to operate under our current business plans and on our results of operations. These potential remedies include divestiture of Hyprotech, mandatory licensing of Hyprotech software products and our other engineering software products to one or more of our competitors, or the creation of a new competitor through the divestiture of certain of our engineering software products and license agreements. If any of these remedies were imposed, we may be required to restructure our operations substantially, which could have an adverse impact on our results of operations and out stock price.

The commencement of this administrative proceeding will have the following adverse effects on our business:

- The proceeding will continue to divert the attention of our management.
- Uncertainties resulting from the initiation of this proceedings could harm our ability to compete in the marketplace, including our ability to negotiate license renewals with our customers.
- The cost of defending a proceeding of this nature and length, including any appeals, will be substantial and could reduce our cash flow. As of June 30, 2003, we had accrued \$13 million to cover the cost of (1) professional service fees associated with our cooperation in the FTC's investigation since its commencement on June 7, 2002, and (2) all estimated future professional services fees relating to the initial administrative

proceeding and any subsequent appeals. If these estimates are insufficient to cover all future costs relating to the proceeding, we may need to accrue additional amounts, which may have a material adverse effect on our results of operations.

Our lengthy sales cycle makes it difficult to predict quarterly revenue levels and operating results.

Because license fees for our software products are substantial and the decision to purchase our products typically involves members of our customers' senior management, the sales process for our solutions is lengthy and can exceed one year. Accordingly, the timing of our license revenues is difficult to predict, and the delay of an order could cause our quarterly revenues to fall substantially below expectations. Moreover, to the extent that we succeed in shifting customer purchases away from individual software products and toward more costly integrated suites of software and services, our

4

sales cycle may lengthen, which could increase the likelihood of delays and cause the effect of a delay to become more pronounced. Delays in sales could cause significant shortfalls in our revenues and operating results for any particular period.

Fluctuations in our quarterly revenues, operating results and cash flow may cause the market price of our common stock to fall.

Our revenues, operating results and cash flow have fluctuated in the past and may fluctuate significantly in the future as a result of a variety of factors, many of which are outside of our control, including:

- our customers' purchasing patterns;
- the length of our sales cycle;
- changes in the mix of our license revenues and service revenues;
- the timing of introductions of new solutions and enhancements by us and our competitors;
- seasonal weakness in the first quarter of each fiscal year, primarily caused by a slowdown in business in some of our international markets;
- the timing of our investments in new product development;
- changes in our operating expenses; and
- fluctuating economic conditions, particularly as they affect companies in the chemicals, petrochemicals and petroleum industries.

We ship software products within a short period after receipt of an order and typically do not have a material backlog of unfilled orders for software products. Consequently, revenues from software licenses in any quarter are substantially dependent on orders booked and shipped in that quarter. Historically, a majority of each quarter's revenues from software licenses has come from license agreements that have been entered into in the final weeks of the quarter. Therefore, even a short delay in the consummation of an agreement may cause our revenues to fall below public expectations for that quarter.

Since our expense levels are based in part on anticipated revenues, we may be unable to adjust spending quickly enough to compensate for any revenue shortfall and any revenue shortfall would likely have a disproportionately adverse effect on our operating results. We expect that these factors will continue to affect our operating results for the foreseeable future. Because of the foregoing factors, we believe that period-to-period comparisons of our operating results are not necessarily meaningful and should not be relied upon as indications of future performance.

If, due to one or more of the foregoing factors or an unanticipated cause, our operating results fail to meet the expectations of public market analysts and investors in a future quarter, the market price of our common stock would likely decline.

Because we derive a majority of our total revenues from customers in the cyclical chemicals, petrochemicals and petroleum industries, our operating results may suffer if these industries experience an economic downturn.

We derive a majority of our total revenues from companies in the chemicals, petrochemicals and petroleum industries. Accordingly, our future success depends upon the continued demand for manufacturing optimization software and services by companies in these process manufacturing industries. The chemicals, petrochemicals and petroleum industries are highly cyclical and highly reactive to the price of oil, as well as general economic conditions. In the past, worldwide economic

5

downturns and pricing pressures experienced by chemical, petrochemical and petroleum companies have led to consolidations and reorganizations. These downturns, pricing pressures and restructurings have caused delays and reductions in capital and operating expenditures by many of these companies. These delays and reductions have reduced demand for products and services like ours. A recurrence of these industry patterns, as well as general domestic and foreign economic conditions and other factors that reduce spending by companies in these industries, could harm our operating results in the future.

If economic conditions and the markets for our products do not improve, sales of our product lines, particularly our manufacturing and supply chain product suites, will be adversely affected.

Adverse changes in the economy and continuing global uncertainty have caused delays and reductions in information technology spending by our customers and a consequent deterioration of the markets for our products and services, particularly our manufacturing and supply chain product suites. If these adverse economic conditions continue or worsen, we will experience further reductions, delays, and postponements of customer purchases that will negatively impact our

revenue and operating results. If economic and political conditions and the market for our products do not improve and our revenues decline, our business could be harmed, and we may not be able to further reduce our costs to align them with these decreased revenues.

If we do not compete successfully, we may lose market share.

Our markets are highly competitive. Our engineering software competes with products of businesses such as Simulation Sciences, a division of Invensys, Shell Global Solutions, ABB, MDC Technology, Aveva Group plc (formerly Cadcentre), WinSim, Inc. (formerly ChemShare) Chemstations, Inc., and Process Systems Enterprise Ltd. As we expand our engineering solutions into the collaborative Process Lifecycle Management (PLM) market and the Enterprise Operations Management (EOM) market, we may see competition from companies that we have not typically competed against in the past or competition from companies in areas where we have not competed in the past, such as Agile, PTC, SAP, Honeywell, ABB, Invensys, Siemens and EDS. Our manufacturing/supply chain software competes with products of companies such as Honeywell's Hi-Spec division, Invensys, ABB, Rockwell, i2 Technologies, Manugistics and certain components of SAP's supply chain offering. We also face competition in all three areas from large companies in the process industries that have developed their own proprietary software solutions.

Some of our current competitors have significantly greater financial, marketing and other resources than we have. In addition, many of our current competitors have established, and may in the future continue to establish, cooperative relationships with third parties to improve their product offerings and to increase the availability of their products to the marketplace. The entry of new competitors or alliances into our market could reduce our market share, require us to lower our prices, or both. Many of these factors are outside our control, and we may not be able to maintain or enhance our competitive position against current and future competitors.

Our operating results may be harmed if our restructuring plans and cost reduction measures do not achieve the anticipated results or cause undesirable consequences.

Since the fourth quarter of fiscal 1999, we have implemented restructuring plans and cost reduction measures, which have included, among other things, significant workforce reductions and consolidation of facilities. Because of the nature and extent of the restructuring actions we have taken to date, we may be unable to initiate additional, significant restructuring measures in future periods. If we fail to achieve the desired results of our restructuring plans and our cost reduction measures, we may suffer material harm to our business.

6

Our cost reduction initiatives may yield unintended consequences, such as attrition beyond our planned reduction in workforce and reduced employee morale. As a result of these factors, our employees may seek alternate employment. Attrition beyond our planned reduction in workforce could have a material adverse effect on our financial performance.

If we do not continue to make the technological advances required by the marketplace, our business could be seriously harmed.

Enterprises are requiring their application software vendors to provide greater levels of functionality and broader product offerings. Moreover, competitors continue to make rapid technological advances in computer hardware and software technology and frequently introduce new products, services and enhancements. We must continue to enhance our current product line and develop and introduce new products and services that keep pace with the technological developments of our competitors. Our business and operating results could suffer if we cannot successfully respond to the technological advances of others or if our new products or product enhancements and services do not achieve market acceptance.

We must also satisfy increasingly sophisticated customer requirements. Under our business plan, we are investing significantly in the development of new business process products that are intended to anticipate and meet the emerging needs of our target market. We are focusing significantly on development of these products, which means we will not invest as substantially in the continued enhancement of our current products. We cannot assure you that our new product development will result in products that will meet market needs and achieve market acceptance.

Moreover, a portion of our product development for enterprise solutions in the foreseeable future is expected to be conducted through co-development arrangements with Accenture that we entered into in February 2002. Our business and operating results will be harmed if this co-development arrangement does not result in our being able to deliver timely products sought by companies in the process industries.

If we are unable to successfully market our products to senior executives of potential customers, our revenue growth may be limited.

With the development of our integrated manufacturing/supply chain solutions and the new solutions we are developing with Accenture, we are increasingly focused on selling the strategic value of our technology to the highest executive levels of customer organizations, typically the chief executive officer, chief financial officer or chief information officer. We have limited experience in selling and marketing at these levels. If we are not successful at selling and marketing to senior executives, our revenue growth and operating results could suffer.

$If we are unable to develop\ relationships\ with\ strategic\ partners,\ our\ revenue\ growth\ may\ be\ harmed.$

An element of our growth strategy is to strategically partner with a few select third-party implementation partners who market and integrate our products. The most significant of these partnerships is our joint marketing and development alliance with Accenture. If we do not adequately train a sufficient number of systems integrator partners, or if potential partners focus their efforts on integrating or co-selling competing products to the process industries, our future revenue growth could be limited and our operating results could be harmed. If our partners fail to implement our solutions for our customers properly, the reputations of our solutions and our company could be harmed and we might be subject to claims by our customers. We intend to continue to establish business relationships with technology companies to accelerate the development and marketing of our solutions. To the extent that we are unsuccessful in maintaining our existing relationships and developing new relationships, our revenue growth may be harmed.

We derive a substantial portion of our total revenues from service engagements and a significant percentage of these engagements have been undertaken on a fixed-price basis. We bear the risk of cost overruns and inflation in connection with fixed-price engagements, and as a result, any of these engagements may be unprofitable. In the past, we have had cost overruns on fixed-price service engagements. In addition, to the extent that we are successful in shifting customer purchases to our integrated suites of software and services and we price those engagements on a fixed-price basis, the size of our fixed-price engagements may increase, which could cause the impact of an unprofitable fixed-price engagement to have a more pronounced impact on our operating results.

Our business may suffer if we fail to address the challenges associated with international operations.

We derived approximately 50% of our total revenues from customers outside the United States in each of the fiscal years ended June 30, 2001, 2002 and 2003. We anticipate that revenues from customers outside the United States will continue to account for a significant portion of our total revenues for the foreseeable future. Our operations outside the United States are subject to additional risks, including:

- unexpected changes in regulatory requirements, exchange rates, tariffs and other barriers;
- political and economic instability;
- difficulties in managing distributors and representatives;
- difficulties in staffing and managing foreign subsidiary operations;
- difficulties and delays in translating products and product documentation into foreign languages;
- difficulties and delays in negotiating software licenses compliant with U.S. accounting revenue recognition requirements; and
- potentially adverse tax consequences.

The impact of future exchange rate fluctuations on our operating results cannot be accurately predicted. In recent years, we have increased the extent to which we denominate arrangements with international customers in the currencies of the countries in which the software or services are provided. From time to time we have engaged in, and may continue to engage in, hedges of a significant portion of installment contracts denominated in foreign currencies. Any hedging policies implemented by us may not be successful, and the cost of these hedging techniques may have a significant negative impact on our operating results.

We may not be able to protect our intellectual property rights, which could make us less competitive and cause us to lose market share.

We regard our software as proprietary and rely on a combination of copyright, patent, trademark and trade secret laws, license and confidentiality agreements, and software security measures to protect our proprietary rights. We have registered or have applied to register several of our significant trademarks in the United States and in certain other countries. We generally enter into non-disclosure agreements with our employees and customers, and historically have restricted access to our software products' source codes, which we regard as proprietary information. In a few cases, we have provided copies of the source code for some of our products to customers solely for the purpose of special product customization and have deposited copies of the source code for some of our products in third-party escrow accounts as security for ongoing service and license obligations. In these cases, we rely on non-disclosure and other contractual provisions to protect our proprietary rights.

8

The steps we have taken to protect our proprietary rights may not be adequate to deter misappropriation of our technology or independent development by others of technologies that are substantially equivalent or superior to our technology. Any misappropriation of our technology or development of competitive technologies could harm our business, and could force us to incur substantial costs in protecting and enforcing our intellectual property rights. The laws of some countries in which our products are licensed do not protect our products and intellectual property rights to the same extent as the laws of the United States.

Our software is complex and may contain undetected errors.

Like many other complex software products, our software has on occasion contained undetected errors or "bugs." Because new releases of our software products are initially installed only by a selected group of customers, any errors or "bugs" in those new releases may not be detected for a number of months after the delivery of the software. These errors could result in loss of customers, harm to our reputation, adverse publicity, loss of revenues, delay in market acceptance, diversion of development resources, increased insurance costs or claims against us by customers.

We may be subject to significant expenses and damages because of liability claims.

The sale and implementation of certain of our software products and services, particularly in the areas of advanced process control and optimization, may entail the risk of product liability claims. Our software products and services are used in the design, operation and management of manufacturing processes at large facilities, and any failure of our software could result in significant claims against us for damages or for violations of environmental, safety and other laws and regulations. Our agreements with our customers generally contain provisions designed to limit our exposure to potential product liability claims. It is possible, however, that the limitation of liability provisions in our agreements may not be effective as a result of federal, state or local laws or ordinances or unfavorable judicial decisions. A substantial product liability claim against us could harm our operating results and financial condition.

Implementation of our products can be difficult and time-consuming, and customers may be unable to implement our products successfully or otherwise achieve the benefits attributable to our products.

Our products are intended to work with complex business processes. Some of our software, such as customized scheduling applications and integrated supply chain products, must integrate with the existing computer systems and software programs of our customers. This can be complex, time-consuming and expensive. As a result, some customers may have difficulty in implementing or be unable to implement these products successfully or otherwise achieve the benefits attributable to these products. Customers may also make claims against us relating to the functionality, performance or implementation of this software. Delayed or ineffective implementation of the software products or related services may limit our ability to expand our revenues and may result in customer dissatisfaction, harm to our reputation and may result in customer unwillingness to pay the fees associated with these products.

If we fail to integrate the operations of the companies we acquire, we may not realize the anticipated benefits and our operating costs could increase.

We may pursue strategic acquisitions that will provide us with complementary products, services and technologies and with additional personnel. The identification and pursuit of these acquisition opportunities and the integration of acquired personnel, products, technologies and businesses require a significant amount of management time and skill. There can be no assurance that we will identify suitable acquisition candidates, consummate any acquisition on acceptable terms or successfully integrate any acquired business into our operations. Additionally, in light of the consolidation trend in

9

our industry, we expect to face competition for acquisition opportunities, which may substantially increase the cost of any potential acquisition.

We have experienced in the past, and may experience again in the future, problems integrating the operations of a newly acquired company with our own operations. Acquisitions also expose us to potential risks, including diversion of management's attention, failure to retain key acquired personnel, and assumption of legal or other liabilities and contingencies. Moreover, customer dissatisfaction with, or problems caused by, the performance of any acquired products or technologies could hurt our reputation.

If we are not successful in our management transition or in attracting and retaining management team members and other highly qualified individuals in our industry, we may not be able to successfully implement our business strategy.

Our ability to establish and maintain a position of technology leadership in the highly competitive software market depends in large part upon our ability to attract and retain highly qualified managerial, sales and technical personnel. We have historically relied on the services of Lawrence B. Evans, our principal founder and chairman and previously our president and chief executive officer. On October 1, 2002, David L. McQuillin, became our president and chief executive officer. Mr. McQuillin had been serving as one of our co-chief operating officers and had not previously served as the chief executive officer of a publicly traded corporation. On July 1, 2003, Charles F. Kane became our senior vice president and chief financial officer, succeeding Lisa W. Zappala, who had been our senior vice president and chief financial officer since September 1998.

Several of our executive officers have not entered into an employment agreement with us. In the future, we may experience the departure of other senior executives due to competition for talent from start-ups and other companies. Our future success depends on a continued, successful management transition and will also depend on our continuing to attract, retain and motivate highly skilled employees. Competition for employees in our industry is intense. We may be unable to retain our key employees or attract, assimilate or retain other highly qualified employees in the future. We have from time to time in the past experienced, and we expect to continue to experience in the future, difficulty in hiring and retaining highly skilled employees with appropriate qualifications.

Our common stock may experience substantial price and volume fluctuations.

The equity markets have from time to time experienced extreme price and volume fluctuations, particularly in the high technology sector, and those fluctuations have often been unrelated to the operating performance of particular companies. In addition, factors such as our financial performance, announcements of technological innovations or new products by us or our competitors, as well as market conditions in the computer software or hardware industries, may have a significant impact on the market price of our common stock.

In the past, following periods of volatility in the market price of a public companies securities, securities class action litigation has often been instituted against companies. This type of litigation could result in substantial costs and a diversion of management's attention and resources.

Our common stockholders may experience further dilution and the price of our common stock may decline as a result of our Series D preferred stock financing.

On August 14, 2003, we issued and sold 300,300 shares of Series D-1 convertible preferred stock, or Series D-1 preferred. We also delivered cash and 63,064 shares of Series D-2 convertible preferred stock, or Series D-2 preferred, in consideration for the surrender of all of our outstanding Series B-I convertible preferred stock, or Series B-I preferred, and Series B-II convertible preferred stock, or Series B-II preferred. Each share of Series D-1 preferred and Series D-2 preferred, which we refer to

10

collectively as the Series D preferred, is initially convertible into a number of shares of common stock equal to the stated value of \$333.00, divided by a conversion price of \$3.33. In addition, we issued warrants to purchase up to 7,267,286 shares of common stock at a purchase price of \$3.33 per share, which we refer to as the WD warrants, and exchanged existing warrants to purchase 791,044 shares of common stock for new warrants to purchase 791,044 shares of common stock at a purchase price of \$4.08 per share, which we refer to as the WB warrants. As a result of the Series D preferred financing, the warrants to purchase common stock which we issued as part of our common stock financing in May 2002 have become exercisable to purchase 1,152,665 shares of common stock at an exercise price of \$9.76 per share, which we refer to as the May 2002 warrants.

The Series D preferred, WD warrants, WB warrants and May 2002 warrants each contain terms which may result in additional, substantial dilution to existing common stockholders as follows:

- The Series D preferred, WD warrants, WB warrants and May 2002 warrants all have antidilution protection, which provides that the conversion price or exercise price adjusts downwards using a weighted-average calculation in the event we issue certain additional securities at a price per share less than the applicable Series D conversion price or warrant exercise price then in effect. These adjustments do not apply to the issuance of common stock or instruments in specified firm commitment underwritten public offerings, strategic arrangements, mergers or acquisitions, and grants and purchases of securities pursuant to equity incentive plans.
- Each share of Series D preferred is entitled to a cumulative dividend of 8.0% of the stated value per share of such Series D preferred per year, payable at the discretion of the board of directors. Accumulated dividends, when and if declared by our board, could be paid in cash or, subject to specified conditions, common stock. If we elect to pay dividends in shares of common stock, we will issue a number of shares of common stock

equal to the quotient obtained by dividing the dividend payment by the volume weighted average of the sale prices of the common stock on the Nasdaq National Market for 20 consecutive trading days, ending on the fourth trading day prior to the required dividend payment date.

- We have granted the holders of the Series D preferred preemptive rights under an investor rights agreement. Under that agreement, each holder of Series D preferred generally has a right to purchase its pro rata portion of certain future issuances of our equity securities until such time that the initial holders of Series D preferred or their permitted transferees, in the aggregate, hold less than 10% of the Series D preferred issued in the financing.
- As part of the Series D preferred financing, we have granted the Series D holders registration rights relating to the shares of common stock issuable upon the conversion of, or as dividends on, the Series D preferred and upon the exercise of either the WB Warrants or WD Warrants. Specifically, the Series D-1 preferred holders have the right to demand up to four registration statements covering such shares. The Series D-2 preferred holders have the right to have such shares included in a resale registration statement for an offering to be made on a continuous basis for a period of up to two years. Any sale of these shares of common stock into the public market could cause a decline in the trading price of our common stock.

In addition, the issuance of the Series D preferred shares constituted a change in corporate control under our current stock incentive plans. As a result of the change in corporate control, each outstanding option as of the closing (other than certain options held by executive officers) became fully exercisable. Immediately following the closing of the Series D preferred financing, there were outstanding options to acquire approximately 8,356,882 shares of common stock that were fully vested. Approximately 38.2% of these options had exercise prices less than \$10.00. These options, if exercised, will result in further dilution to holders of common stock.

11

Our redemption obligations under our convertible debentures or the repurchase of our convertible debentures in the open market could have a material adverse effect on our financial condition.

In June 1998, we completed a convertible debt offering of \$86,250,000 in $5^{1}/4\%$ convertible subordinated debentures that are due June 15, 2005. We have set aside \$45,000,000 of the Series D preferred financing proceeds we received in August 2003 to redeem or repurchase, at or prior to maturity, a portion of the convertible debentures. Even assuming we redeem \$45,000,000 of our convertible debentures, we will still have \$41,250,000 in convertible debentures due in June 2005. We may be required to dedicate a substantial portion of our cash flows from operations, including from the sale of receivables, to repay the principal and interest on the full amount of these convertible debentures. We may choose to repurchase a portion of the convertible debentures in the open market, subject to compliance with applicable laws and approval of our board of directors. However, we cannot guarantee that we will be able to effect these repurchases at favorable prices. Our repurchase of convertible debentures will reduce the cash we have available to fund operations, research and product development, capital expenditures and other general corporate purposes. In addition, we have incurred net losses in the past and may incur losses in the future that may impair our ability to generate the cash required to meet our obligations under the convertible debentures. If we cannot generate sufficient cash to meet these obligations, we may be required to incur additional indebtedness or raise additional capital which may negatively impact our stockholders.

We may need to raise additional capital.

We expect that the increase of \$15,000,000 to our working capital as a result of the Series D preferred financing together with our current cash balances, cash-equivalents, short-term investments, availability of sales of our installment contracts, availability under our bank line of credit and cash flows from operations will be sufficient to meet our working capital and capital expenditure requirements for at least the next twelve months. However, we may need to obtain additional financing thereafter or earlier, if our current plans and projections prove to be inaccurate or our expected cash flows prove to be insufficient to fund our operations because of lower-than-expected revenues, unanticipated expenses, including those related to the FTC proceedings or their outcome, or other unforeseen difficulties.

An important part of our cash management program is the sale of receivables. Historically, we have had arrangements to sell long-term contracts to two financial institutions, General Electric Capital Corporation and Fleet Business Credit Corporation. These contracts represent amounts due over the life of existing term licenses. During fiscal year ended June 30, 2003, installments receivable decreased by \$0.6 million to \$108.1 million. We sold \$66.7 million of installments receivable to General Electric Credit Corporation and Fleet Business Credit Corporation during fiscal 2003. Our ability to continue these arrangements or replace them with similar arrangements is important to maintain adequate funding.

Our ability to obtain additional financing will depend on a number of factors, including market conditions, our operating performance and investor interest. These factors may make the timing, amount, terms and conditions of any financing unattractive. In addition, the uncertain outcome of the FTC complaint creates a serious obstacle in us seeking additional financing. Until this complaint is resolved, we expect our ability to obtain additional financing will be substantially impaired. If adequate funds are not available or are not available on acceptable terms, we may have to forego strategic acquisitions or investments, reduce or defer our development activities, or delay our introduction of new products and services. Any of these actions may seriously harm our business and operating results.

12

The holders of our Series D preferred shares own a substantial portion of our capital stock that may afford them significant influence over our affairs.

As of September 24, 2003, the Series D preferred shares (as converted to common stock) represented 43.5% of our outstanding common stock and the WD warrants were exercisable for a number of shares representing 8.7% of our outstanding common stock (ignoring certain limitations on the ability to covert such shares or exercise such warrants). As a result, these stockholders, if acting together, would have the ability to delay or prevent a change in control of AspenTech that may be favored by other stockholders and otherwise exercise significant influence over all corporate actions requiring stockholder approval, irrespective of how our other stockholders may vote, including:

• any amendment of our certificate of incorporation or bylaws;

- the approval of some mergers and other significant corporate transactions, including a sale of substantially all of our assets; or
- the defeat of any non-negotiated takeover attempt that might otherwise benefit the public stockholders.

We expect to set aside \$45,000,000 of the net proceeds of the Series D preferred financing to repay a portion of the convertible debentures at or prior to maturity. If the board of directors were to determine that it was in our best interests to use all or a portion of those funds for another purpose, we would be unable to do so without the consent of the holders of our Series D-1 preferred shares. In addition, the holders of our Series D-1 preferred shares currently have the right to elect four of our nine board members and thereby may be able to exert substantial influence over matters submitted for board approval.

SPECIAL NOTE REGARDING FORWARD-LOOKING INFORMATION

This prospectus includes and incorporates forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. All statements, other than statements of historical facts, included or incorporated in this prospectus regarding our strategy, future operations, financial position, future revenues, projected costs, prospects, plans and objectives of management are forward-looking statements. The words "anticipates," "believes," "estimates," "expects," "intends," "may," "plans," "projects," "will," "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. We cannot guarantee that we actually will achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included or incorporated in this prospectus, particularly under the heading "Risk Factors," that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make. We do not assume any obligation to update any forward-looking statements.

13

USE OF PROCEEDS

All of the shares of common stock offered by this prospectus are being offered by the selling stockholders. For information about the selling stockholders, see "Selling Stockholders." We will not receive any proceeds from the sale of shares by the selling stockholders.

The selling stockholders will pay any underwriting discounts and commissions and expenses incurred by the selling stockholders for brokerage, accounting, tax or legal services or any other expenses incurred by the selling stockholders in disposing of the shares. We will bear all other costs, fees and expenses incurred in effecting the registration of the shares covered by this prospectus, including all registration and filing fees, Nasdaq listing fees and fees and expenses of our counsel and our accountants.

SELLING STOCKHOLDERS

The following table and related notes set forth information regarding the beneficial ownership of our common stock as of October 1, 2003 by the selling stockholders. The selling stockholders consist of entities that in August 2003 acquired an aggregate of 63,064 shares of our Series D-2 preferred and WD and WB warrants to acquire an aggregate of 2,052,324 shares of common stock. See "Series D-2 Convertible Preferred Stock and Warrants" below for a brief summary of terms of the securities issued to the selling stockholders.

The shares of common stock being offered by this prospectus consist of the shares of common stock issued from time to time after the date hereof pursuant to conversions of the Series D-2 preferred and exercises of the WD and WB warrants acquired by the selling stockholders in August 2003. The term "selling stockholder" includes donees, pledges, transferees or other successors-in-interest selling shares received after the date of this prospectus from the selling stockholders as a gift, pledge, partnership, distribution or other non-sale related transfer.

We do not know when or in what amounts a selling stockholder may offer shares for sale. The selling stockholders may choose not to sell any of the shares offered by this prospectus. Because the selling stockholders may offer all or some of the shares pursuant to this offering, and because there are currently no agreements, arrangements or understandings with respect to the sale of any of the shares, we cannot estimate the number of the shares that the selling stockholders will hold after completion of the offering. For purposes of the following table, we have assumed that the selling stockholders will sell all of the shares covered by this prospectus.

Beneficial ownership in the following table is determined in accordance with the rules of the SEC, and includes voting or investment power with respect to shares. Shares reflected under "Right to Acquire—Preferred" consist of shares of common stock issuable within 60 days after October 1, 2003 pursuant to conversions of the Series D-2 preferred. Shares reflected under "Right to Acquire—Warrants" consist of shares of common stock issuable within 60 days after October 1, 2003 pursuant to exercises of warrants. Shares set forth under "Right to Acquire" with respect to a selling stockholder are deemed outstanding for purposes of computing the percentage ownership of any other selling stockholder. Unless otherwise indicated below, to our knowledge, all selling stockholders named in the table have sole voting and investment power with respect to their shares of stock, except to the extent authority is shared by spouses under applicable law. The inclusion of any shares in this table does not constitute an admission of beneficial ownership for the person named below.

Under the terms of the Series D-2 preferred, the number of shares of common stock that may be acquired upon conversion of the Series D-2 preferred is limited to the extent necessary to ensure that, following such conversion, the common stock beneficially owned by a holder and its affiliates, and any

this 4.999% conversion limitation or increase the percent at which such limitation is triggered with respect to such holder. This 4.999% limitation is disregarded for the purposes of the following table.

	Beneficial Ownership Before Offering						Beneficial Ownership After Offering	
		Right to Acquire					The offering	
Name of Selling Stockholder	Outstanding Shares	Preferred	Warrants	Total Number	<u>%</u>	Shares Offered	Total Number	%
Pine Ridge Financial Inc. c/o Cavallo Capital Corp. 660 Madison Avenue New York, NY 10022	635,000	3,153,200	1,477,573	5,265,773	11.8%	4,165,189	1,100,584	2.7%
Perseverance LLC c/o Cavallo Capital Corp. 660 Madison Avenue New York, NY 10022	0	0	129,863	129,863	*	129,863	0	0%
Smithfield Fiduciary LLC c/o Highbridge Capital Management, LLC 9 West 57 th Street 27 th Floor New York, NY 10019	1,516,248	3,153,200	1,242,439	5,911,887	13.3%	4,063,672	1,848,215	4.6%

Less than one percent.

Cavallo Capital Corp. may be deemed to have voting control and investment discretion over the securities held by Pine Ridge Financial, Inc. and Perseverance LLC as the result of agreements it has entered into with those two entities.

Highbridge Capital Management, LLC is the trading manager of Smithfield Fiduciary LLC and consequently has voting control and investment discretion over securities held by Smithfield. Glenn Dubin and Henry Swieca control Highbridge. Each of Highbridge, Glenn Dubin and Henry Swieca disclaims beneficial ownership of the securities held by Smithfield.

Relationships with Selling Stockholders

None of the selling stockholders has held any position or office with, or has otherwise had a material relationship with, us or any of our subsidiaries within the past three years.

Series D-2 Convertible Preferred Stock and Warrants

Each share of the Series D-2 preferred will have a stated value of \$333.00 and will be entitled to a cumulative dividend of 8% per year, payable at the discretion of the board of directors. Accumulated dividends, when and if declared by the board, could be paid in cash or, subject to specified conditions, common stock. If we elect to pay the dividend in shares of common stock, we will issue a number of shares of common stock equal to the quotient obtained by dividing the dividend payment by the volume weighted average of the sale prices of the common stock on the Nasdaq National Market for 20 consecutive trading days, ending on the fourth trading day prior to the required dividend payment date.

15

Our ability to elect to pay the dividend on the Series D-2 preferred in shares of common stock is subject to certain conditions, including:

- we must provide appropriate notice to the holders of the Series D-2 preferred of our election to pay the dividend in shares of common stock;
- the common stock must be listed on the Nasdaq National Market or another market or stock exchange specified in the purchase agreement, without interruption, between the date on which we provide the notice described above and the date on which certificates representing the shares of common stock being issued in payment of the dividend are delivered to the holders of Series D-2 preferred;
- as of the delivery date of the certificates representing the common stock dividend, we have not received any written notice or warning from the Nasdaq National Market or another market or stock exchange with respect to the potential delisting of the common stock;
- the shares of common stock issued in payment of the dividend are registered pursuant to an effective registration statement filed under the Securities Act or such shares may be sold without volume restrictions pursuant to Rule 144(k) of the Securities Act; and
- neither we nor any of our material subsidiaries (1) has commenced (or has had commenced against it) a case under any bankruptcy, dissolution, liquidation or similar law, (2) has been adjudicated to be insolvent, (3) has made a general assignment for the benefit of creditors or (4) fails to pay, or stated in writing that it is unable to pay, its debts generally as they become due.

Except as described below or as otherwise provided by law, the holders of the Series D-2 preferred generally have the right to vote with the holders of our Series D-1 preferred and the holders of our common stock on an as-converted or economic equivalent basis. Each share of Series D-2 preferred will represent the lesser of:

- 100 votes per share; and
- the number of votes equal to the stated value of the Series D-2 preferred (\$333.00) divided by the average of the closing bid prices of the common stock on the Nasdaq National Market for the five trading days preceding the closing of the financing.

For example, if the average of the closing bid prices of the common stock for the five trading days preceding the closing of the financing is \$4.50 per share, each share of Series D-2 preferred will represent 74 votes. The approval of the holders of a majority of the shares of the Series D-1 preferred and the Series D-2 preferred, each voting separately as a class, will be required to approve certain corporate actions, including any amendment of our charter or by-laws that is inconsistent with the Series D-1 and Series D-2 certificate of designations or that adversely affects the holders of Series D-1 preferred and Series D-2 preferred and any authorization of a class of capital stock ranking senior to, or on parity with, the Series D-1 preferred and Series D-2 preferred. Holders of the Series D-2 preferred will not have a separate class approval right to approve a transaction that will result in a change in control of AspenTech, except as provided by law. Holders of the Series D-2 preferred will not have a separate class right to elect any directors, but will instead vote for the election of directors on an as-converted or economic equivalent basis, with holders of common stock.

Each share of Series D-2 preferred is convertible into common stock at any time at the option of the holder. Each share of Series D-2 preferred is convertible into a number of shares of common stock equal to its stated value divided by the conversion price of the Series D-2 preferred. The stated value of the Series D-2 preferred is \$333.00 per share and is subject to adjustment in the event of any stock dividend, stock split, reverse stock split, combination, split up, recapitalization and like occurrence affecting such shares. The initial conversion price of the Series D-2 preferred is \$3.33 per share, and

16

may be adjusted if certain events occur. Therefore, each share of Series D-2 preferred is initially convertible into 100 shares of common stock. The Series D-2 preferred has antidilution protection that adjusts the conversion price downwards using a weighted-average calculation in the event we issue certain additional securities at a price per share less than the Series D-2 conversion price then in effect.

We will be entitled to redeem the Series D-2 preferred for \$416.25 per share, plus any accumulated but unpaid dividends, at any time on or after the third anniversary of the issuance of the Series D-2 preferred if, among other things, the daily volume-weighted average trading price of the common stock on the Nasdaq National Market exceeds \$7.60 per share (subject to appropriate adjustment if a reverse split is effected) on each trading day for 45 consecutive trading days.

At the request of holders holding Series D-2 preferred with a stated value in excess of \$3,000,000 on or after the sixth anniversary of the closing, we will be required to redeem up to 50% of the Series D-2 preferred in cash at a price per share equal to \$333.00, plus accumulated but unpaid dividends. After the seventh anniversary of the closing such holders may require us to redeem 100% of their shares.

Upon the liquidation, dissolution or winding up of AspenTech, the holders of the Series D-2 preferred, along with the holders of the Series D-1 preferred, are entitled to be paid a liquidation preference out of the assets of AspenTech legally available for distribution to the stockholders before any payment may be made to the holders of common stock or any other holders of preferred stock. The liquidation preference is equal to the greater of (1) the stated value of the Series D-2 preferred, which is initially \$333.00 per share, plus any accumulated but unpaid dividends, and (2) the amount such holders would be entitled to if the Series D-2 preferred was converted into common stock immediately prior to the liquidation. Mergers and certain other similar transactions may be deemed to be liquidation events for these purposes.

Under the terms of the Series D-2 preferred, the number of shares of common stock that may be acquired upon conversion of Series D-2 preferred is limited to the extent necessary to ensure that, following such conversion, the common stock beneficially owned by a holder and its affiliates, and any other person that might be aggregated with such holder under Rule 13(d) of the Exchange Act, does not exceed 4.999% of the outstanding common stock, including common stock issuable upon conversion of the Series D-2 preferred. A holder of Series D-2 preferred may, upon 61 days' written notice to us, waive this 4.999% conversion limitation or increase the percent at which such limitation is triggered with respect to such holder.

The WB warrants issued to the selling stockholders may be exercised to acquire up to 791,044 shares of common stock at an initial exercise price of \$4.08 per share (both subject to appropriate adjustment if a reverse split is effected). The number of shares is further subject to adjustment in the event of stock splits, recapitalizations, reorganizations and, in certain circumstances, is subject to a weighted-average antidilution adjustment if we issue equity securities (or debt securities convertible into equity securities) at a price per share less than the exercise price then in effect. The WB warrants will be exercisable for cash or, at any time at which the underlying shares of common stock are not registered under the Securities Act, through a "cashless exercise" feature. The WB warrants will be exercisable immediately upon issuance and will have a term of approximately three and one-half years.

Upon certain fundamental transactions, such as a merger or consolidation, the sale of all or substantially all of our assets or the reclassification of the common stock, each holder of WB warrants has the right to receive the same amount and kind of securities, cash or property upon exercise as it would have been entitled to receive had it been the owner of the shares of common stock underlying the WB warrant at the time of such transaction. A holder of WB warrants may also require that any successor or surviving entity of AspenTech issue it a new warrant, on terms similar to those of the WB warrants. If such a transaction results in holders of common stock receiving consideration other than

17

freely tradeable securities of a public reporting company, then, at the request of any holder of WB warrants, we (or any successor or surviving entity of AspenTech) will be required to purchase the holder's WB warrant for a cash purchase price equal to the value of the remaining unexercised portion of the WB warrant. In the event of such a repurchase, the value of the remaining unexercised portion of the WB warrant will be determined by use of the Black and Scholes Option Pricing Model.

The WD warrants issued to the selling stockholders may be exercised to acquire up to 1,261,280 shares of common stock at an initial exercise price of \$3.33 per share (both subject to appropriate adjustment if a reverse split is effected). The number of shares is further subject to adjustment in the event of stock splits, recapitalizations, reorganizations and, in certain circumstances, is subject to a weighted-average antidilution adjustment if we issue equity securities (or debt securities convertible into equity securities) at a price per share less than the exercise price then in effect. The WD warrants will be exercisable for cash or, at any time at which the underlying shares of common stock are not registered under the Securities Act, through a "cashless exercise" feature. The WD warrants will be exercisable immediately upon issuance and will have a term of seven years.

Upon certain fundamental transactions, such as a merger or consolidation, the sale of all or substantially all of our assets or the reclassification of the common stock, each holder of WD warrants has the right to receive the same amount and kind of securities, cash or property upon exercise as it would have been

PLAN OF DISTRIBUTION

For purposes of the following description, the term "selling stockholders" includes donees, pledges, transferees or other successors-in-interest selling shares received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other non-sale related transfer. The selling stockholders may, from time to time, sell any or all of their shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling stockholders may use any one or more of the following methods when selling shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- · a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholders may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus.

The selling stockholders may also engage in short sales against the box, puts and calls and other transactions in our securities or derivatives of our securities and may sell or deliver shares in connection with these trades.

Broker-dealers engaged by the selling stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated. The selling stockholders do not expect these commissions and discounts to exceed what is customary in the types of transactions involved. Any profits on the resale of shares of common stock by a broker-dealer acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. Discounts, concessions, commissions and similar selling expenses, if any, attributable to the sale of shares will be borne by a selling stockholder. The selling stockholders may agree to indemnify any agent, dealer or broker-dealer that participates in transactions involving sales of the shares if liabilities are imposed on that person under the Securities Act.

The selling stockholders may from time to time pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock from time to time under this prospectus after we have filed an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus.

The selling stockholders also may transfer the shares of common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners

19

for purposes of this prospectus and may sell the shares of common stock from time to time under this prospectus after we have filed an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus.

The selling stockholders and any broker-dealers or agents that are involved in selling the shares of common stock may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares of common stock purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act.

We are required to pay certain fees and expenses incident to the registration of the shares of common stock, including certain fees and disbursements of counsel to the selling stockholders. We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

The selling stockholders have advised us that they have not entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of their shares of common stock, nor is there an underwriter or coordinating broker acting in connection with a proposed sale of shares of common stock by any selling stockholder. If we are notified by any selling stockholder that any material arrangement has been entered into with a broker-dealer for the sale of shares of common stock, if required, we will file a supplement to this prospectus. If the selling stockholders use this prospectus for any sale of the shares of common stock, they will be subject to the prospectus delivery requirements of the Securities Act.

The anti-manipulation rules of Regulation M under the Securities Exchange Act may apply to sales of our common stock and activities of the selling stockholders.

LEGAL MATTERS

The validity of the common stock offered by this prospectus has been passed upon by Hale and Dorr LLP.

EXPERTS

Our consolidated balance sheet as of June 30, 2003 and 2002 and the consolidated statements of income, stockholders' equity and cash flows for each of the two years in the period ended June 30, 2003 incorporated in this prospectus by reference from our Annual Report on Form 10-K for the year ended June 30, 2003 have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report (which expressed an unqualified opinion and includes explanatory paragraphs referring to the Company's change in method of accounting for goodwill and intangible assets and the reclassification of reimbursements from customers for out of pocket expenses), which is incorporated herein by reference and have been so incorporated in reliance upon the authority of such firm as experts in giving said reports.

Our consolidated statements of income, stockholders' equity and cash flows for the period ended June 30, 2001 incorporated by reference herein and in the Registration Statement have been audited by Arthur Andersen LLP, independent accountants, as indicated in their reports with respect thereto, and are included herein in reliance upon the authority of such firm as experts in giving said reports. Arthur Andersen LLP has not consented to the inclusion of their report in this prospectus, and we have not obtained their consent to do so in reliance upon Rule 437a under the Securities Act.

20

WHERE YOU CAN FIND MORE INFORMATION

We file reports, proxy statements and other documents with the SEC. You may read and copy any document we file at the SEC's public reference room at Judiciary Plaza Building, 450 Fifth Street, N.W., Room 1024, Washington, D.C. 20549. You should call 1-800-SEC-0330 for more information on the public reference room. Our SEC filings are also available to you on the SEC's Internet site at http://www.sec.gov.

This prospectus is part of a registration statement that we filed with the SEC. The registration statement contains more information than this prospectus regarding us and our common stock, including certain exhibits and schedules. You can obtain a copy of the registration statement from the SEC at the address listed above or from the SEC's Internet site.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC requires us to "incorporate" into this prospectus information that we file with the SEC in other documents. This means that we can disclose important information to you by referring to other documents that contain that information. The information incorporated by reference is considered to be part of this prospectus. Information contained in this prospectus and information that we file with the SEC in the future and incorporate by reference in this prospectus automatically updates and supersedes previously filed information. We incorporate by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, prior to the sale of all the shares covered by this prospectus.

- (1) Our annual report on Form 10-K for the fiscal year ended June 30, 2003;
- (2) Our current reports on Form 8-K filed on July 11, 2003 and August 22, 2003;
- (3) All of our filings pursuant to the Exchange Act after the date of filing the initial registration statement and prior to effectiveness of the registration statement; and
- (4) The description of our common stock contained in our registration statement on Form 8-A filed on September 13, 1994, as amended by an amendment to such registration statement on Form 8-A/A filed on June 12, 1998, and as updated by our current report on Form 8-K filed on August 22, 2003.

You may request a copy of these documents, which will be provided to you at no cost, by contacting:

Aspen Technology, Inc. Ten Canal Park Cambridge, Massachusetts 02141 Attention: Investor Relations Telephone: (617) 949-1000

Email: invest@aspentech.com Internet: www.aspentech.com

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the various expenses to be incurred in connection with the sale and distribution of the securities being registered hereby, all of which will be borne by AspenTech (except any underwriting discounts and commissions and expenses incurred by the selling stockholders for brokerage, accounting, tax or legal services or any other expenses incurred by the selling stockholders in disposing of the shares). All amounts shown are estimates except the Securities and Exchange Commission registration fee.

Securities and Exchange Commission registration fee	\$ 3,963
Legal fees and expenses	\$ 5,000
Accounting fees and expenses	\$ 2,500
Printing, EDGAR formatting and mailing expenses	\$ 5,000
Miscellaneous expenses	\$ 3,537
Total Expenses	\$ 20,000

Item 15. Indemnification of Directors and Officers.

Section 102 of the Delaware General Corporation Law allows a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. AspenTech has included such a provision in its Certificate of Incorporation, as amended (the "Certificate of Incorporation").

Section 145 of the General Corporation Law of Delaware provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against amounts paid and expenses incurred in connection with an action or proceeding to which he is or is threatened to be made a party by reason of such position, if such person shall have acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal proceeding, if such person had no reasonable cause to believe his conduct was unlawful; provided that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the adjudicating court determines that such indemnification is proper under the circumstances.

Article SEVENTH of the Registrant's Certificate of Incorporation provides that no director of the Registrant shall be personally liable for any monetary damages for any breach of fiduciary duty as a director, except to the extent that the Delaware General Corporation Law prohibits the elimination or limitation of liability of directors for breach of fiduciary duty.

Article EIGHTH of the Certificate of Incorporation provides that a director or officer of the Registrant shall be indemnified by the Registrant against:

(a) all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement incurred in connection with any litigation or other legal proceeding (other than an action by

22

or in the right of the Registrant) brought against him or her by virtue of his or her position as a director or officer of the Registrant if he or she acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the Registrant, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful; and

(b) all expenses (including attorneys' fees) and amounts paid in the settlement incurred in connection with any action by or in the right of the Registrant brought against him or her by virtue of his or her position as a director or officer of the Registrant if he or she acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the Registrant, except that no indemnification shall be made with respect to any matter as to which such person shall have been adjudged to be liable to the Registrant, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses.

Notwithstanding the foregoing, to the extent that a director or officer has been successful, on the merits or otherwise, including the dismissal of an action without prejudice, he or she is required to be indemnified by the Registrant against all expenses (including attorneys' fees) incurred in connection therewith. Expenses shall be advanced to a director or officer at his or her request, provided that he or she undertakes to repay the amount advanced if it is ultimately determined that he or she is not entitled to indemnification for such expenses.

Indemnification is required to be made unless the Registrant determines that the applicable standard of conduct required for indemnification has not been met. In the event of a determination by the Registrant that the director or officer did not meet the applicable standard of conduct required for indemnification, or if the Registrant fails to make an indemnification payment within sixty days after such payment is claimed by such person, such person is permitted to petition the court to make an independent determination as to whether such person is entitled to indemnification. As a condition precedent to the right of indemnification, the director or officer must give the Registrant notice of the action for which indemnity is sought and the Registrant has the right to participate in such action or assume the defense thereof.

Article EIGHTH of the Certificate of Incorporation further provides that the indemnification provided therein is not exclusive, and provides that in the event that the Delaware General Corporation Law is amended to expand the indemnification permitted to directors or officers the Registrant must indemnify those persons to fullest extent permitted by such law as so amended.

Item 16. Exhibits

				Incorporated by Reference	
Exhibit Number	Description	Filed with this Form S-3	Form	Filing Date with SEC	Exhibit Number
4.1	Certificate of Incorporation of Aspen Technology, Inc., as amended.		8-K	August 22, 2003	4
4.2	By-laws of Aspen Technology, Inc.		8-K	March 27, 1998	3.2
5.1	Opinion of Hale and Dorr LLP.	X			
23.1	Consent of Deloitte & Touche LLP.	X			
23.2	Notice Regarding Consent of Arthur Andersen LLP.	X			
23.3	Consent of Hale and Dorr LLP (contained in Exhibit 5.1).	X			
24.1	Power of Attorney (see page 23 of this Registration Statement).	X			
99.1	Securities Purchase Agreement dated as of June 1, 2003 between Aspen Technology, Inc. and the Purchasers named therein.		8-K	June 2, 2003	99.1
99.2	Repurchase and Exchange Agreement dated as of June 1, 2003 between Aspen Technology, Inc. and the Holders named therein.		8-K	June 2, 2003	99.2
99.3	Investor Rights Agreement dated as of August 14, 2003 between Aspen Technology, Inc. and the Stockholders named therein.		8-K	August 22, 2003	99.1
99.4	Form of WB Warrant of Aspen Technology, Inc. dated as of August 14, 2003.		8-K	August 22, 2003	99.3
99.5	Form of WD Warrant of Aspen Technology, Inc. dated as of August 14, 2003.		8-K	August 22, 2003	99.4

Item 17. Undertakings.

Item 512(a) of Regulation S-K. The undersigned Registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended (the "Securities Act");
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of this Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement. Notwithstanding the foregoing, any increase or decrease in the volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the

24

Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement;

of 1934, as amended (the "Exchange Act"), that are incorporated by reference in this Registration Statement.

- (2) That, for the purposes of determining any liability under the Securities Act, each post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at the time shall be deemed to be the initial *bona fide* offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

Item 512(b) of Regulation S-K. The Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

Item 512(h) of Regulation S-K. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the indemnification provisions described herein, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

25

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Commonwealth of Massachusetts, on October 15, 2003.

ASPEN TECHNOLOGY, INC.

By: /s/ DAVID L. MCQUILLIN

David L. McQuillin President and Chief Executive Officer

SIGNATURES AND POWER OF ATTORNEY

We, the undersigned officers and directors of Aspen Technology, Inc. hereby severally constitute and appoint David L. McQuillin, Charles F. Kane, and Mark L. Johnson and each of them singly, our true and lawful attorneys with full power to any of them, and to each of them singly, to sign for us and in our names in the capacities indicated below the Registration Statement on Form S-3 filed herewith and any and all pre-effective and post-effective amendments to said Registration Statement and generally to do all such things in our name and behalf in our capacities as officers and directors to enable Aspen Technology, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to said Registration Statement and any and all amendments thereto.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date	
/s/ DAVID L. MCQUILLIN	President and Chief Executive Officer and Director	October 15, 2003	
David L. McQuillin	(Principal Executive Officer)		
/s/ CHARLES F. KANE	Senior Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	October 15, 2003	
Charles F. Kane	(Finicipal Financial and Accounting Officer)		
/s/ LAWRENCE B. EVANS	Chairman of the Board of Directors	October 15, 2003	
Lawrence B. Evans			
/s/ GRESHAM T. BREBACH, JR.			
Gresham T. Brebach, Jr.	Director	October 15, 2003	

/s/ DOUGLAS R. BROWN	Director	October 15, 2003
Douglas R. Brown		
/s/ STEPHEN L. BROWN		
Stephen L. Brown	Director	October 15, 2003
/s/ STEPHEN M. JENNINGS		
Stephen M. Jennings	Director	October 15, 2003
/s/ JOAN C. MCARDLE		
Joan C. McArdle	Director	October 15, 2003
/s/ DOUGLAS KINGSLEY		
Douglas Kingsley	Director	October 15, 2003
/s/ MICHAEL PEHL		
Michael Pehl	Director	October 15, 2003
	27	

EXHIBIT INDEX

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		28			

QuickLinks

CALCULATION OF REGISTRATION FEE

TABLE OF CONTENTS

PROSPECTUS SUMMARY

ASPEN TECHNOLOGY, INC.

THE OFFERING

RISK FACTORS

SPECIAL NOTE REGARDING FORWARD-LOOKING INFORMATION

USE OF PROCEEDS

SELLING STOCKHOLDERS

PLAN OF DISTRIBUTION

LEGAL MATTERS

EXPERTS

WHERE YOU CAN FIND MORE INFORMATION

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

SIGNATURES

SIGNATURES AND POWER OF ATTORNEY

EXHIBIT INDEX

HALE AND DORR LLP COUNSELORS AT LAW 60 STATE STREET, BOSTON, MASSACHUSETTS 02109 617-526-6000 • FAX 617-526-5000

October 17, 2003

Aspen Technology, Inc. Ten Canal Park Cambridge, MA 02141

Registration Statement on Form S-3

Ladies and Gentlemen:

This opinion is furnished to you in connection with a Registration Statement on Form S-3 (the "Registration Statement") to be filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), for the registration of an aggregate of 8,358,724 shares of Common Stock, \$.10 par value per share (the "Shares"), of Aspen Technology, Inc., a Delaware corporation (the "Company"). All of the Shares are being registered on behalf of certain stockholders of the Company (the "Selling Stockholders").

We are acting as counsel for the Company in connection with the registration for resale of the Shares. We have examined signed copies of the Registration Statement to be filed with the Commission. We have also examined and relied upon minutes of meetings of the stockholders and the Board of Directors of the Company as provided to us by the Company, stock record books of the Company as provided to us by the Company, the Certificate of Incorporation and By-Laws of the Company, each as restated and/or amended to date, and such other documents as we have deemed necessary for purposes of rendering the opinions hereinafter set forth.

In our examination of the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as copies, the authenticity of the originals of such latter documents and the legal competence of all signatories to such documents.

Our opinion below, insofar as it relates to the Selling Stockholders' shares being fully paid, is based solely on a certificate of the Chief Financial Officer of the Company confirming the Company's receipt of the consideration called for by the applicable resolutions authorizing the issuance of such shares.

We assume that the appropriate action will be taken, prior to the offer and sale of the Shares, to register and qualify the Shares for sale under all applicable state securities or "blue sky" laws.

We express no opinion herein as to the laws of any state or jurisdiction other than the state laws of the Commonwealth of Massachusetts, the General Corporation Law of the State of Delaware and the federal laws of the United States of America.

Based upon and subject to the foregoing, we are of the opinion that the Shares have been duly authorized and are validly issued, fully paid and nonassessable.

It is understood that this opinion is to be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

Aspen Technology, Inc. October 17, 2003 Page 2

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters. This opinion is based upon currently existing statutes, rules, regulations and judicial decisions, and we disclaim any obligation to advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein.

We hereby consent to the filing of this opinion with the Commission as an exhibit to the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act and to the use of our name therein and in the related prospectus under the caption "Legal Matters." In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours, /s/ HALE AND DORR LLP

INDEPENDENT AUDITORS' CONSENT

The Board of Directors and Stockholders of Aspen Technology, Inc.

We consent to the incorporation by reference in this Registration Statement of Aspen Technology, Inc. (the "Company") on Form S-3 of our report dated September 29, 2003 (which expresses an unqualified opinion and includes explanatory paragraphs referring to the Company's change in method of accounting for goodwill and intangible assets and the reclassification of reimbursements from the customers for out of pocket expenses), appearing in the Annual Report on Form 10-K of Aspen Technology, Inc. for the year ended June 30, 2003, and to the reference to us under the heading "Experts" in the Prospectus, which is part of this registration statement.

DELOITTE & TOUCHE LLP

Boston, Massachusetts October 14, 2003

QuickLinks

INDEPENDENT AUDITORS' CONSENT

NOTICE REGARDING CONSENT OF ARTHUR ANDERSEN LLP

Section 11(a) of the Securities Act of 1933, as amended (the "Securities Act"), provides that if part of a registration statement at the time it becomes effective contains an untrue statement of a material fact, or omits a material fact required to be stated therein or necessary to make the statements therein not misleading, any person acquiring a security pursuant to such registration statement (unless it is proved that at the time of such acquisition such person knew of such untruth or omission) may assert a claim against, among others, an accountant who has consented to be named as having certified any part of the registration statement or as having prepared any report for use in connection with the registration statement.

On June 17, 2002, the board of directors of Aspen Technology, Inc. (the "Company"), upon the recommendation of its Audit Committee, dismissed Arthur Andersen LLP as the Company's independent public accountants and engaged Deloitte & Touche LLP, effective immediately, to serve as its independent public accountants for the fiscal year ending on June 30, 2002. For additional information, see the Company's Current Report on Form 8-K dated June 17, 2002 and filed with the Securities and Exchange Commission on June 18, 2002. The Company has been unable to obtain Andersen's written consent to the incorporation by reference into this registration statement of Andersen's audit report with respect to the Company's consolidated financial statements for the year ended December 31, 2001.

Under these circumstances, Rule 437a under the Securities Act permits the Company to file this registration statement, which incorporates by reference Andersen's audit report referred to above, without a written consent from Andersen. The absence of such consent may limit recovery by investors on certain claims. In particular, and without limitation, investors may not be able to assert claims against Andersen under Section 11(a) of the Securities Act for any untrue statement of a material fact contained in the financial statements audited by Andersen or for any omission of a material fact required to be stated therein. Accordingly, you would be unable to assert a claim against Andersen under Section 11(a) of the Securities Act because it has not consented to the incorporation by reference of its previously issued report in this registration statement.

QuickLinks

NOTICE REGARDING CONSENT OF ARTHUR ANDERSEN LLP