As filed with the Securities and Exchange Commission on June 9, 2005

Registration No. 333-117183

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Post-Effective
Amendment No. 3

to
FORM S-3
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

QUANEX CORPORATION

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

38-1872178 (I.R.S. Employer Identification No.)

1900 West Loop South, Suite 1500 Houston, Texas 77027 (713) 961-4600

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

Kevin P. Delaney 1900 West Loop South, Suite 1500 Houston, Texas 77027 (713) 961-4600

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

Copy to:

Harva R. Dockery Fulbright & Jaworski L.L.P. 1301 McKinney, Suite 5100 Houston, TX 77010 (713) 651-5151

Approximate Date of Commencement of Proposed Sale to the Public: From time to time after this registration statement becomes effective, subject to market conditions and other factors.

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

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 of 1933, 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.

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

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.



\$125,000,000



2.50% Convertible Senior Debentures due May 15, 2034 and the Common Stock Issuable Upon Conversion of the Debentures

We issued the debentures in a private placement on May 5, 2004. The securities to be offered and sold using this prospectus will be offered and sold by the selling security holders named in this prospectus. See "Selling Security Holders" beginning on page 18. We will not receive any of the proceeds from the sale by the selling security holders of the securities offered by this prospectus.

The debentures are due May 15, 2034. We will pay interest on the debentures at an annual rate of 2.50% of the principal amount on May 15 and November 15 of each year, commencing November 15, 2004. Beginning on May 15, 2011, we will pay contingent interest on the debentures if the average trading price of the debentures is above a specified level, as described in this prospectus.

Holders may surrender their debentures for conversion into shares of our common stock at a conversion rate of 26.1113 shares of our common stock per \$1,000 principal amount of debentures. This is equivalent to a conversion price of approximately \$38.2976 per share of common stock, subject to adjustment in some events. Holders may surrender their debentures for conversion if any of the following conditions is satisfied:

- during the fiscal quarter after any fiscal quarter ending on or after April 30, 2004, if the closing sale price of our common stock for at least 20 trading days in the 30 trading-day period ending on the last trading day of the previous fiscal quarter is more than 120% of the conversion price per share of our common stock on such last trading day;
- if we have called the debentures for redemption; or
- upon the occurrence of specified corporate transactions described in this prospectus.

Upon conversion of the debentures we may, in our discretion, in lieu of delivering shares of common stock, deliver cash or a combination of cash and shares of common stock. On January 26, 2005, we announced our irrevocable election to settle the principal amount of the debentures in cash when they become convertible and are surrendered by the holders thereof.

The debentures are our general unsecured senior obligations, ranking equally in right of payment with all of our existing and future unsecured senior indebtedness, and senior in right of payment to any of our existing and future subordinated indebtedness. The debentures are effectively subordinated to all of our senior secured indebtedness and all indebtedness and liabilities of our subsidiaries, including trade creditors.

On or after May 15, 2011, we may redeem for cash all or part of the debentures that have not previously been converted or purchased at a price equal to 100% of the principal amount of the debentures plus accrued and unpaid interest, contingent interest and additional interest, if any, up to but not including the date of redemption.

Holders may require us to purchase for cash all or part of their debentures on May 15 of 2011, 2014, 2019, 2024 and 2029 at a price equal to 100% of the principal amount of the debentures plus accrued and unpaid interest including contingent interest and additional interest, if any, up to but not including the date of purchase. In addition, upon a fundamental change (as described in this prospectus), each holder may require us to purchase for cash all or a portion of such holder's debentures at a price equal to 100% of the principal amount of the debentures plus accrued and unpaid interest including contingent interest and additional interest, if any, up to but not including the date of purchase.

The debentures will be treated as "contingent payment debt instruments" for United States federal income tax purposes and will be subject to special rules. You should read "Material U.S. Federal Income Tax Considerations".

Shares of our common stock are listed on the New York Stock Exchange under the symbol "NX". The closing price on the New York Stock Exchange on , 2005 was \$.

Investing in the debentures involves risks. See "Risk Factors" beginning on page 7.

Neither the SEC 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 , 2005

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You should rely only on the information contained in, or incorporated by reference into, this document or to which we have referred you. We have not authorized anyone to provide you with information that is different. This document may only be used where it is legal to sell these securities. The information in this document may only be accurate on the date of this document.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we have filed with the Securities and Exchange Commission using a "shelf" registration process. This means the securities described in this prospectus may be offered and sold using this prospectus from time to time as described in the "Plan of Distribution". You should carefully read this prospectus and the information described under the heading "Where You Can Find More Information". Under no circumstances should the delivery to you of this prospectus or any offering or sales made pursuant to this prospectus create any implication that the information contained in this prospectus is correct as of any time after the date of this prospectus.

SUMMARY

This summary highlights basic information contained in this prospectus. This summary may not contain all of the information that is important to you, and it is qualified in its entirety by the more detailed information and historical consolidated financial statements, including the notes to those financial statements, that are part of our reports filed with the SEC and incorporated by reference in this prospectus. You should carefully consider the information contained in and incorporated by reference in the entire prospectus, including the information set forth under the heading "Risk Factors". In this prospectus, the terms "we", "us", "our", "the Company", and "Quanex" refer to Quanex Corporation and its subsidiaries unless the context indicates otherwise.

Business Overview

We are a technological leader in the production of value-added engineered carbon and alloy steel bars, aluminum flat-rolled products, flexible insulating glass spacer systems, engineered vinyl and thermoplastic alloy composite components, and precision-formed metal and wood products, which primarily serve the vehicular products and building products markets. We use state-of-the-art manufacturing technologies, low-cost production processes, and engineering and metallurgical expertise to provide customers with specialized products for specific applications. Our net sales and operating income in the fiscal year ended October 31, 2004 were \$1.46 billion and \$99.4 million, respectively, and in the six months ended April 30, 2005 were \$1.0 billion and \$145.1 million, respectively.

We operate 23 manufacturing facilities in 11 states in the United States. These facilities feature efficient plant design and flexible manufacturing processes, enabling us to produce a wide variety of custom engineered products and materials for the vehicular products and building products markets. We are able to maintain minimal levels of finished goods inventories at most locations because we typically manufacture products upon order to customer specifications.

Other Information

Quanex was founded in 1927 and has been incorporated in Delaware since 1968. Our executive offices are located at 1900 West Loop South, Suite 1500, Houston, Texas 77027. Our telephone number at that address is (713) 961-4600. Our website address is www.quanex.com. The information on our website is not part of this prospectus.

Offering Summary

This prospectus covers the resale of up to \$125,000,000 aggregate principal amount of the debentures and the 3,263,913 shares of our common stock (and accompanying rights (see page 45)) issuable upon conversion of the debentures plus an indeterminate number of shares of our common stock issuable upon conversion of the debentures by means of adjustment of the conversion price pursuant to the terms of the debentures. We issued and sold a total of \$125,000,000 aggregate principal amount of the debentures on May 5, 2004 in a private placement to Credit Suisse First Boston LLC, Bear, Stearns & Co. Inc., Robert W. Baird & Co. Incorporated and KeyBanc Capital Markets, A Division of McDonald Investments Inc. (the "initial purchasers"). The following summary contains basic information about the debentures and is not intended to be complete. It does not contain all the information that is important to holders of the debentures. For a more complete understanding of the debentures, please refer to the section of this document entitled "Description of the Debentures". For purposes of the description of the debentures included in this prospectus, references to "the Company", "Issuer", "us", "we" and "our" refer only to Quanex Corporation.

| Issuer | Quanex Corporation, a Delaware corporation. |
|--------------------------|--|
| Securities Offered | \$125,000,000 aggregate principal amount of 2.50% Convertible Senior Debentures due May 15, 2034, including shares of our common stock into which the debentures are convertible. |
| Selling Security Holders | The securities to be offered and sold using this prospectus will be offered and sold by the selling security holders named in this prospectus. See "Selling Security Holders". |
| Issue Price | The debentures were issued at 100% of their principal amount plus accrued interest, if any, from May 5, 2004. |
| Maturity Date | May 15, 2034, unless earlier converted, redeemed by us at our option or repurchased by us at the option of the holders. |
| Interest | 2.50% per annum interest rate from May 5, 2004 on the principal amount, payable semiannually, in arrears, on each May 15 and November 15 beginning November 15, 2004 to the holders of record at the close of business on the preceding May 1 and November 1, respectively. Interest generally will be computed on the basis of a 360 day year comprised of twelve 30 day months. |
| Contingent Interest | We will pay contingent interest to the holders of debentures during any six month period from May 15 to November 14 and from November 15 to May 14, commencing with the six month period beginning May 15, 2011 if the average "debenture price", as that term is defined on page 19, of a debenture for the five trading days ending on the third trading day immediately preceding the first day of the relevant six month period equals 120% or more of the principal amount of such debenture. The amount of contingent interest payable per debenture in respect of any such six month period will be equal to 0.25% per annum of such average debenture price of such debenture. |

| Ranking | The debentures are our general unsecured senior obligations, ranking equally in right of payment with all of our existing and future unsecured senior indebtedness, and senior in right of payment to any of our existing and future subordinated indebtedness. The debentures are effectively subordinated to all of our senior secured indebtedness and all indebtedness and liabilities of our subsidiaries, including trade creditors. As of April 30, 2005, we had approximately \$110.0 million of senior secured indebtedness outstanding, while our subsidiaries had approximately \$121.9 million of liabilities, including approximately \$9.5 million of indebtedness, outstanding. We and our subsidiaries are not prohibited from incurring senior indebtedness or other debt under the indenture. See "Description of the Debentures—General". |
|-------------------|--|
| Conversion Rights | The debentures are convertible into shares of our common stock at a conversion rate of 26.1113 shares of our common stock per \$1,000 principal amount of debentures (which represents a conversion price of approximately \$38.2976 per share of common stock) under the conditions and subject to such adjustments as are described under "Description of the Debentures—Conversion Rights". |
| | |

Holders may surrender their debentures for conversion into shares of our common stock prior to the stated maturity under the following circumstances:

- during the fiscal quarter after any fiscal quarter ending on or after April 30, 2004, if the closing sale price of our common stock for at least 20 trading days in the 30 trading day period ending on the last trading day of the previous fiscal quarter is more than 120% of the conversion price per share of our common stock on such last trading day;
- if we have called the debentures for redemption; or
- upon the occurrence of specified corporate transactions.

| | common stock, deliver cash or a combination of cash and shares of common stock. If we elect to pay cash in lieu of shares, the payment will be based on the volume weighted average price of our common stock over a 20 trading day measurement period beginning on the third trading day following the conversion date. On January 26, 2005, we announced our irrevocable election to settle the principal amount of the debentures in cash when they become convertible and are surrendered by the holders thereof. See "Description of the Debentures—Conversion Rights". This notification is irrevocable and legally binding with regard to any conversion of the debentures. As such, the cash conversion settlement election made with respect to the principal amount on that date remains effective if the debentures cease to be convertible for any period but subsequently become convertible again. |
|---|--|
| | Until the debentures are surrendered for conversion, we will not be required to notify holders of our method for settling the excess amount of our conversion obligation relating to the amount of the conversion value above the principal amount, if any. |
| | Except as described in "Description of the Debentures—Conversion Rights", upon any conversion, you will not receive any separate cash payment representing accrued and unpaid interest including contingent interest and additional interest, if any. |
| Optional Redemption | On or after May 15, 2011, we may redeem for cash all or part of the debentures that have not been previously converted or purchased at a price equal to 100% of the principal amount of the debentures plus accrued and unpaid interest, including contingent interest and additional interest, if any, up to but not including the date of redemption. See "Description of the Debentures—Optional Redemption". |
| Repurchase of the Debentures at the Option of Holders | Holders may require us to purchase for cash all or part of their debentures on May 15 of 2011, 2014, 2019, 2024 and 2029 at a price equal to 100% of the principal amount of the debentures plus accrued and unpaid interest, including contingent interest and additional interest, if any, up to but not including the date of purchase. See "Description of the Debentures—Repurchase of Debentures at the Option of Holders—Optional put". |

| Fundamental Change | In the event of a fundamental change, as described in this prospectus, each holder may require us to purchase for cash all or a portion of such holder's debentures at a price equal to 100% of the principal amount of the debentures plus accrued and unpaid interest, including contingent interest and additional interest, if any, up to but not including the date of purchase. See "Description of the Debentures—Repurchase of Debentures at the Option of Holders—Repurchase of debentures at the option of holders upon a fundamental change". |
|-------------------------------|--|
| Sinking Fund | None. |
| Use of Proceeds | We used the net proceeds from the initial offering of the debentures to repay a portion of the amounts outstanding under our revolving credit agreement and for general corporate purposes. We will not receive any proceeds from the sale by any selling security holder of the debentures or our common stock issuable upon conversion of the debentures. |
| Registration Rights Agreement | If we fail to comply with certain of our obligations under the registration rights agreement, additional interest will be payable on the debentures or, following conversion, additional amounts with respect to the shares of common stock issued upon conversion. See "Description of the Debentures—Registration Rights". |
| DTC Eligibility | The debentures have been issued in book entry form and are represented by permanent global certificates deposited with, or on behalf of, The Depository Trust Company, or DTC, and registered in the name of a nominee of DTC. Beneficial interests in any of the debentures will be shown on, and transfers will be effected only through, records maintained by DTC or its nominee and any such interest may not be exchanged for certificated securities, except in limited circumstances. See "Description of the Debentures—Book Entry, Delivery and Form". |
| Listing and Trading | The debentures issued in the private placement are eligible for trading in the PORTAL SM Market of the NASD, Inc. The debentures sold using this prospectus, however, will no longer be eligible for trading in the PORTAL Market. We do not intend to list the debentures on any other national securities exchange or automated quotation system. Our common stock is quoted on the New York Stock Exchange under the symbol "NX". |
| | |

Risk Factors An investment in the debentures and the common stock issuable upon conversion of the debentures involves risks. Prospective investors should carefully consider the information set forth under "Risk Factors". U.S. Federal Income Tax Considerations The debentures and the common stock issuable upon conversion of the debentures are subject to

The debentures and the common stock issuable upon conversion of the debentures are subject to special and complex United States federal income tax rules. Prospective investors are urged to consult their own tax advisors with respect to the federal, state, local and foreign tax consequences of purchasing, owning and disposing of the debentures and common stock issuable upon conversion of the debentures. See "Risk Factors—You should consider the U.S. federal income tax consequences of owning the debentures" and "Material U.S. Federal Income Tax Considerations".

RISK FACTORS

Before you buy the debentures and the common stock issuable upon conversion of the debentures, you should carefully consider the factors described below in addition to the remainder of this prospectus and the information incorporated by reference. If any of the risks actually occur, our business, financial condition or results of operations could be negatively affected.

Risks Relating to our Business

If our raw materials or energy were to become unavailable or to significantly increase in price, we might not be able to timely produce products for our customers or maintain our profit levels.

We require substantial amounts of raw materials, substantially all of which are purchased from outside sources. Furthermore, we do not have long-term contracts for the supply of most of our raw materials. The availability and prices of raw materials may be subject to curtailment or change due to new laws or regulations, suppliers' allocations to other purchasers or interruptions in production by suppliers. For example, we experienced a steep increase in costs for steel and aluminum scrap in fiscal 2004 due to a global rebound in manufacturing and demand for steel in addition to increased demand from China and other consumers for scrap metal. In addition, the operation of our facilities requires substantial amounts of electric power and natural gas. Any change in the supply of, or price for, these raw materials or energy could affect our ability to timely produce products for our customers. Although we have contractual arrangements with many of our customers that permit us to increase our prices in response to increased raw material costs, in times of rapidly rising raw material prices the adjustments will lag the current market price.

Portions of our business are generally cyclical in nature. Lowered vehicle production, fewer housing starts, reduced remodeling expenditures or weaknesses in the economy could significantly reduce our net earnings.

Demand for our products is cyclical in nature and sensitive to general economic conditions. Our business supports cyclical industries such as the automotive and construction industries.

The demand for our Vehicular Products Segment's products is largely dependent on the North American production level of vehicles. The markets for our products have historically been cyclical because new vehicle demand is dependent on, among other things, consumer spending and is tied closely to the overall strength of the economy. Declines in vehicle production could significantly reduce our net earnings. Our sales are also impacted by retail inventory levels and our customers' production schedules. If our OEM customers significantly reduce their inventory levels and reduce their orders from us, our performance would be impacted.

The primary drivers of our Building Products Segment are housing starts and remodeling expenditures. The building and construction industry is cyclical, and product demand is based on numerous factors such as interest rates, general economic conditions, consumer confidence and other factors beyond our control. Declines in housing starts and remodeling expenditures due to such factors could significantly reduce our net earnings.

Portions of our business are seasonal in nature, leading to fluctuations in our quarterly earnings that may affect our ability to pay interest on the debentures.

Portions of our business are seasonal in nature and follow activity levels in the building and construction industry. The primary markets for our Building Products divisions are in the Northeast, Midwest and West Coast regions of the United States, where weather during the winter months typically reduces homebuilding and home improvement activity. These divisions typically experience their lowest sales during the Company's first fiscal quarter. Furthermore, due to the number of holidays in the Company's first fiscal quarter, sales have historically been lower in this period as some customers reduce production schedules. Accordingly, our results for the first and second quarters of our fiscal year are not indicative of our annual profitability. If our earnings on a seasonally slow quarter fall too

much, our ability to pay interest on the debentures may be impaired and the value of our common stock may decrease.

We are subject to various environmental requirements, and compliance with, or liabilities under, existing or future environmental laws and regulations could significantly increase our costs of doing business.

Our operations are subject to extensive federal, state and local laws and regulations concerning the discharge of materials into the environment and the remediation of chemical contamination. To satisfy such requirements, we must make capital and other expenditures on an ongoing basis. For example, environmental agencies continue to develop regulations implementing the Federal Clean Air Act. Depending on the nature of the regulations adopted, we may be required to incur additional capital and other expenditures in the next several years for air pollution control equipment, to maintain or obtain operating permits and approvals, and to address other air emission-related issues. Future expenditures relating to environmental matters will necessarily depend upon the application to Quanex and our facilities of future regulations and government decisions. It is likely that we will be subject to increasingly stringent environmental standards and the additional expenditures related to compliance with such standards. Furthermore, if we fail to comply with applicable environmental regulations, we could be subject to substantial fines or penalties and to civil and criminal liability.

Under applicable state and federal laws, we also may be responsible for, among other things, all or part of the costs required to remove or remediate wastes or hazardous substances at locations we have owned or operated at any time. We are currently involved in environmental investigations or remediation at several such locations. From time to time, we also have been alleged to be liable for all or part of the costs incurred to clean up third-party sites where we are alleged to have arranged for disposal of hazardous substances. While we have established reserves for such liabilities, such reserves may not be adequate to cover the ultimate cost of remedial measures required by environmental authorities.

Total remediation reserves, at April 30, 2005, for our current plants, former operating locations, and disposal facilities were approximately \$9.4 million. Of that current remediation reserve, approximately \$2.0 million represents administrative costs; the balance represents estimated costs for investigation, studies, cleanup, and treatment. Approximately 55% of the total remediation reserve currently is allocated to cleanup and other corrective measures relating to the former Piper Impact operation. At present, the largest component is for remediation of soil and groundwater contamination from prior operators at the former Piper Impact property on Highway 15 in New Albany, Mississippi. We voluntarily implemented a state-approved remedial action plan there that includes natural attenuation together with a groundwater collection and treatment system, but we continue to investigate site conditions and evaluate performance of the remedy. During the first quarter of 2005, the Company sold the Piper Impact business, including its sole operating facility on Barkley Drive in New Albany. The Company currently owns the Highway 15 location, which no longer is operating.

The discovery of previously unknown contamination, inadequate performance of a remedy or the imposition of new clean-up requirements at any site for which we are responsible could require us to incur additional costs or become subject to significant new or increased liabilities.

We may not be able to successfully identify, manage or integrate future acquisitions, and if we are unable to do so, we are unlikely to sustain our historical growth rates and profitability.

Historically, we have grown through a combination of internal growth and external expansion through acquisitions, such as our December 2003 acquisitions of TruSeal Technologies and MACSTEEL Monroe and our December 2004 acquisition of Mikron Industries. Although we are actively pursuing our growth strategy both in our domestic target markets and overseas and expect to continue doing so in the future, we cannot provide any assurance that we will be able to identify appropriate acquisition candidates or, if we do, that we will be able to successfully negotiate the terms of an acquisition, finance the acquisition or integrate the acquired business effectively and profitably into our existing

operations. Integration of Mikron Industries or future acquired businesses could disrupt our business by diverting management's attention away from day-to-day operations. Further, failure to successfully integrate any acquisition may cause significant operating inefficiencies and could adversely affect our profitability. Consummating an acquisition could require us to raise additional funds through additional equity or debt financing. Additional equity financing could depress the market price of our common stock. Additional debt financing could require us to accept covenants that limit our financial or operating flexibility, including our ability to pay dividends.

We operate in competitive markets, and our business will suffer if we are unable to adequately address potential downward pricing pressures and other factors that may reduce our operating margins.

The principal markets that we serve are highly competitive. Competition is based primarily on the precision and range of achievable tolerances, quality, price and the ability to meet delivery schedules dictated by customers. Our competition in the markets in which we participate comes from companies of various sizes, some of which have greater financial and other resources than we do and some of which have more established brand names in the markets we serve. Any of these competitors may foresee the course of market development more accurately than us, develop products that are superior to our products, have the ability to produce similar products at a lower cost than us, or adapt more quickly than us to new technologies or evolving customer requirements. Increased competition could force us to lower our prices or to offer additional services at a higher cost to us, which could reduce our gross profit and net income, particularly in lower-margin businesses such as Nichols Aluminum.

OEMs have significant pricing leverage over suppliers and may be able to achieve price reductions over time, which will reduce our profits.

Temroc Metals sells directly to OEMs. Our Engineered Products division's products are sold primarily to OEMs, except for some residential building products, which are sold through distributors. MACSTEEL's and Nichols Aluminum's products are sold directly to OEMs and in smaller amounts through distributors. There is substantial and continuing pressure from OEMs in various industries, especially the automotive industry, to reduce the prices they pay to suppliers. We attempt to manage such downward pricing pressure, while trying to preserve our business relationships with our OEM customers, by seeking to reduce our production costs through various measures, including purchasing raw materials and components at lower prices and implementing cost-effective process improvements. However, our suppliers may resist pressure to lower their prices and may seek to impose price increases. If we are unable to offset OEM price reductions through these measures, our gross margins and profitability could be adversely affected. In addition, OEMs have substantial leverage in setting purchasing and payment terms, including the terms of accelerated payment programs under which payments are made prior to the account due date in return for an early payment discount.

We could lose customers and the related revenues due to the transfer of manufacturing capacity by our customers out of the United States to lower cost regions of the world.

Manufacturing activity in the United States has been on the decline over the past several years. One of the reasons for this decline is the migration by U.S. manufacturers to other regions of the world that offer lower cost labor forces. The combined effect is that U.S. manufacturers can reduce product costs by manufacturing and assembling in other regions of the world and then importing those products to the United States. Some of our customers have shifted production to other regions of the world and there can be no assurance that this trend will not continue. We will lose customers and revenues if our customers locate in areas that we choose not to serve or that we cannot economically serve.

If our relationship with our employees were to deteriorate, we may be faced with labor shortages, disruptions or stoppages, which could shut down certain of our operations, reducing our revenue and income.

Our operations rely heavily on our employees, and any labor shortage, disruption or stoppage caused by poor relations with our employees and/or renegotiation of labor contracts could shut down certain of our operations. Approximately 34% of our employees are covered by collective bargaining agreements which expire between 2006 and 2009. It is possible that we could become subject to additional work rules imposed by agreements with labor unions, or that work stoppages or other labor disturbances could occur in the future, any of which could reduce our revenue due to lost sales and income. Similarly, any failure to negotiate a new labor agreement when required might result in a work stoppage that could reduce our operating margins and income.

In addition, many OEMs and their suppliers have unionized work forces. Work stoppages or slowdowns experienced by OEMs or their suppliers could result in slowdowns or closures of assembly plants where our products are included in assembled vehicles. In the event that one or more of our customers experiences a material work stoppage, such work stoppage could prevent the customers from purchasing our products.

Changes in regulatory requirements or new technologies may render our products obsolete or less competitive.

Changes in legislative, regulatory or industry requirements or in competitive technologies may render certain of our products obsolete or less competitive, preventing us from selling them at profitable prices, or at all. Our ability to anticipate changes in technology and regulatory standards and to successfully develop and introduce new and enhanced products on a timely and cost-efficient basis will be a significant factor in our ability to remain competitive. Our business may, therefore, require significant ongoing and recurring additional capital expenditures and investments in research and development. We may not be able to achieve the technological advances necessary for us to remain competitive or certain of our products may become obsolete. We are also subject to the risks generally associated with new product introductions and applications, including lack of market acceptance, delays in product development and failure of products to operate properly.

Equipment failures, delays in deliveries or catastrophic loss at any of our manufacturing facilities could lead to production curtailments or shutdowns that prevent us from producing our products.

An interruption in production capabilities at any of our facilities as a result of equipment failure or other reasons could result in our inability to produce our products, which would reduce our sales and earnings for the affected period. In addition, we generally manufacture our products only after receiving the order from the customer and thus do not hold large inventories. In the event of a stoppage in production at any of our manufacturing facilities, even if only temporary, or if we experience delays as a result of events that are beyond our control, delivery times could be severely affected. Any significant delay in deliveries to our customers could lead to increased returns or cancellations and cause us to lose future sales. Our manufacturing facilities are also subject to the risk of catastrophic loss due to unanticipated events such as fires, explosions or violent weather conditions. We have in the past and may in the future experience plant shutdowns or periods of reduced production as a result of equipment failure, delays in deliveries or catastrophic loss, which could have a material adverse effect on our results of operations or financial condition. Although we have obtained property damage and business interruption insurance, we may not have adequate insurance to compensate us for all losses that result from any of these events.

Our business involves complex manufacturing processes that may result in costly accidents or other disruptions of our operations.

Our business involves complex manufacturing processes. Some of these processes involve high pressures, hot metal and other materials and equipment that present certain safety risks to workers

employed at our manufacturing facilities. Although we employ safety procedures in the design and operation of our facilities, the potential exists for accidents involving death or serious injury. The potential liability resulting from any such accident, to the extent not covered by insurance, could cause us to incur unexpected cash expenditures, thereby reducing the cash available to us to operate our business and pay interest on the debentures. Such an accident could disrupt operations at any of our facilities, which could adversely affect our ability to deliver product to our customers on a timely basis and to retain our current business.

Flaws in the design or manufacture of our products could cause product liability or warranty claims for which we do not have adequate insurance or affect our reputation among customers.

Our products are essential components in vehicles, buildings and other applications where problems in the design or manufacture of our products could result in property damage, personal injury or death. While we believe that our liability insurance is adequate to protect us from product liability and warranty liabilities, our insurance may not cover all liabilities or be available in the future at a cost acceptable to us. In addition, if any of our products prove to be defective, we may be required to participate in a recall involving such products. A successful claim brought against us in excess of available insurance coverage, if any, or a requirement to participate in any product recall, could significantly reduce our profits or negatively affect our reputation with customers.

Risks Related to the Debentures and our Common Stock

The debentures are unsecured and future secured indebtedness, as well as all indebtedness of our subsidiaries, will rank effectively senior to the debentures.

The debentures are unsecured and rank equal in right of payment with our existing and future unsecured and senior indebtedness. The debentures are effectively subordinated to our secured debt to the extent of the value of the assets that secure that indebtedness. In the event of our bankruptcy, liquidation or reorganization or upon acceleration of the debentures, payment on the debentures could be less, ratably, than on any secured indebtedness. We may not have sufficient assets remaining to pay amounts due on any or all of the debentures then outstanding. As of April 30, 2005, we had approximately \$110.0 million of senior secured indebtedness outstanding. The debentures effectively would be subordinated to such borrowings.

The debentures are not guaranteed by any of our subsidiaries. Our right to receive any distribution of assets of any subsidiary upon that subsidiary's liquidation, reorganization or otherwise, is subject to the prior claims of creditors of that subsidiary, except to the extent we are also recognized as a creditor of that subsidiary. As a result, the debentures are effectively subordinated to the claims of such creditors. As of April 30, 2005, our subsidiaries had approximately \$9.5 million of aggregate indebtedness outstanding to which the debentures effectively are subordinated.

The indenture governing the debentures does not prohibit or limit us or our subsidiaries from incurring additional indebtedness, including additional secured indebtedness, and other liabilities, or from pledging assets to secure such indebtedness and liabilities. The incurrence of additional indebtedness and, in particular, the granting of a security interest to secure the indebtedness, could adversely affect our ability to pay our obligations on the debentures. As of April 30, 2005, we had \$184.2 million available under our revolving credit agreement. Furthermore, our revolving credit agreement would have allowed us to incur approximately \$95.4 million of additional indebtedness as of April 30, 2005 (although additional amounts could be incurred if the banks waived certain covenants contained in the revolving credit agreement).

We may not be able to repay or repurchase the principal amount of the debentures when required.

At maturity, the entire outstanding principal amount of the debentures will become due and payable by us. In addition, on May 15 of 2011, 2014, 2019, 2024 and 2029 or if certain designated events occur (as described in "Description of the Debentures—Repurchase of Debentures at the

Option of Holders"), holders of the debentures may require us to repurchase their debentures for cash. If the holders require us to repurchase the debentures as described under "Description of the Debentures—Repurchase of Debentures at the Option of Holders—Optional put" or in the event a fundamental change occurs, we will be required to purchase all or any part of the holder's debentures at a purchase price equal to 100% of their principal amount, plus accrued and unpaid interest (including contingent interest and additional interest, if any) to, but not including, the date of purchase. It is possible that we will not have sufficient funds at the time of repurchase to make the required repurchases of the debentures or that restrictions in our other indebtedness may not allow these repurchases. Our failure to purchase the debentures would be a default under the indenture. We refer you to "Description of the Debentures—Repurchase of Debentures at the Option of Holders".

You should consider the U.S. federal income tax consequences of owning the debentures.

Under the indenture governing the debentures, we agreed, and by acceptance of a beneficial interest in a debenture each holder of a debenture is deemed to have agreed, to treat the debentures as indebtedness for U.S. federal income tax purposes that is subject to the Treasury regulations governing contingent payment debt instruments. For U.S. federal income tax purposes, interest income on the debentures will accrue at the rate of 5.86% per year, compounded semi-annually, which rate represents our determination of the yield at which we could have issued, as of the issue date, a comparable noncontingent, nonconvertible, fixed-rate debt instrument with terms and conditions otherwise similar to the debentures. A United States Holder (as that term is defined in "Material U.S. Federal Income Tax Considerations") will be required to accrue interest income on a constant yield to maturity basis at this rate (subject to certain adjustments), with the result that a United States Holder generally will recognize taxable income significantly in excess of regular interest payments received while the debentures are outstanding.

A United States Holder will also recognize gain or loss on the sale, conversion, exchange, redemption or retirement of a debenture in an amount equal to the difference between the amount realized on the sale, conversion, exchange, redemption or retirement of a debenture, including the fair market value of our common stock received, and the United States Holder's adjusted tax basis in the debenture. Any gain recognized on the sale, conversion, exchange, redemption or retirement of a debenture generally will be ordinary interest income; any loss will be ordinary loss to the extent of the interest previously included in income, and thereafter, capital loss. The material U.S. federal income tax consequences relevant to persons holding the debentures are summarized in this prospectus under the heading "Material U.S. Federal Income Tax Considerations".

If we increase the cash dividend on our common stock, an adjustment to the conversion rate may result, and you may be deemed to have received a taxable dividend subject to U.S. federal income tax without the receipt of any cash. If you are a Non-United States Holder (as defined in "Material U.S. Federal Income Tax Considerations"), such deemed dividend may be subject to U.S. federal withholding tax at a 30% rate or such lower rate as may be specified by an applicable treaty. See "Material U.S. Federal Income Tax Considerations".

We expect that the trading value of the debentures will be significantly affected by the price of our common stock and other factors which may affect the price you receive if you sell the debentures.

The market price of the debentures is expected to be significantly affected by the market price of our common stock. This may result in greater volatility in the trading value of the debentures than would be expected for nonconvertible debt securities. In addition, the debentures have a number of features, including conditions to conversion, that could result in a holder receiving less than the value of our common stock into which a debenture would otherwise be convertible. These features could adversely affect the value and the trading price for the debentures.

Because there is no current market for the debentures, an active trading market may not develop.

There is no established trading market for the debentures. We do not intend to list the debentures for trading on a national securities exchange. Although the debentures issued in the private placement are currently traded on the PORTAL Market, there may be no liquidity in any market for the debentures, the holders may not be able to sell their debentures, or the prices at which holders of the debentures would be able to sell their debentures may not be acceptable. The debentures could trade at prices higher or lower than their initial purchase prices depending on many factors. Accordingly, there can be no assurance that a market for the debentures will develop. Furthermore, if a market were to develop, the market price for the debentures may be adversely affected by changes in our financial performance, changes in the overall market for similar securities and changes in performance or prospects for companies in our industry.

If we experience a fundamental change, we may be unable to purchase your debentures as required under the indenture.

Upon a fundamental change, as described in this prospectus, you will have the right to require us to repurchase your debentures. If we experience a fundamental change and do not have sufficient funds to pay the repurchase price for all of the debentures you tendered, an event of default under the indenture governing the debentures would occur as a result of such failure. Such a fundamental change would also constitute a default under our revolving credit agreement, resulting in the acceleration of the amounts due thereunder and termination of the agreement. We may not have sufficient funds to repurchase the debentures and repay the revolving credit facility simultaneously. In addition, a fundamental change may be prohibited or limited by, or create an event of default under, other agreements relating to borrowings which we may enter into from time to time. Borrowings under the revolving credit agreement will be, and other borrowings are likely to be, senior indebtedness. Therefore, a fundamental change at a time when we cannot pay for your debentures that are tendered as a result of such fundamental change could result in your receiving substantially less than the principal amount of the debentures. See "Description of the Debentures—Repurchase of Debentures at the Option of Holders—Repurchase of debentures at the option of holders upon a fundamental change".

The debentures are not protected by restrictive covenants, so our operation of the business may reduce the value of the debentures and we may enter into major transactions without the consent of the holders of the debentures.

The indenture governing the debentures does not contain any financial or operating covenants or restrictions on the payment of dividends, the incurrence of indebtedness or liens or the issuance or repurchase of securities by us or any of our subsidiaries. The indenture contains no covenants or other provisions to afford protection to holders of the debentures in the event of a fundamental change involving us, except to the extent described under "Description of the Debentures—Repurchase of Debentures at the Option of Holders—Repurchase of debentures at the option of holders upon a fundamental change" and "Description of the Debentures—Consolidation, Merger and Sale of Assets". We could enter into certain transactions, including recapitalizations, that would not constitute a fundamental change but would increase the amount of debt, including other senior indebtedness, outstanding or otherwise adversely affect the debentures.

The conditional conversion feature of the debentures could result in your receiving less than the value of the common stock into which a debenture is convertible.

The debentures are convertible only if specified conditions are met. If the specified conditions for conversion are not met, you will not be able to convert your debentures, and you will not be able to receive the value of the common stock into which the debentures would otherwise be convertible.

Upon conversion of the debentures, we will pay cash in lieu of issuing shares of our common stock for the principal amount of the debentures. Therefore, holders of the debentures will receive no shares of

our common stock for the principal amount of the debentures, and as to any excess amount, may receive no shares of our common stock or fewer shares than the number into which their debentures are convertible.

On January 26, 2005, we announced our irrevocable election to settle the principal amount of the debentures in cash when they become convertible and are surrendered by the holders thereof. We have the right to satisfy our obligation with respect to any excess amounts due to holders as a result of conversion of the debentures by issuing shares of common stock into which the debentures are convertible, the cash value of the common stock into which the debentures are convertible, or a combination thereof. Accordingly, upon conversion of a debenture, holders may not receive any shares of our common stock, or they might receive fewer shares of common stock relative to the conversion value of any excess amounts due as a result of conversion of the debentures. Further, our liquidity may be reduced because we have elected to deliver cash upon conversion for the principal amount of the debentures, and may be further reduced to the extent that we choose to deliver cash rather than shares of common stock for any excess amounts due as a result of conversion of debentures.

If we elect to settle any excess amounts due as a result of conversion of the debentures in cash or a combination of cash and common stock, your settlement will be delayed for an additional 22 trading days.

On January 26, 2005, we announced our irrevocable election to settle the principal amount of the debentures in cash when they become convertible and are surrendered by the holders thereof. If we elect to settle any excess amounts upon conversion of debentures in cash or a combination of cash and our common stock, settlement with respect to this excess amount will be delayed until the 25th trading day following our receipt of the holder's conversion notice, unless the cash settlement averaging period is extended under certain circumstances or the holder submits its conversion notice within 30 trading days prior to maturity. See "Description of the Debentures—Conversion Rights—Payment Upon Conversion".

We have the ability to issue additional equity securities, which would lead to dilution of our issued and outstanding common stock.

The issuance of additional equity securities or securities convertible into equity securities, as well as the conversion of the debentures or any other securities convertible into equity securities, would result in dilution of existing stockholders' equity interests in us. We are authorized to issue, without stockholder approval, 1,000,000 shares of preferred stock, no par value per share, in one or more series, which may give other stockholders dividend, conversion, voting, and liquidation rights, among other rights, which may be superior to the rights of holders of our common stock. Our board of directors has the authority to issue, without vote or action of stockholders, shares of preferred stock in one or more series, and has the ability to fix the rights, preferences, privileges and restrictions of any such series. Any such series of preferred stock could contain dividend rights, conversion rights, voting rights, terms of redemption, redemption prices, liquidation preferences or other rights superior to the rights of holders of our common stock. Our board of directors has no present intention of issuing any such preferred series, but reserves the right to do so in the future. In addition, we are authorized to issue, without stockholder approval, up to 50,000,000 shares of common stock, \$.50 par value per share, of which 25,104,325 were outstanding as of March 8, 2005. We are also authorized to issue, without stockholder approval, securities convertible into either common stock or preferred stock.

Trading in the debentures may result in increased short selling of our common stock, and conversion of the debentures will dilute the existing owners of our common stock.

Certain purchasers of convertible debentures pursue trading strategies which entail selling short the equity securities issuable upon conversion of the debentures; should future purchasers of our debentures pursue such trading strategies any such short sales may have a downward effect on the trading price of our common stock. Upon any conversion of the debentures into our common stock, existing shareholders of the common stock will experience dilution to the extent of the common shares

issued upon conversion, and our reported earnings per share may, under certain circumstances, be less than our reported earnings per share had the conversion not occurred.

We are subject to a new accounting rule that results in lower earnings per share, on a diluted basis.

At its September 2004 meeting, the Emerging Issues Task Force (EITF) of the Financial Accounting Standards Board (FASB) reached a conclusion on EITF Issue No. 04-8, "The Effect of Contingently Convertible Debt on Diluted Earnings Per Share", that would require the contingent shares issuable under the debentures to be included in our diluted earnings per share calculation retroactive to the date of issuance by applying the "if converted" method under FASB Statement No. 128, "Earnings Per Share" (FAS 128). The new rule was ratified by the FASB in October 2004. Under the consensus, companies are required to retroactively restate diluted earnings per share numbers applying the "if converted" method of accounting from the issuance date of the contingently convertible bond. The Company adopted the consensus reached by the EITF on Issue 04-8 on January 31, 2005. Prior to adopting the consensus, the Company announced that it had irrevocably elected to settle the principal amount of its Debentures in cash when they become convertible and are surrendered by the holders thereof. The Company retains its option to satisfy any premium obligation (stock price in excess of conversion price) with either shares, cash or a combination of shares and cash. As a result of the Company's election, diluted earnings per share includes only the amount of shares it would take to satisfy the premium obligation assuming all of the Debentures were surrendered. The Company estimates that for every \$3.00 increase in its stock price above the Debentures' conversion price of \$38.30, diluted earnings per share will be reduced by approximately \$0.01 per quarter.

FORWARD-LOOKING STATEMENTS

Certain of the statements contained in this prospectus and in documents incorporated by reference herein are "forward-looking" statements as defined under the Private Securities Litigation Reform Act of 1995. Generally, the words "expect", "believe", "intend", "estimate", "anticipate", "project", "will" and similar expressions identify forward-looking statements, which generally are not historical in nature. All statements which address future operating performance, events or developments that we expect or anticipate will occur in the future, including statements relating to volume, sales, operating income and earnings per share, and statements expressing general optimism about future operating results, are forward-looking statements. Forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from our company's historical experience and our present projections or expectations. As and when made, management believes that these forward-looking statements are reasonable. However, caution should be taken not to place undue reliance on any such forward-looking statements since such statements speak only as of the date when made and there can be no assurance that such forward-looking statements will occur. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Factors exist that could cause our actual results to differ materially from the expected results described in or underlying our company's forward-looking statements. Some of such factors are described in the "Risk Factors" section of this prospectus and include:

- worldwide political stability and domestic and international economic activity,
- availability of steel and aluminum scrap and other raw materials;
- prevailing prices of steel and aluminum scrap and other raw material costs,
- the rate of change in prices for steel and aluminum scrap,
- energy costs,
- interest rates,
- · market conditions, particularly in the vehicular, home building and remodeling markets,
- any material changes in purchases by our principal customers,
- labor supply and relations,
- new environmental regulations,
- changes in estimates of costs for environmental cleanup or compliance,
- the successful implementation of our internal operating plans, and acquisition strategies and integration,
- · performance issues with key customers, suppliers and subcontractors, and
- regulatory changes and legal proceedings.

Accordingly, there can be no assurance that the forward-looking statements contained herein will occur or that objectives will be achieved. All written forward-looking statements attributable to Quanex or persons acting on our behalf are expressly qualified in their entirety by such factors.

RATIO OF EARNINGS TO FIXED CHARGES

We have computed the ratio of earnings to fixed charges for each of the following periods on a consolidated basis.

| | Fiscal years ended October 31, | | | | Six months ended April 30, 2005 | |
|------|--------------------------------|------|-------|-------|--|--|
| 2000 | 2000 2001 2002 2003 2004 | | | | | |
| * | 4.0x | 7.3x | 24.3x | 15.7x | 25.1x | |

^{*} For the fiscal year ended October 31, 2000, fixed charges exceeded earnings by approximately \$14.9 million.

Ratio of earnings to fixed charges is computed by dividing income before taxes and fixed charges by fixed charges. Fixed charges consist of interest charges, capitalized interest and amortization of debt issuance costs. The computation is as follows:

| | | Fiscal years ended October 31, | | | | Six months ended | |
|------------------------------------|----|--------------------------------|---------|---------------------|----------------------|---------------------|-------------------|
| | | 2000 | 2001 | 2002 | 2003 | 2004 | April 30, 2005 |
| | | | (| dollars in thousand | ls, except per share | data) | |
| Income (loss) before income taxes | \$ | (14,856) \$ | 45,622 | \$ 81,614 | \$ 65,823 | \$ 88,775 | \$ 129,199 |
| Add: | | | | | | | |
| Interest expense | | 15,255 | 16,555 | 14,812 | 2,517 | 5,514 | 5,058 |
| Debt issuance amortization | | 502 | 367 | 121 | 312 | 535 | 292 |
| Capitalized interest | | (1,941) | (1,666) | (1,879) | _ | _ | _ |
| | _ | | | | | | |
| Earnings (loss) as defined | \$ | (1,040) \$ | 60,878 | \$ 94,668 | \$ 68,652 | \$ 94,824 | \$ 134,549 |
| Interest expense | \$ | 15,255 \$ | 16,555 | \$ 14,812 | \$ 2,517 | \$ 5,514 | \$ 5,058 |
| Debt issuance amortization | | 502 | 367 | 121 | 312 | 535 | 292 |
| Capitalized interest | | (1,941) | (1,666) | (1,879) | _ | _ | _ |
| | | | | | | | |
| Fixed charges as defined | \$ | 13,816 \$ | 15,256 | \$ 13,054 | \$ 2,829 | \$ 6,049 | \$ 5,350 |
| Ratio of earnings to fixed charges | | * | 4.0x | 7.3x | 24.3x | 15.7x | |

^{*} For the fiscal year ended October 31, 2000, fixed charges exceeded earnings by approximately \$14.9 million.

NO PROCEEDS

On May 5, 2004, the Company issued the debentures in a private placement to Credit Suisse First Boston, Bear, Stearns & Co. Inc., Robert W. Baird & Co., and KeyBanc Capital Markets as initial purchasers. The net proceeds from the private placement, totaling approximately \$122 million, were used to repay a portion of the amounts outstanding under our revolving credit agreement.

The securities to be offered and sold using this prospectus will be offered and sold by the selling security holders named in this prospectus or in any amendment to this prospectus. We will not receive any proceeds from the sale of the securities or conversion of the debentures. The shares of our common stock offered by this prospectus are issuable upon conversion of the debentures with respect to any excess above the principal amount, which excess amount may be settled in cash, stock or a combination of cash and stock.

SELLING SECURITY HOLDERS

On May 5, 2004, we issued and sold a total of \$125,000,000 aggregate principal amount of the debentures in a private placement to Credit Suisse First Boston LLC, Bear, Stearns & Co. Inc., Robert W. Baird & Co. Incorporated and KeyBanc Capital Markets, A Division of McDonald Investments Inc. (which we refer to as the initial purchasers in this prospectus). The debentures were resold in transactions exempt from the registration requirements of the Securities Act of 1933, as amended, to "qualified institutional buyers" (as defined in Rule 144A under the Securities Act) in compliance with Rule 144A. The selling security holders, which term includes their transferees, distributees, pledgees or donees or their successors, may from time to time offer and sell pursuant to this prospectus any and all of the debentures and any shares of our common stock issuable upon conversion of the debentures for any excess amount above the principal amount, which excess amount may be settled in cash, stock or a combination of cash and stock, will be made when the debentures are tendered for conversion).

The debentures and our shares of common stock to be issued upon conversion of the debentures are being registered pursuant to a registration rights agreement between us and the initial purchasers. In that agreement, we undertook to file a registration statement with regard to the debentures and our shares of common stock issuable upon conversion of the debentures and, subject to certain exceptions, to keep that registration statement effective for up to two years. The registration statement to which this prospectus relates is intended to satisfy our obligations under that agreement.

The selling security holders named below have advised us that they currently intend to sell the debentures and our shares of common stock set forth below pursuant to this prospectus. The selling security holders may offer all, some or none of the debentures or the common stock into which the debentures are convertible. To our knowledge, none of the selling security holders named below nor any of their affiliates, officers, directors or principal equity holders, has, during the three years prior to the date of this prospectus, held any position, office or other material relationship with us or any of our predecessors or affiliates, except as may be noted below in "Plan of Distribution".

Unless the securities were purchased pursuant to this registration statement, before a security holder not named below may use this prospectus in connection with an offering of securities, this prospectus will be amended to include the name and amount of debentures and common stock beneficially owned by the selling security holder and the amount of debentures and common stock to be offered. Any amended prospectus will also disclose whether any selling security holder selling in connection with that amended prospectus has held any position, office or other material relationship with us or any of our predecessors or affiliates during the three years prior to the date of the amended prospectus.

The following table is based solely on information provided by the selling security holders. This information represents the information provided to us by selling security holders on or prior to the last business day prior to the date of this prospectus.

| Selling Security Holder | Amount of Debentures Beneficially Owned(\$) | Percentage of Debentures Outstanding | Amount of Debentures to be Sold(\$)(1) | Number of Shares of Common Stock Beneficially Owned(2)(3)† | Number of Shares of Common Stock That May Be Sold(1)(3)†# | Number of Shares of Common Stock upon Completion of Offering(1)† | |
|--|--|--|--|---|---|--|--|
| Citadel Equity Fund Ltd.(8)(11) | 34,750,000 | 27.8 | 34,750,000 | 907,367.68 | 907,367.68 | 0 | |
| Credit Suisse First Boston LLC(5) | 500,000 | 27.0 | 500.000 | 13.055.65 | 13.055.65 | 0 | |
| CSS, LLC(5)(22) | 1,000,000 | * | 1,000,000 | 26,111.30 | 26,111.30 | 0 | |
| Excelsior Master Fund LP(19) | 1,000,000 | * | 1,000,000 | 26,111.30 | 26,111.30 | 0 | |
| FrontPoint Convertible Arbitrage Fund, | 1,000,000 | | 1,000,000 | 20,111.50 | 20,111.50 | 0 | |
| L.P.(6) | 5,000,000 | 4.00 | 5,000,000 | 130,556.50 | 130,556.50 | 0 | |
| Georgia Firefighter's Pension Fund(12) | 270,000 | 4.00 | 270,000 | 7,050.05 | 7.050.05 | 0 | |
| Highbridge International LLC(8)(10) | 21,700,000 | 17.36 | 21,700,000 | 566,615.21 | 566,615.21 | 0 | |
| KBC Financial Products USA Inc.(5) | 21,700,000 | 17.30 | 21,700,000 | 300,013.21 | 300,013.21 | 0 | |
| (7) | 550,000 | * | 550,000 | 14,361.22 | 14,361.22 | 0 | |
| Laurel Ridge Capital, LP(14) | 2,000,000 | 1.60 | 2,000,000 | 52,222.60 | 52,222.60 | 0 | |
| Newport Alternative Investment | 2,000,000 | 1.00 | 2,000,000 | 32,222.00 | 32,222.00 | 0 | |
| Fund(18) | 932,000 | * | 932,000 | 24,335.74 | 24,335.74 | 0 | |
| Radcliffe SPC, Ltd. for and on behalf of | 932,000 | | 932,000 | 24,335.74 | 24,335.74 | 0 | |
| the Class A Convertible Crossover | | | | | | | |
| Segregated Portfolio(9) | 8,975,000 | 7.18 | 8,975,000 | 234,348.92 | 234.348.92 | 0 | |
| Radian Asset Assurance, Inc(12). | 1,595,000 | 1.28 | 1,595,000 | 41,647.53 | 41,647.53 | 0 | |
| | 1,595,000 | 1.20 | 1,595,000 | 41,047.55 | 41,047.55 | 0 | |
| Radian Group Convertible | 1 500 000 | 1.20 | 1 500 000 | 30 166 05 | 20.166.05 | 0 | |
| Securities(12) Radian Guaranty(12) | 1,500,000 4,370,000 | 1.20 3.50 | 1,500,000 4,370,000 | 39,166.95 114,106.38 | 39,166.95 114,106.38 | 0 | |
| Rampart Convertible Arbitrage | 4,370,000 | 3.50 | 4,370,000 | 114,100.50 | 114,106.56 | U | |
| LLC(21) | 1,500,000 | 1.20 | 1,500,000 | 39,166,95 | 39.166.95 | 0 | |
| Silverback Master, Ltd.(23) | 5,000,000 | 4.00 | 5,000,000 | 130,556.50 | 130,556.50 | | |
| | | 2.00 | | | | 0 | |
| Silvercreek II Limited(18) | 2,506,000 | 2.69 | 2,506,000 | 65,434.92 87,786.19 | 65,434.92 87,786.19 | 0 | |
| Silvercreek Limited Partnership(18) | 3,362,000 | 5.60 | 3,362,000 | | | 0 | |
| UBS AG London F/B/O HFS(20) | 7,000,000 | 3.00 | 7,000,000 | 182,779.10 | 182,779.10 | · · | |
| UBS Securities LLC(4)(5) | 100,000 | * | 100,000 | 65,051.13(16) | 2,611.13 | 62,440 | |
| University of Arkansas(12) | 270,000 | * | 270,000 | 7,050.05 | 7,050.05 | 0 | |
| University of Arkansas Foundation(12) | 270,000 | * | 270,000 | 7,050.05 | 7,050.05 | Ü | |
| Waterstone Market Neutral MAC 51, | CE 4 000 | * | CE 4 000 | 17.076.00 | 17.076.00 | 0 | |
| Ltd.(13) Waterstone Market Neutral Master | 654,000 | | 654,000 | 17,076.80 | 17,076.80 | 0 | |
| | 0.146.000 | 6.50 | 0.146.000 | 212 702 65 | 212 702 65 | 0 | |
| Fund, Ltd.(13) | 8,146,000 | 6.52 | 8,146,000 | 212,702.65 | 212,702.65 | 0 | |
| Unidentified Security Holders | 12,050,000 | 9.64 | 12,050,000 | 314,641.63(17) | 314,641.63(17) | | |
| TOTAL | \$ 125,000,000 | 100%\$ | 125,000,000 | 3,326,353(16)† | 3,263,913† | 62,440 | |

[†] Reflects adjustments, as required by the anti-dilution provisions of the indenture governing the debentures, resulting from a stock split paid on December 31, 2004 in the form a 50% stock dividend on the Company's common stock to all stockholders of record on December 17, 2004 and increased cash dividends paid by the Company in September 2004 and December 2004.

^{*} Less than 1%

[#] On January 26, 2005, we announced our irrevocable election to settle the principal amount of the debentures in cash when they become convertible and are surrendered by the holders thereof.

⁽¹⁾ Because a selling security holder may sell all or a portion of the debentures and common stock issuable upon conversion of the debentures (see note # above) pursuant to this prospectus, no estimate can be given as to the number or percentage of debentures and common stock that the selling security holder will hold upon termination of any sales. The information

presented assumes that all of the selling security holders will fully exchange the debentures for shares of our common stock and that the selling security holders will sell all shares of our common stock that they received pursuant to such exchange.

- (2) Includes shares of common stock issuable upon conversion of the debentures (see note # above).
- (3) For purposes of this table, the number of shares of our common stock issuable upon conversion of the debentures is calculated assuming the conversion of the full amount of debentures held by such holder at a conversion rate of 26.1113 shares of our common stock per \$1,000 principal amount of the debentures, which equals a conversion price of approximately \$38.2976. This conversion rate is subject to adjustment as described under "Description of Debentures—Conversion Rights—Conversion Rate Adjustments". Accordingly, the number of shares of our common stock to be sold may increase or decrease from time to time. Fractional shares will not be issued upon conversion of the debentures. Cash will be paid instead of fractional shares, if any. On January 26, 2005, we announced our irrevocable election to settle the principal amount of the debentures in cash when they become convertible and are surrendered by the holders thereof.
- (4) This selling security holder is a reporting company under the Securities Exchange Act.
- (5) This selling security holder has identified itself as a registered broker-dealer and, accordingly, it is, under the interpretations of the Securities and Exchange Commission, an "underwriter" within the meaning of the Securities Act of 1933. Please see "Plan of Distribution" for required disclosure regarding these selling security holders.
- (6) FrontPoint Convertible Arbitrage Fund GP LLC is the general partner of FrontPoint Convertible Arbitrage Fund, L.P. FrontPoint Partners LLC is the managing member of FrontPoint Convertible Arbitrage Fund GP, LLC and as such has voting and dispositive power over the securities held by the fund. Philip Duff, W. Gillespie Caffray and Paul Ghaffari are members of the board of managers of FrontPoint Partners LLC and are the sole members of its management committee. Messrs. Duff, Caffray and Ghaffari and FrontPoint Partners LLC and FrontPoint Convertible Arbitrage Fund GP, LLC each disclaim beneficial ownership of the securities held by the fund except for their pecuniary interest therein.
- (7) KBC Financial Products USA Inc. exercises voting and investment control over any shares of common stock issuable upon conversion of the Notes owned by this selling shareholder. Mr. Luke Edwards, Managing Director, may be deemed to be the beneficial owner of these securities since he exercises voting and investment control over them.
- (8) This selling security holder has identified itself as an affiliate of a registered broker-dealer and has represented to us that such selling security holder acquired its debentures or underlying common stock in the ordinary course of business and, at the time of the purchase of the debentures or the underlying common stock, such selling security holder had no agreements or understandings, directly or indirectly, with any person to distribute the debentures or underlying common stock. To the extent that we become aware that such selling security holder did not acquire its debentures or underlying common stock in the ordinary course of business or did have such an agreement or understanding, we will file a post-effective amendment to the registration statement of which this prospectus forms a part to designate such affiliate as an "underwriter" within the meaning of the Securities Act of 1933.
- (9) Pursuant to an investment management agreement, RG Capital Management, L.P. ("RG Capital") serves as the investment manager of Radcliffe SPC, Ltd.'s Class A Convertible Crossover Segregated Portfolio. RGC Management Company, LLC ("Management") is the general partner of RG Capital. Steve Katznelson and Gerald Stahlecker serve as the managing members of Management. Each of RG Capital, Management and Messrs. Katznelson and Stahlecker disclaims beneficial ownership of the securities owned by Radcliffe SPC, Ltd. for and on behalf of the Class A Convertible Crossover Segregated Portfolio.
- (10) Glenn Dubin and Henry Swieca are the principals of Highbridge Capital Management, the trading advisor to Highbridge International LLC. As such, they may be deemed to be the beneficial owners of these securities since they exercise voting and investment power over them.
- (11) Citadel Limited Partnership ("Citadel") is the trading manager of Citadel Equity Fund Ltd. and consequently has investment discretion over securities held by Citadel Equity Fund Ltd. Citadel disclaims beneficial ownership of the shares beneficially owned by Citadel Equity Fund Ltd. Kenneth C. Griffin indirectly controls Citadel and therefore has ultimate investment discretion over securities held by Citadel Equity Fund Ltd. Mr. Griffin disclaims beneficial ownership of the shares held by Citadel Equity Fund Ltd.
- (12) Maren Lindstrom may be deemed to be the beneficial owner of these securities since she exercises voting and investment power over them.
- (13) Shawn Bergerson may be deemed to be the beneficial owner of these securities since he exercises voting and investment power over them.
- (14) Van Nguyen, Jon Illuzzi, Andrew Mitchell, Nathaniel Newlin, Timothy Walton and Venkatesh Reddy may be deemed to be the beneficial owners of these securities since they exercise voting and investment powers over them.
- (15) Lionhart Investments Limited may be deemed to be the beneficial owner of these securities since it exercises voting and investment power over them.
- (16) Includes shares of common stock beneficially owned other than shares of common stock issuable upon conversion of the debentures.
- (17) Not exactly equal to 26.1113 shares of common stock per \$1,000 principal amount of the debentures due to rounding.

- (18) Louise Morwick may be deemed to be the beneficial owner of these securities since she exercises voting and investment power over them.
- (19) Edward E. Lees, James A. White, Jr. and Robert Jordan may be deemed to be the beneficial owners of these securities since they exercise voting and investment power over them.
- (20) Dominic Lynch may be deemed to be the beneficial owner of these securities since he exercises voting and investment power over them.
- (21) Palisade Capital Management, LLC may be deemed to be the beneficial owner of these securities since it exercises voting and investment power over them.
- (22) Michael J. Carusillo, Clayton A. Struve and Nicholas D. Schoewe may be deemed to be the beneficial owners of these securities since they exercise voting and investment power over them.
- (23) Elliot Bossen may be deemed to be the beneficial owner of these securities since he exercises voting and investment power over them.

Unless it is otherwise noted in the above table and the footnotes thereto, none of the selling security holders has identified itself to us as a broker-dealer or as an affiliate of a broker dealer. To our knowledge, no selling security holder who is a registered broker-dealer or an affiliate of a registered broker-dealer received any securities as underwriting compensation. Please see "Plan of Distribution" for required disclosure regarding these selling security holders.

DESCRIPTION OF THE DEBENTURES

We issued the debentures under an indenture dated as of May 5, 2004 between us and Union Bank of California, N.A., as trustee.

The following description is only a summary of the material provisions of the debentures, the indenture and the registration rights agreement. It does not purport to be complete. We urge you to read these documents in their entirety because they, and not this description, define the rights of holders of the debentures. You may request copies of these documents from us upon written request at our address, which is listed under "Summary—Other Information".

For purposes of this section, references to "we", "us", "our" and "Quanex" refer solely to Quanex Corporation and not to our subsidiaries.

General

The Debentures

The debentures:

- are limited to \$125,000,000 aggregate principal amount;
- mature on May 15, 2034, unless earlier converted by you, redeemed at our option or purchased by us at your option;
- bear interest at a rate of 2.50% per annum, payable semi-annually, in arrears, on each May 15 and November 15, beginning on November 15, 2004 to the holders of record at the close of business on the preceding May 1 and November 1, respectively;
- accrue contingent interest, which may be payable as set forth below under "—Contingent Interest";
- bear additional interest or in the case of common stock issued upon conversion of the debentures, additional amounts, if we fail to comply with certain obligations set forth below under "—Registration Rights";
- are our general unsecured senior obligations, ranking equally in right of payment with all of our existing and future unsecured senior indebtedness, and senior in right of payment to any of our existing and future subordinated indebtedness. The debentures are effectively subordinated to all of our senior secured indebtedness and all indebtedness and liabilities of our subsidiaries, including trade creditors;
- are convertible as to the principal amount into cash, and as to any excess amounts, at a conversion rate of 26.1113 shares of our common stock per \$1,000 principal amount of debentures (which represents a conversion price of approximately \$38.2976 per share of common stock; under the conditions and subject to such adjustments as are described under "—Conversion Rights";
- are redeemable by us beginning on May 15, 2011 at any time as a whole or in part, at a redemption price in cash equal to 100% of the principal amount of the debentures to be redeemed plus accrued and unpaid interest (including contingent interest and additional interest, if any) to, but not including, the redemption date as described under "—Optional Redemption";
- are subject to repurchase by us for cash at the option of the holders on May 15 of 2011, 2014, 2019, 2024 and 2029 or upon a fundamental change, at a repurchase price in cash equal to 100% of the principal amount of the debentures to be repurchased plus accrued and unpaid interest (including contingent interest and additional interest, if any) to, but not including, the repurchase date as described under "—Repurchase of Debentures at the Option of Holders—

Optional put" and "—Repurchase of debentures at the option of holders upon a fundamental change"; and

• are represented by one or more registered securities in global form as described under "—Book-Entry, Delivery and Form".

The indenture will not contain any financial covenants and will not restrict us or our subsidiaries from paying dividends, incurring additional senior indebtedness or any other indebtedness or issuing or repurchasing securities. The indenture will contain no covenants or other provisions to afford protection to holders of debentures in the event of highly leveraged transaction or a fundamental change of Quanex, except to the extent described under "—Repurchase of Debentures at the Option of Holders—Repurchase of debentures at the option of holders upon a fundamental change" and "—Consolidation, Merger and Sale of Assets".

The debentures are our general unsecured senior obligations, ranking equally in right of payment with all of our existing and future unsecured senior indebtedness, and senior in right of payment to any of our existing and future subordinated indebtedness. The debentures are effectively subordinated to all of our senior secured indebtedness and all indebtedness and liabilities of our subsidiaries, including trade creditors. As of April 30, 2005, we had approximately \$110.0 million of senior secured indebtedness outstanding, while our subsidiaries had approximately \$121.9 million of liabilities, including approximately \$9.5 million of indebtedness, outstanding.

No sinking fund is provided for the debentures. The debentures are issued only in registered form, without coupons, in denominations of \$1,000 principal amount and multiples thereof.

We will maintain an office where the debentures may be presented for registration, transfer, exchange or conversion. This office will initially be an office or agency of the trustee. Except under limited circumstances described below, the debentures are issued only in fully registered book-entry form, without coupons, and are represented by one or more global securities. There will be no service charge for any registration of transfer or exchange of debentures. We may, however, require holders to pay a sum sufficient to cover any tax or other governmental charge payable in connection with certain transfers or exchanges.

Holders may not sell or otherwise transfer the debentures or the common stock issuable upon conversion of the debentures except in compliance with any applicable transfer restrictions and the provisions set forth under "Selling Security Holders", "Plan of Distribution" and "—Registration Rights".

Interest

The debentures will bear interest at a rate of 2.50% per annum from May 5, 2004. We will pay interest semi-annually, in arrears, on May 15 and November 15 of each year, beginning on November 15, 2004, subject to limited exceptions if the debentures are converted prior to the relevant interest payment date. Interest will be paid to the holders of record at the close of business on the preceding May 1 and November 1, as the case may be, immediately preceding the relevant interest payment date; provided that interest will be paid to a person other than the holder of record on the record date on the maturity date or, in connection with a redemption at our option or repurchase at the option of the holders, on the redemption date or repurchase date, as the case may be, if it is after a record date but on or before the corresponding interest payment date. In any such case, we will pay the accrued and unpaid interest only to the person to whom we pay the principal amount.

Interest will be computed on the basis of a 360-day year comprised of twelve 30-day months. We will also pay contingent interest on the debentures in the circumstances described under "—Contingent Interest".

Contingent Interest

Subject to the accrual and record date provisions described below, we will pay contingent interest to the holders of debentures during any six-month period from May 15 to November 14 and from November 15 to May 14, commencing with the six-month period beginning on May 15, 2011 if the average debenture price of a debenture for the five trading days ending on the third trading day immediately preceding the first day of the relevant six-month period equals 120% or more of the principal amount of such debenture. The amount of contingent interest payable per debenture with respect to any such six-month period will equal 0.25% per annum of such average debenture price of such debenture.

We will pay contingent interest, if any, in the same manner as we will pay interest described above under "—Interest".

The "debenture price" on any date of determination means the average of the secondary market bid quotations per \$1,000 debenture obtained by the bid solicitation agent for \$10,000,000 principal amount of debentures at approximately 4:00 p.m., New York City time, on such determination date from three unaffiliated securities dealers we select, provided that if:

- at least three such bids are not obtained by the bid solicitation agent, or
- in our reasonable judgment, the bid quotations are not indicative of the secondary market value of the debentures,

then the debenture price will equal (a) the then-applicable conversion rate of the debentures multiplied by (b) the average closing sale price (as defined under "—Conversion Rights") of our common stock for the last five trading days ending on such determination date.

A "trading day" means a day during which trading in securities generally occurs on the New York Stock Exchange or, if our common stock is not listed on the New York Stock Exchange, on the principal other national or regional securities exchange on which our common stock is then listed or, if our common stock is not listed on a national or regional securities exchange, on the National Association of Securities Dealers Automated Quotation system ("Nasdaq") or, if our common stock is not quoted on Nasdaq, on the principal other market on which such common stock is then traded.

The bid solicitation agent will initially be the trustee. We may change the bid solicitation agent, but it will not be one of our affiliates. The bid solicitation agent will solicit bids from nationally recognized securities dealers that are believed by us to be willing to bid for the debentures.

Upon determination that holders of debentures will be entitled to receive contingent interest which may become payable during a relevant six-month period, on or prior to the start of such six-month period, we will provide notice to all holders at their addresses shown in the register of the registrar setting forth the amount of contingent interest per \$1,000 principal amount of debentures and disseminate a press release and publish it on our website.

Under the indenture governing the debentures, we and each holder of the debentures agree, for United States federal income tax purposes, to treat the debentures as indebtedness that is subject to Treasury Regulations governing contingent payment debt instruments.

Conversion Rights

General

Holders may surrender any outstanding debentures for conversion at a conversion rate of 26.1113 shares of our common stock per \$1,000 principal amount (which represents a conversion price of

approximately \$38.2976 per share of common stock), subject to the conversion rate adjustments described below, under the following circumstances:

- during the fiscal quarter after any fiscal quarter ending on or after April 30, 2004, if the closing sale price of our common stock for at least 20 trading days in the 30 trading-day period ending on the last trading day of the previous fiscal quarter is more than 120% of the conversion price per share of our common stock on such last trading day;
- if we have called the debentures for redemption; or
- upon the occurrence of specified corporate transactions that are described in greater detail below under "—Conversion Rights—Conversion upon specified corporate transactions".

We will not issue fractional shares of common stock upon conversion of the debentures. Instead, we will pay the cash value of such fractional shares based upon the closing sale price of our common stock on the trading day immediately preceding the conversion date. Holders may convert debentures only in denominations of \$1,000 principal amount and integral multiples thereof. On January 26, 2005, we announced our irrevocable election to settle the principal amount of the debentures in cash when they become convertible and are surrendered by the holders thereof.

If a holder exercises its right to require us to repurchase its debentures as described under "—Repurchase of Debentures at the Option of Holders—Optional put" and "—Repurchase of debentures at the option of holders upon a fundamental change", such holder may convert its debentures into shares of our common stock only if it withdraws its applicable repurchase notice in accordance with the indenture.

We describe each of these circumstances in greater detail below.

Conversion upon satisfaction of common stock sale price conditions

Holders may surrender debentures for conversion into shares of our common stock prior to the stated maturity during the fiscal quarter after any fiscal quarter ending on or after April 30, 2004, if the closing sale price of our common stock for at least 20 trading days in the 30 trading-day period ending on the last trading day of the previous fiscal quarter is more than 120% of the conversion price per share of our common stock on such last trading day.

The "closing sale price" of our common stock on any trading day means the closing per share sale price (or if no closing sale price is reported, the average of the bid and ask prices or, if there is more than one bid or ask price, the average of the average bid and the average ask prices) on such trading day as reported in composite transactions for the principal U.S. securities exchange on which our common stock is traded or, if the common stock is not listed on a U.S. national or regional securities exchange, as reported by Nasdaq or, if our common stock is not quoted on Nasdaq, on the principal other market on which such common stock is then traded.

The "conversion price" per share of our common stock as of any day equals the quotient of the principal amount of a debenture divided by the number of shares of our common stock issuable upon conversion of such debenture on that day.

Conversion upon notice of redemption

A holder may surrender for conversion any debentures we call for redemption at any time prior to the close of business on the business day prior to the redemption date, even if the debentures are not otherwise convertible at that time. If a holder already has delivered a repurchase notice with respect to a debenture, however, the holder may not surrender that debenture for conversion until the holder has withdrawn the notice in accordance with the indenture.

Conversion upon specified corporate transactions

Even if the closing sale price contingency described above under "—Conversion upon satisfaction of common stock sale price conditions" has not occurred, if we elect to distribute to holders of our common stock:

- certain rights or warrants entitling them to subscribe for or purchase shares of our common stock at less than the closing sale price on the record date for such issuance (excluding purchase rights governed by our stockholder rights plan), or
- cash, debt securities (or other evidence of indebtedness) or other assets (excluding dividends or distributions described in clauses (1) or (2) in the description below of adjustments to the conversion rate), which distribution has a per share value exceeding 5% of the closing sale price of the common stock on the trading day preceding the declaration date for such distribution,

we must notify the holders of debentures at least 20 days prior to the ex-dividend date for such distribution. Once we have given such notice, holders may surrender their debentures for conversion at any time until the earlier of the close of business on the business day prior to the ex-dividend date or our announcement that such distribution will not take place; provided that a holder may not exercise this right to convert if the holder will otherwise participate in the distribution without conversion.

The "ex-dividend date" means, with respect to any issuance or distribution on shares of our common stock, the first trading day on which the shares of our common stock trade "regular way" on the principal securities market on which the shares of common stock are then traded without the right to receive such issuance or distribution.

In addition, if we are party to a consolidation, merger, combination or binding share exchange involving Quanex or transfer or lease of all or substantially all of our assets pursuant to which our common stock would be converted into cash, securities or other assets, a holder may surrender debentures for conversion at any time from and after the date that is 15 days prior to the anticipated effective date of the transaction or event until 15 days after the actual date of such transaction or event.

In the event of any reclassification of our common stock, a consolidation, merger, combination or binding share exchange involving Quanex or transfer or lease of all or substantially all of our assets under which our common stock is converted into cash, securities or other property, then at the effective time of the transaction, the right to convert a debenture into our common stock will be changed into a right to convert a debenture into the kind and amount of cash, securities or other property that the holder would have received if the holder had converted debentures immediately before the record date for the transaction. If the transaction also constitutes a "fundamental change", as defined below, a holder can require us to purchase all or a portion of its debentures as described below under "—Repurchase of Debentures at the Option of Holders—Repurchase of debentures at the option of holders upon a fundamental change".

Procedures

The right of conversion attaching to any debenture may be exercised (a) if such debenture is represented by a global security, by book-entry transfer to the conversion agent (which will initially be the trustee) through the facilities of The Depository Trust Company ("DTC"), or (b) if such debenture is represented by a certificated security, by delivery of such debenture at the specified office of the conversion agent, accompanied, in either case, by a duly signed and completed notice of conversion and appropriate endorsements and transfer documents if required by the conversion agent. The conversion date shall be the date on which the debenture and all of the items required for conversion shall have been so delivered and the requirements for conversion have been met.

No separate payment or adjustment will be made for accrued and unpaid interest on a converted debenture or for dividends or distributions on any of our common stock issued upon conversion of a debenture, except as provided in the indenture. By delivering to the holder the number of shares issuable or cash payable upon conversion together with a cash payment in lieu of any fractional shares, or cash or a combination of cash and shares of our common stock in lieu thereof, we will satisfy our obligation with respect to the conversion of the debentures. That is, accrued interest (including contingent interest and additional interest, if any) will be deemed to be paid in full rather than canceled, extinguished or forfeited. We will not adjust the conversion rate to account for any accrued interest, including contingent interest and additional interest, if any.

If the holder converts after a record date for an interest payment but prior to the corresponding interest payment date, such holder will receive on the interest payment date interest accrued on those debentures, notwithstanding the conversion of debentures prior to the interest payment date, assuming the holder was the holder of record on the corresponding record date. However, each holder agrees, by accepting a debenture, that if the holder surrenders any debentures for conversion during such period, such holder must pay us at the time such holder surrenders its debenture for conversion an amount equal to the interest that has accrued and that will be paid on the debentures being converted on the interest payment date. The preceding sentence does not apply, however, if (1) we have specified a redemption date that is after a record date for an interest payment but prior to the corresponding interest payment date or (2) any overdue interest exists at the time of conversion with respect to the debentures converted but only to the extent of the amount of such overdue interest. Accordingly, under the circumstances described in clause (1), a holder of debentures who chooses to convert those debentures on a date that is after a record date but prior to the corresponding interest payment date will not be required to pay us, at the time that holder surrenders those debentures for conversion, the amount of regularly scheduled interest it will receive on the interest payment date.

Holders of debentures are not required to pay any taxes or duties relating to the issuance or delivery of our common stock upon exercise of conversion rights, but they are required to pay any tax or duty which may be payable relating to any transfer involved in the issuance or delivery of the common stock in a name other than the name of the holder of the debenture. Certificates representing shares of our common stock will be issued or delivered only after all applicable taxes and duties, if any, payable by the holder have been paid.

The debentures will be deemed to have been converted immediately prior to the close of business on the conversion date. Delivery of shares will be accomplished by delivery to the conversion agent of certificates for the relevant number of shares, other than in the case of holders of debentures in book-entry form with DTC, which shares shall be delivered in accordance with DTC customary practices. A holder will not be entitled to any rights as a holder of our common stock, including, among other things, the right to vote and receive dividends and notices of stockholder meetings, until the conversion is effective.

If we elect to settle the principal amount of the debentures or the excess amount (as described below) in common stock only, a certificate for the number of full shares of common stock into which the debentures are converted (and cash in lieu of fractional shares) will be delivered to such holder, assuming all of the other requirements have been satisfied by such holder, as soon as practicable after we issue our notification of our chosen method of settlement, which we must issue on the date that is three trading days following receipt of the conversion notice. If we elect to settle the principal amount of the debentures or the excess amount (as described below) in cash or a combination of cash and common stock, the cash and, if applicable, a certificate for the number of full-shares of common stock into which the debentures are converted (and cash in lieu of fractional shares) will be delivered to such holder, assuming all of the other requirements have been satisfied by such holder and subject to any extension of the cash settlement averaging period described under "Payment Upon Conversion", on the 25th trading day following receipt of the conversion notice, unless the holder submits its conversion

notice within 30 trading days prior to maturity, in which case such delivery will take place on the maturity date.

Payment Upon Conversion

In lieu of delivery of shares of our common stock, and pursuant to the procedures described below, we may elect to deliver to holders surrendering debentures either cash or a combination of cash and shares of our common stock. On January 26, 2005, we announced our irrevocable election to settle the principal amount of the debentures in cash when they become convertible and are surrendered by the holders thereof. This notification is irrevocable and legally binding with regard to any conversion of the debentures. As such, the cash conversion settlement election with respect to the principal amount of the debentures remains in force if the debentures cease to be convertible but subsequently become convertible again.

Until the debentures are surrendered for conversion, we will not be required to notify holders of our method for settling the excess amount ("excess amount"), if any, of our conversion obligation relating to the amount of the conversion value (the product of the closing sale price for our common stock on the trading day before the conversion date multiplied by the then current conversion rate) above the principal amount of the debenture ("excess conversion obligation").

Conversion On or Prior to 31 Trading Days Prior to Maturity. If we receive a holder's conversion notice on or prior to the day that is 31 trading days prior to the stated maturity of the debentures (the "final notice date"), the following procedures will apply:

- Settlement of our conversion obligation relating to the principal amount of the debentures will be according to the principal conversion settlement election we have already made.
- We will notify the holder through the trustee, at any time on or before the date that is three trading days following receipt of the holder's conversion notice (the "settlement notice period"), of the method we choose to settle the excess conversion obligation, as applicable. Specifically we will indicate whether settlement of the excess conversion obligation will be 100% in common stock (other than with respect to fractional shares), 100% in cash or in a combination of cash and common stock. If we elect to settle the excess conversion obligation in a combination of cash and common stock, we will specify the percentage of the obligation to be settled in cash. We will treat all holders converting on the same trading day in the same manner. We will not, however, have any obligation to settle the excess conversion obligation arising on different trading days in the same manner. That is, we may choose on one trading day to settle in common stock only and choose on another trading day to settle in cash only or in a combination of common stock and cash.
- Settlement of any excess amount solely in common stock (other than with respect to fractional shares) will occur as soon as practicable after we notify the holders that we have chosen this method of settlement. Settlement of any excess amount in cash or in a combination of common stock and cash will occur on the third trading day following the final trading day of the 20-trading day period (the "cash settlement averaging period") beginning on the final trading day of the settlement notice period.
- Settlement amounts will be computed as follows:
 - (1) With respect to our conversion obligation on the principal amount we will deliver to a holder, for each \$1,000 original principal amount of debentures, cash in an amount equal to \$1,000.

- (2) With respect to the excess conversion obligation, if any, we will compute the settlement amount based upon either:
 - (a) If we elect to satisfy our excess conversion obligation in shares of common stock (other than with respect to fractional shares), we will deliver to a holder the equivalent value of the excess conversion obligation in shares of Quanex common stock. For each \$1,000 original principal amount of debentures, we will deliver the number of shares equal to the quotient of (i) the value of the excess conversion obligation divided by (ii) the volume weighted average price of our common stock during the cash settlement averaging period. The "value of the excess conversion obligation" will be equal to the excess of (A) the product of (1) the applicable conversion rate multiplied by (2) the volume weighted average price of our common stock during the cash settlement averaging period over (B) the \$1,000 original principal amount. The "volume weighted average price" per share of our common stock on any trading day will be the volume weighted average price on the New York Stock Exchange or, if our common stock is not listed on the New York Stock Exchange, on the principal exchange or over-the-counter market on which our common stock is then listed or traded, from 9:30 a.m. to 4:00 p.m. (New York City time) on that trading day as displayed by Bloomberg (Bloomberg key-strokes: NX Equity VAP) (or if such volume weighted average price is not available, the market value of one share on such trading day as we determine in good faith using a volume weighted method).

or

(b) If we elect to satisfy our excess conversion obligation in cash, we will deliver to a holder, for each \$1,000 original principal amount of debentures, cash in an amount equal to the excess of (A) the product of (1) the applicable conversion rate multiplied by (2) the volume weighted average price of our common stock during the cash settlement averaging period over (B) the \$1,000 original principal amount.

or

- (c) If we elect to satisfy our excess conversion obligation in a combination of cash and common stock, we will deliver to a holder, for each \$1,000 original principal amount of debentures:
 - a cash amount ("cash amount") (excluding any cash in lieu of fractional shares) equal to the product of (i) the value of the
 excess conversion obligation multiplied by (ii) the percentage of the excess conversion obligation to be satisfied in cash;

and

a number of shares of common stock equal to (i) the number of shares that would be issued pursuant to paragraph (2)(a) above; minus (ii) the number of shares equal to the quotient of the cash amount divided by the volume weighted average price of our common stock during the cash settlement averaging period.

Conversion During 30 Trading Days Prior to Maturity. If we receive a holder's conversion notice after the "final notice date", the following procedures will apply:

- Settlement of our conversion obligation relating to the principal amount of the debentures will be according to the principal conversion settlement election we have already made.
- We will notify the holder through the trustee of the method we choose to settle the excess conversion obligation in the same manner as set forth above under "—Conversion On or Prior

- to 31 Trading Days Prior to Maturity", except that we will settle all of our conversion obligations arising during the 30-trading day period prior to maturity in the same manner.
- Settlement of our conversion obligation of the excess amount solely in common stock will occur as soon as practicable after we notify the holder that we have chosen this method of settlement. Settlement of the excess amount, in cash or in a combination of common stock and cash will occur on the third trading day following the final trading day of the cash settlement averaging period described in the next bullet point.
- The settlement amount will be computed in the same manner as set forth above under "—Conversion On or Prior to 31 Trading Days Prior to Maturity", except that the "cash settlement averaging period" will be the 20-trading day period beginning on the date that is the 23rd trading day prior to the maturity date.

Extension of Cash Settlement Averaging Period. If any trading day during a cash settlement averaging period is not an undisrupted trading day, then determination of the price for that day will be delayed until the next undisrupted trading day; that is, such day will not count as one of the 20 trading days that constitute the cash settlement averaging period. If this would result in the cash settlement averaging period extending beyond the eighth trading day after the last of the original 20 trading days in the cash settlement averaging period, then we will determine all prices for all delayed and undetermined prices on that eighth trading day based on our good faith estimate of our common stock's value on that date. In the event that any trading day during the cash settlement averaging period beginning on the date that is the 23rd trading day prior to the maturity date is not an undisrupted trading day, settlement will occur after the maturity date.

An "undisrupted trading day" means a trading day on which our common stock does not experience any of the following during the one-hour period ending at the conclusion of the regular trading day:

- any suspension of or limitation imposed on the trading of our common stock on any national or regional securities exchange or association or over-the-counter market;
- any event (other than an event listed in the third bullet below) that disrupts or impairs the ability of market participants in general to (i) effect transactions in or obtain market values for our common stock on any relevant national or regional securities exchange or association or over-the-counter market or (ii) effect transactions in or obtain market values for, futures or options contracts relating to the common stock on any relevant national or regional securities exchange or association or over-the-counter market; or
- any relevant national or regional securities exchange or association or over-the-counter market on which our common stock trades closes on any
 exchange trading day prior to its scheduled closing time unless such earlier closing time is announced by the exchange at least one hour prior to
 the earlier of (i) the actual closing time for the regular trading session on such exchange and (ii) the submission deadline for orders to be entered
 into the exchange for execution on such trading day,

if, in the case of the first and second bullet points above, we determine that the effect of such suspension, limitation, disruption or impairment is material.

Conversion Rate Adjustments

We will adjust the conversion rate if any of the following events occur:

(1) we issue common stock as a dividend or distribution on our common stock;

- (2) we issue to all holders of our common stock any rights or warrants entitling them for a period of not more than 60 days to subscribe for or purchase shares of our common stock or securities convertible into shares of our common stock, at a price per share or a conversion price per share less than the then current market price per share of our common stock on the trading day immediately preceding the time of announcement of such issuance (other than pursuant to a stockholder rights plan);
- (3) we subdivide or combine our common stock;
- (4) we distribute to all holders of our common stock shares of our capital stock, dividends or other cash distributions payable in respect of our common stock that are not regular cash dividends, evidences of our indebtedness or other assets, including securities of any other person other than Quanex, or rights or warrants to subscribe for or purchase any of our securities but excluding:
 - dividends or distributions and rights or warrants referred to in clauses (1) and (2) above; and
 - regular cash dividends referred to in clause (5) below;
- (5) we make regular cash dividends to all holders of our common stock in excess of \$0.17 per share in any fiscal quarter; and
- (6) we or any of our subsidiaries make purchases of shares of our common stock pursuant to a tender offer or exchange offer.

Adjustments to the conversion rate resulting from any regular cash dividends on our common stock may not cause the conversion rate (as adjusted for any other adjustment) to exceed the quotient obtained by dividing the principal amount at issuance of a debenture by the last reported closing sale price of our common stock on the cover page of this prospectus.

To the extent that our stockholder rights plan is in effect, upon conversion of the debentures into common stock, the holders will receive, in addition to the common stock, the rights described in our rights plan, whether or not the rights have separated from the common stock at the time of conversion, subject to certain limited exceptions. If we implement a new rights plan, we will be required under the indenture to provide that the holders of debentures will receive the rights upon conversion of the debentures, whether or not these rights were separated from the common stock prior to conversion, subject to certain limited exceptions.

We will not make any adjustment to the conversion rate if holders of debentures may participate in transactions without conversion, or in certain other cases.

We will not be required to make an adjustment in the conversion rate unless the adjustment would require a change of at least 1% in the conversion rate. However, we will carry forward any adjustments that are less than 1% of the conversion rate. Except as described above in this section, we will not adjust the conversion rate.

On August 26, 2004, the Company's Board of Directors authorized an annual dividend increase of \$0.08 per common share outstanding, increasing the annual dividend from \$0.68 to \$0.76, or \$0.02 per quarter. The quarterly cash dividend of \$0.19 per share was paid on September 30, 2004 and December 31, 2004. On December 2, 2004 the Company's Board of Directors declared a three-for-two stock split in the form of a 50% stock dividend, payable on December 31, 2004 to holders of record on December 17, 2004. The conversion rate of 26.1113 shares per \$1,000 principal amount (and corresponding conversion price of approximately \$38.2976 pr share) described herein gives effect to adjustments resulting from the increased cash dividends paid in 2004 and the December 2004 stock split. The increase of the quarterly dividend from \$0.17 to \$0.19 for future quarters is not expected to

result in an adjustment to the conversion rate in the near future. The Company will monitor the cumulative impact of the dividend increase and will make the necessary notifications should the cumulative adjustments exceed the 1% threshold again in the future.

In the event of:

- any reclassification of our common stock;
- a consolidation, merger, combination or binding share exchange involving Quanex; or
- a transfer or lease of all or substantially all of the assets of Quanex,

under which our common stock is converted into cash, securities or other property, then at the effective time of the transaction, the right to convert a debenture into our common stock will be changed into a right to convert a debenture into the kind and amount of cash, securities or other property that the holder would have received if the holder had converted debentures immediately before the record date for the transaction.

To the extent permitted by law, we may, from time to time, increase the conversion rate for a period of at least 20 days if our board of directors has made a determination that this increase would be in our best interest or to avoid or diminish income tax to holders of our common stock in connection with a dividend or distribution of stock or similar event. Any such determination by our board will be conclusive. We would give holders at least 15 days' notice of any increase in the conversion rate.

A holder may, in some circumstances, including the distribution of cash dividends to stockholders, be deemed to have received a distribution or dividend subject to United States federal income tax as a result of an adjustment or the nonoccurrence of an adjustment to the conversion rate. See "Material U.S. Federal Income Tax Considerations—Tax Consequences to United States Holders—Constructive Dividends" and "—Tax Consequences to Non-United States Holders—Distributions on Common Stock".

Optional Redemption

Prior to May 15, 2011, the debentures will not be redeemable at our option. On or after May 15, 2011, we may redeem the debentures in cash at any time as a whole or in part, at a redemption price in cash equal to 100% of the principal amount of the debentures to be redeemed plus accrued and unpaid interest (including contingent interest and additional interest, if any) to, but not including, the redemption date.

We will give at least 30 days' but not more than 60 days' notice of redemption by mail to holders of debentures. Debentures or portions of debentures called for redemption are convertible by the holder until the close of business on the business day prior to the redemption date.

If we do not redeem all of the debentures, the trustee will select the debentures to be redeemed in principal amounts of \$1,000 or multiples thereof by lot, on a pro rata basis or by any other method the trustee considers fair and appropriate. If any debentures are to be redeemed in part only, we will issue a new debenture or debentures with a principal amount equal to the unredeemed principal portion thereof. If a portion of a holder's debentures is selected for partial redemption and the holder converts a portion of its debentures, the converted portion will be deemed to be taken from the portion selected for redemption.

If the paying agent holds cash sufficient to pay the redemption price of the debentures for which a redemption notice has been delivered on the redemption date in accordance with the terms of the indenture, then, immediately after the redemption date, the debentures will cease to be outstanding and interest (including contingent interest and additional interest, if any) on such debentures shall

cease to accrue, whether or not the debentures are delivered to the paying agent. Thereafter, all other rights of the holder shall terminate, other than the right to receive the redemption price upon delivery of the debentures.

Repurchase of Debentures at the Option of Holders

Optional put

On May 15 of 2011, 2014, 2019, 2024 and 2029, a holder may require us to repurchase for cash any outstanding debentures for which the holder has properly delivered and not withdrawn a written repurchase notice, subject to certain additional conditions, at a purchase price in cash equal to 100% of the principal amount of those debentures plus accrued and unpaid interest (including contingent interest and additional interest, if any) to, but not including, the repurchase date. Holders may submit their debentures for repurchase to the paying agent at any time from the opening of business on the date that is 20 business days prior to the repurchase date until the close of business on the business day immediately preceding the relevant repurchase date.

Unless we have elected to redeem all of the debentures on or before the repurchase date (to the extent permitted by the indenture), we are required to give notice at least 20 business days prior to each repurchase date to all holders at their addresses shown in the register of the registrar and to beneficial owners as required by applicable law stating, among other things, the procedures that holders must follow to require us to repurchase their debentures as described below. The repurchase notice given by each holder electing to require us to repurchase debentures shall be given so as to be received by the paying agent no later than the close of business on the business day immediately preceding the repurchase date and must state:

- if certificated debentures are to be delivered, the certificate numbers of the holder's debentures to be delivered for repurchase;
- the portion of the principal amount of debentures to be repurchased, which must be \$1,000 or a multiple thereof; and
- that the debentures are to be repurchased by us pursuant to the applicable provisions of the debentures and the indenture.

A holder may withdraw any repurchase notice by delivering a written notice of withdrawal to the paying agent prior to the close of business on the business day immediately preceding the repurchase date. The notice of withdrawal shall state:

- if certificated debentures are to be withdrawn, the certificate numbers of the debentures being withdrawn;
- · the principal amount of debentures being withdrawn; and
- the principal amount, if any, of the debentures that remain subject to the repurchase notice.

If debentures are not in certificated form, the foregoing notices must comply with appropriate DTC procedures.

In connection with any repurchase, we will, to the extent applicable:

- comply with the provisions of Rule 13e-4, Rule 14e-1 and any other tender offer rules under the Exchange Act that may then be applicable;
- file a Schedule TO or any other required schedule under the Exchange Act; and
- otherwise comply with all federal and state securities laws in connection with any offer by us to purchase the debentures.

Our obligation to pay the purchase price for debentures for which a repurchase notice has been delivered and not validly withdrawn is conditioned upon the holder delivering the debentures, together with necessary endorsements, to the paying agent at any time after delivery of the repurchase notice. We will cause the purchase price for the debentures to be paid promptly following the later of the repurchase date or the time of delivery of the debentures, together with such endorsements.

If the paying agent holds cash sufficient to pay the purchase price of the debentures for which a repurchase notice has been delivered on the repurchase date in accordance with the terms of the indenture, then, immediately after the repurchase date, the debentures will cease to be outstanding and interest (including contingent interest and additional interest, if any) on such debentures shall cease to accrue, whether or not the debentures are delivered to the paying agent. Thereafter, all other rights of the holder shall terminate, other than the right to receive the purchase price upon delivery of the debentures.

Our ability to repurchase debentures may be limited by restrictions on the ability of Quanex to obtain funds for such repurchase and the terms of our then existing agreements. Our failure to repurchase the debentures when required would result in an event of default with respect to the debentures. We cannot assure you that we will have the financial resources, or will be able to arrange financing, to pay the purchase price for all the debentures that might be delivered by holders of debentures seeking to exercise the repurchase right. See "Risk Factors—We may not be able to repay or repurchase the principal amount of the debentures when required".

Repurchase of debentures at the option of holders upon a fundamental change

In the event a fundamental change (as defined below) occurs, each holder will have the right, at its option, subject to the terms and conditions of the indenture, to require us to repurchase all or any part of the holder's debentures in integral multiples of \$1,000 principal amount, at a price in cash for each \$1,000 principal amount of such debentures equal to 100% of the principal amount of such debentures tendered, plus any accrued and unpaid interest (including contingent interest and additional interest, if any) to, but excluding, the repurchase date. We will be required to repurchase the debentures on the date that is 30 business days after the occurrence of a fundamental change.

Within 10 business days after the occurrence of a fundamental change, we must mail to all holders of debentures at their addresses shown in the register of the registrar and to beneficial owners as required by applicable law a notice regarding the fundamental change, which notice must state, among other things:

- the events causing a fundamental change;
- the date of such fundamental change;
- the last date on which a holder may exercise the repurchase right;
- the repurchase price;
- the repurchase date;
- the name and address of the paying and conversion agents;
- the conversion rate, and any adjustments to the conversion rate that will result from the fundamental change;
- that debentures with respect to which a repurchase notice is given by the holder may be converted, if otherwise convertible, only if the repurchase notice has been withdrawn in accordance with the terms of the indenture; and
- the procedures that holders must follow to exercise these rights.

To exercise this right, the holder must transmit to the paying agent a written notice, and such repurchase notice must be received by the paying agent no later than the close of business on the business day immediately preceding the repurchase date. The repurchase notice must state:

- the certificate numbers of the debentures to be delivered by the holder, if applicable;
- the portion of the principal amount of debentures to be repurchased, which portion must be \$1,000 or an integral multiple of \$1,000; and
- that such debentures are being tendered for repurchase pursuant to the fundamental change provisions of the indenture.

A holder may withdraw any repurchase notice by delivering to the paying agent a written notice of withdrawal prior to the close of business on the business day immediately preceding the purchase date. The notice of withdrawal must state:

- the certificate numbers of the debentures being withdrawn, if applicable;
- the principal amount of debentures being withdrawn; and
- the principal amount, if any, of the debentures that remain subject to a repurchase notice.

If the debentures are not in certificated form, the foregoing notices from holders must comply with the applicable DTC procedures.

We will under the indenture:

- comply with the provisions of Rule 13e-4, Rule 14e-1 and any other tender offer rules under the Exchange Act that may then be applicable;
- file a Schedule TO or any other required schedule under the Exchange Act; and
- otherwise comply with all federal and state securities laws in connection with any offer by us to repurchase the debentures upon a fundamental change.

Our obligation to pay the repurchase price for a debenture for which a repurchase notice has been delivered and not validly withdrawn is conditioned upon delivery of the debenture, together with necessary endorsements, to the paying agent at any time after the delivery of such repurchase notice. We will cause the repurchase price for such debenture to be paid promptly following the later of the repurchase date or the time of delivery of such debenture.

If the paying agent holds money sufficient to pay the repurchase price of a debenture on the repurchase date in accordance with the terms of the indenture, then, immediately after the repurchase date, interest on such debenture will cease to accrue, whether or not the debenture is delivered to the paying agent. Thereafter, all other rights of the holder shall terminate, other than the right to receive the repurchase price upon delivery of the debenture.

A "fundamental change" shall be deemed to have occurred upon the occurrence of any of the following:

- (1) any "person" or "group" is or becomes the "beneficial owner", directly or indirectly, of shares of our voting stock representing 50% or more of the total voting power of all outstanding classes of our voting stock or has the power, directly or indirectly, to elect a majority of the members of our board of directors;
- (2) we consolidate with, or merge with or into, another person or we sell, assign, convey, transfer, lease or otherwise dispose of all or substantially all of our assets, or any person consolidates with, or merges with or into, us, in any such event other than pursuant to a transaction in which the persons that "beneficially owned" directly or indirectly, the shares of our voting

- stock immediately prior to such transaction beneficially own, directly or indirectly, shares of voting stock representing a majority of the total voting power of all outstanding classes of voting stock of the surviving or transferee person;
- (3) a majority of the members of our board of directors are not continuing directors (as defined below);
- (4) the holders of our capital stock approve any plan or proposal for our liquidation or dissolution (whether or not otherwise in compliance with the indenture); or
- (5) our common stock ceases to be listed on a national securities exchange or quoted on The Nasdaq National Market or another established automated over-the-counter trading market in the United States.

However, a fundamental change will not be deemed to have occurred if:

- (a) the closing sale price of our common stock for any five trading days during the ten trading days immediately preceding the fundamental change is equal to or exceeds 105% of the conversion price in effect on such trading day; and
- (b) in the case of a merger or consolidation, all of the consideration (excluding cash payments for fractional shares and cash payments pursuant to dissenters' appraisal rights) in the merger or consolidation constituting the fundamental change consists of common stock traded on a national securities exchange or quoted on The Nasdaq National Market (or which will be so traded or quoted when issued or exchanged in connection with such fundamental change) and as a result of such transaction or transactions the debentures become convertible solely into such common stock.

For purposes of this fundamental change definition:

- "person" or "group" shall have the meanings given to them for purposes of Sections 13(d) and 14(d) of the Exchange Act or any successor provisions, and the term "group" includes any group acting for the purpose of acquiring, holding or disposing of securities within the meaning of Rule 13d-5(b)(l) under the Exchange Act, or any successor provision;
- a "beneficial owner" will be determined in accordance with Rule 13d-3 under the Exchange Act, as in effect on the date of the indenture;
- "beneficially own" and "beneficially owned" have meanings correlative to that of beneficial owner;
- "board of directors" means the Board of Directors or other governing body charged with the ultimate management of any person;
- "capital stock" means: (1) in the case of a corporation, corporate stock; (2) in the case of an association or business entity, any and all shares, interests, participations, rights or other equivalents (however designated) of corporate stock; (3) in the case of a partnership or limited liability company, partnership interests (whether general or limited) or membership interests; or (4) any other interest or participation that confers on a person the right to receive a share of the profits and losses of, or distributions of assets of, the issuing person;
- "continuing director" means, as of any date of determination, any member of our board of directors who was a member of such board of directors on the date of the indenture; or was nominated for election or elected to such board of directors with the approval of: (A) a majority of the continuing directors who were members of such board at the time of such nomination or election or (B) a nominating committee, a majority of which committee were continuing directors at the time of such nomination or election.

"voting stock" means any class or classes of capital stock or other interests then outstanding and normally entitled (without regard to the
occurrence of any contingency) to vote in the election of the board of directors, managers or trustees.

The term "all or substantially all" as used in the definition of change in control will likely be interpreted under applicable state law and will be dependent upon particular facts and circumstances. There may be a degree of uncertainty in interpreting this phrase. As a result, we cannot assure you how a court would interpret this phrase under applicable law if you elect to exercise your rights following the occurrence of a transaction which you believe constitutes a transfer of "all or substantially all" of our assets.

This fundamental change repurchase feature may make more difficult or discourage a takeover of us and the removal of incumbent management. We are not, however, aware of any specific effort to accumulate shares of our common stock or to obtain control of us by means of a merger, tender offer, solicitation or otherwise. In addition, the fundamental change repurchase feature is not part of a plan by management to adopt a series of anti-takeover provisions. Instead, the fundamental change repurchase feature is a result of negotiations between us and the initial purchasers.

We could, in the future, enter into certain transactions, including recapitalizations, that would not constitute a fundamental change but would increase the amount of debt, including other senior indebtedness, outstanding or otherwise adversely affect a holder. Neither we nor our subsidiaries are prohibited from incurring debt, including other senior indebtedness, under the indenture. The incurrence of significant amounts of additional debt could adversely affect our ability to service our debt, including the debentures.

Our ability to repurchase debentures may be limited by restrictions on the ability of Quanex to obtain funds for such repurchase through dividends from our subsidiaries and the terms of our then existing borrowing agreements. Our failure to repurchase the debentures when required would result in an event of default with respect to the debentures. We cannot assure you that we would have the financial resources, or would be able to arrange financing, to pay the purchase price for all the debentures that might be delivered by holders of debentures seeking to exercise the repurchase right. See "Risk Factors—We may not be able to repay or repurchase the principal amount of the debentures when required".

Events of Default

Each of the following constitutes an event of default with respect to the debentures:

- (1) default in the payment when due of any principal of any of the debentures at maturity, upon redemption or exercise of a repurchase right or otherwise;
- (2) default in the payment of any interest, contingent interest or additional interest when due under the debentures, which default continues for 30 days;
- (3) default in our obligation to satisfy our conversion obligation upon exercise of a holder's conversion right;
- (4) default in our obligation to provide notice of the occurrence of a fundamental change when required by the indenture;
- (5) our failure to comply with any of our other agreements in the debentures or the indenture upon our receipt of notice to us of such default from the trustee or to us and the trustee from holders of not less than 25% in aggregate principal amount at maturity of the debentures, and our failure to cure (or obtain a waiver of) such default within 60 days after we receive such notice;

- (6) default under any indebtedness for money borrowed by us or any of our subsidiaries that is a "significant subsidiary" (as defined in Rule 1-02 of Regulation S-X under the Securities Act or the Exchange Act) the aggregate outstanding principal amount of which is in an amount in excess of \$10 million, for a period of 30 days after written notice to us by the trustee or to us and the trustee by holders of at least 25% in aggregate principal amount of the debentures then outstanding, which default:
 - is caused by a failure to pay principal or interest when due on such indebtedness by the end of the applicable grace period, if any, unless such indebtedness is discharged; or
 - · results in the acceleration of such indebtedness, unless such acceleration is waived, cured, rescinded or annulled; or
- (7) certain events of bankruptcy, insolvency or reorganization affecting us or any or our significant subsidiaries.

If an event of default, other than an event of default described in clause (7) above with respect to us, occurs and is continuing, either the trustee or the holders of at least 25% in aggregate principal amount of the debentures then outstanding may declare the principal amount of the debentures then outstanding plus any interest on the debentures accrued and unpaid (including contingent interest and additional interest, if any) through the date of such declaration to be immediately due and payable. If an event of default described in clause (7) above occurs with respect to us, the principal amount of the debentures plus accrued and unpaid interest (including contingent interest and additional interest, if any) will automatically become immediately due and payable.

At any time after a declaration of acceleration has been made, but before a judgment or decree for payment of money has been obtained by the trustee, and subject to applicable law and certain other provisions of the indenture, the holders of a majority in aggregate principal amount of the debentures then outstanding may, under certain circumstances, rescind and annul such acceleration.

Subject to the indenture, applicable law and the trustee's indemnification, the holders of a majority in aggregate principal amount of the outstanding debentures will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee with respect to the debentures.

No holder will have any right to institute any proceeding under the indenture, or for the appointment of a receiver or a trustee, or for any other remedy under the indenture unless:

- the holder has previously given the trustee written notice of a continuing event of default;
- the holders of at least 25% in aggregate principal amount of the debentures then outstanding have made a written request and have offered reasonable indemnity to the trustee to institute such proceeding as trustee; and
- the trustee has failed to institute such proceeding within 60 days after such notice, request and offer, and has not received from the holders of a majority in aggregate principal amount of the debentures then outstanding a direction inconsistent with such request within 60 days after such notice, request and offer.

However, the above limitations do not apply to a suit instituted by a holder for the enforcement of payment of the principal of or any interest on any debenture on or after the applicable due date or the right to convert the debenture in accordance with the indenture.

Generally, the holders of not less than a majority of the aggregate principal amount of outstanding debentures may waive any default or event of default unless:

- we fail to pay principal of or any interest (including contingent interest and additional interest, if any) on any debenture when due or the payment of any repurchase price;
- we fail to convert any debenture into common stock and/or cash; or
- we fail to comply with any of the provisions of the indenture that would require the consent of the holder of each outstanding debenture affected.

We are required to furnish to the trustee, on an annual basis, a statement by our officers as to whether or not we, to the officers' knowledge, are in default in the performance or observance of any of the terms, provisions and conditions of the indenture, specifying any known defaults.

Consolidation, Merger and Sale of Assets

We may not consolidate with or merge into any person in a transaction in which we are not the surviving person or convey, transfer or lease all or substantially all of our properties and assets to any successor person, unless:

- the resulting, surviving or transferee person is organized and validly existing under the laws of the United States of America, any state of the United States, or the District of Columbia and assumes our obligations on the debentures and under the indenture;
- immediately after giving effect to the transaction, no default or event of default shall have occurred and be continuing; and
- other conditions specified in the indenture are met.

Modification and Waiver

We and the trustee may amend or supplement the indenture or the debentures with the consent of the holders of at least a majority in aggregate principal amount of the outstanding debentures. In addition, the holders of a majority in aggregate principal amount of the outstanding debentures may waive our compliance in any instance with any provision of the indenture without notice to the holders. However, no amendment, supplement or waiver be made without the consent of the holder of each outstanding debenture if such amendment, supplement or wavier would:

- change the stated maturity of the principal of or the payment date of any installment of interest, contingent interest or additional interest on or with respect to the debentures;
- reduce the principal amount of, repurchase price or redemption price of or rate of interest, contingent interest or additional interest on any debenture;
- reduce the amount of principal payable upon acceleration of the maturity of any debenture;
- change the currency in which the principal of, repurchase price or redemption price or rate of interest with respect to the debentures is payable;
- impair the right to institute suit for the enforcement of any payment on, or with respect to, any debenture;
- modify the provisions with respect to the purchase rights of the holders upon the events described under "—Repurchase of Debentures at the Option of Holders—Optional put" and "—Repurchase of Debentures at the Option of Holders—Repurchase of debentures at the option of holders upon a fundamental change" in a manner adverse to holders;

- adversely affect the right of holders to convert debentures other than as provided in the indenture;
- reduce the percentage in principal amount of the outstanding debentures, the consent of whose holders is required in order to take specific actions including, but not limited to, the waiver of past defaults or the modification or amendment of the indenture; or
- alter the manner of calculation or rate of accrual of interest, contingent interest or additional interest, redemption price or repurchase price on any debenture or extend the time or payment of any such amount.

We and the trustee may amend or supplement the indenture or the debentures without notice to, or the consent of the holders to, among other things, cure any ambiguity, defect or inconsistency or make any other change that does not adversely affect the rights of any holder, as set forth in the indenture.

Satisfaction and Discharge

We may satisfy and discharge our obligations under the indenture by delivering to the trustee for cancellation all outstanding debentures or by depositing with the paying agent or conversion agent, as the case may be, after the debentures have become due and payable, whether at maturity or any redemption date, or any repurchase date, or upon conversion or otherwise, cash or shares of common stock (as applicable under the terms of the indenture) sufficient to pay all of the outstanding debentures and paying all other sums payable under the indenture. Such discharge is subject to terms contained in the indenture.

Calculations in Respect of the Debentures

We or our agents will be responsible for making all calculations called for under the debentures. These calculations include, but are not limited to, determination of the trading price of the debentures and sale price of our common stock and the projected payment schedule. We or our agents will make all these calculations in good faith and, absent manifest error, our and their calculations will be final and binding on holders of debentures. We or our agents will provide a schedule of these calculations to the trustee, and the trustee is entitled to conclusively rely upon the accuracy of these calculations without independent verification.

Governing Law

The indenture and the debentures are governed by, and construed in accordance with, the laws of the State of New York.

Concerning the Trustee

Union Bank of California, N.A. is the trustee under the indenture. The trustee will be the paying agent, conversion agent, transfer agent and bid solicitation agent for the debentures. The trustee can be contacted at the address set forth below regarding transfer or conversion of the debentures.

Union Bank of California, N.A. 475 Sansome Street, 12th Floor San Francisco, CA 94111 Attention: Corporate Trust Department Facsimile No: (415) 296-6757

Confirm: (415) 296-6750

Book-Entry, Delivery and Form

We initially issued the debentures in the form of one or more global securities. The global securities have been deposited with the trustee as custodian for DTC and registered in the name of Cede & Co., as DTC's nominee. Except as set forth below, the global securities may be transferred, in whole and not in part, only to DTC or another nominee of DTC. You may hold your beneficial interests in the global securities directly through DTC if you have an account with DTC or indirectly through organizations that have accounts with DTC. Debentures in definitive certificated form (called "certificated securities") will be issued only in certain limited circumstances described below.

DTC has advised us that it is:

- a limited purpose trust company organized under the laws of the State of New York;
- a member of the Federal Reserve System;
- a "clearing corporation" within the meaning of the New York Uniform Commercial Code; and
- a "clearing agency" registered pursuant to the provisions of Section 17A of the Exchange Act.

DTC was created to hold securities of institutions that have accounts with DTC (called "participants") and to facilitate the clearance and settlement of securities transactions among its participants in such securities through electronic book-entry changes in accounts of the participants, thereby eliminating the need for physical movement of securities certificates. DTC's participants include securities brokers and dealers, which may include the initial purchaser, banks, trust companies, clearing corporations and certain other organizations. Access to DTC's book-entry system is also available to others such as banks, brokers, dealers and trust companies (called the "indirect participants") that clear through or maintain a custodial relationship with a participant, whether directly or indirectly.

Ownership of beneficial interests in the global security will be limited to participants or persons that may hold interests through participants. Ownership of beneficial interests in the global security will be shown on, and the transfer of those beneficial interests will be effected only through, records maintained by DTC (with respect to participants' interests), the participants and the indirect participants. The laws of some jurisdictions may require that certain purchasers of securities take physical delivery of such securities in definitive form. These limits and laws may impair the ability to transfer or pledge beneficial interests in the global security.

Owners of beneficial interests in global securities who desire to convert their interests into common stock should contact their brokers or other participants or indirect participants through whom they hold such beneficial interests to obtain information on procedures, including proper forms and cut-off times, for submitting requests for conversion.

So long as DTC, or its nominee, is the registered owner or holder of a global security, DTC or its nominee, as the case may be, will be considered the sole owner or holder of the debentures represented by the global security for all purposes under the indenture and the debentures. In addition, no owner of a beneficial interest in a global security will be able to transfer that interest except in accordance with the applicable procedures of DTC. Except as set forth below, as an owner of a beneficial interest in the global security, you will not be entitled to have the debentures represented by the global security registered in your name, will not receive or be entitled to receive physical delivery of certificated securities and will not be considered to be the owner or holder of any debentures under the global security. We understand that, under existing industry practice, if an owner of a beneficial interest in the global security desires to take any action that DTC, as the holder of the global security, is entitled to take, DTC would authorize the participants to take such action, and the participants would authorize beneficial owners owning through such participants to take such action or would otherwise act upon the instructions of beneficial owners owning through them.

We will make payments of principal of, premium, if any, and any interest on the debentures represented by the global security registered in the name of and held by DTC or its nominee to DTC or its nominee, as the case may be, as the registered owner and holder of the global security. We expect that DTC or its nominee, upon receipt of any payment of principal of, premium, if any, or additional interest, if any, on the global security, will credit participants' accounts with payments in amounts proportionate to their respective beneficial interests in the principal amount of the global security as shown on the records of DTC or its nominee. We also expect that payments by participants or indirect participants to owners of beneficial interests in the global security held through such participants or indirect participants will be governed by standing instructions and customary practices and will be the responsibility of such participants or indirect participants. Neither we, the trustee nor any paying agent or conversion agent will have any responsibility or liability for any aspect of the records relating to, or payments made on account of, beneficial interests in the global security for any debenture or for maintaining, supervising or reviewing any records relating to such beneficial interests or for any other aspect of the relationship between DTC and its participants or indirect participants or the relationship between such participants or indirect participants and the owners of beneficial interests in the global security owning through such participants.

Transfers between participants in DTC will be effected in the ordinary way in accordance with DTC rules and will be settled in same-day funds.

DTC has advised us that it will take any action permitted to be taken by a holder of debentures only at the direction of one or more participants to whose account the DTC interests in the global security is credited, and only in respect of such portion of the aggregate principal amount of debentures as to which such participant or participants has or have given such direction. However, if DTC notifies us that it is unwilling to be a depository for the global security or ceases to be a clearing agency or there is an event of default under the debentures, DTC will exchange the global security for certificated securities, which it will distribute to its participants and which will be legended, if required, as set forth under the heading "Transfer Restrictions".

Although DTC is expected to follow the foregoing procedures in order to facilitate transfers of interests in the global security among participants of DTC, it is under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued at any time. Neither we nor the trustee will have any responsibility or liability for the performance by DTC or the participants or indirect participants of their respective obligations under the rules and procedures governing their respective operations.

Registration Rights

The following summary of the registration rights to be provided in the registration rights agreement and the debentures is not complete. You should refer to the registration rights agreement for a full description of the registration rights that apply to the debentures.

We agreed to file a shelf registration statement under the Securities Act not later than 90 days after the first date of original issuance of the debentures to register resales of the debentures and the shares of common stock into which the debentures are convertible. The debentures and the common stock issuable upon conversion of the debentures are referred to collectively as registrable securities. The shelf registration statement to which this prospectus relates is intended to satisfy our obligations under the registration rights agreement. We will use our reasonable best efforts to have that shelf registration statement declared effective as soon as practicable but not later than 180 days after the first date of original issuance of the debentures, and to keep it effective until the earliest of:

(1) two years from the date the shelf registration statement becomes effective;

- (2) the date when all registrable securities shall have been registered under the Securities Act and disposed of; and
- (3) the date on which all registrable securities held by non-affiliates are eligible to be sold to the public pursuant to Rule 144(k) under the Securities Act.

If we notify the holders in accordance with the registration rights agreement upon the occurrence of certain events, then the holders will suspend the use of the prospectus until the requisite changes have been made and the period of effectiveness of the shelf registration statement provided for above shall be extended by the number of days from and including the date of the giving of such notice to and including the date when holders have received the amended or supplemented prospectus.

A holder of registrable securities that sells registrable securities pursuant to the shelf registration statement generally will be required to provide information about itself and the specifics of the sale, be named as a selling security holder in the related prospectus, deliver a prospectus to purchasers, be subject to relevant civil liability provisions under the Securities Act in connection with such sales and be bound by the provisions of the registration rights agreements which are applicable to such holder.

If:

- (1) the shelf registration statement has not been filed with the SEC by the 90th day after the first date of original issuance of the debentures;
- (2) the shelf registration statement has not been declared effective by the SEC by the 180th day after the first date of original issue of the debentures;
- (3) after the shelf registration statement has been declared effective, such shelf registration statement ceases to be effective, or the shelf registration statement or prospectus contained therein ceases to be usable in connection with the resales of debentures and the common stock issuable upon the conversion of the debentures, in accordance with and during the periods specified in the registration rights agreement because either (1) any event occurs as a result of which the prospectus forming part of such shelf registration statement would include any untrue statement of a material fact or omit to state any material fact necessary to make the statements therein in the light of the circumstances under which they were made not misleading or (2) it shall be necessary to amend such shelf registration statement or supplement the related prospectus, to comply with the Securities Act or Exchange Act or the respective rules thereunder; or
- (4) after the effectiveness of the shelf registration statement, we have failed to timely comply with any of our obligations with respect to filing any amendments or supplements to the shelf registration statement so that a holder that has returned a completed questionnaire (as defined below) may use the prospectus

(we refer to each such event described above in clauses (1) through (4) as a registration default), additional interest will accrue on the debentures, from and including the date on which the registration default shall occur to but excluding the date on which all such registration defaults have been cured, at the rate of 0.50% per year and additional amounts shall accumulate on any common stock issued upon conversion of the debentures at an equivalent rate.

Notwithstanding the foregoing, after the effectiveness of the shelf registration statement, we may suspend the availability of the shelf registration statement and the use of any prospectus by written notice to the holders for a period or periods not to exceed an aggregate of 45 calendar days in any

90-calendar day period, and not to exceed 90 calendar days in any twelve-month period (each such period, a "*Deferral Period*") without incurring such additional interest or additional amounts if:

- (i) an event has occurred and is continuing as a result of which the shelf registration statement would, in our reasonable judgment, contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading; and
- (ii) we determine in good faith that the disclosure of such event at such time would have a material adverse effect on our company and its subsidiaries taken as a whole and is not otherwise then required by law to be disclosed;

provided, that in the event the disclosure relates to a proposed or pending material business transaction that is previously not disclosed publicly, the disclosure of which would, in our judgment, impede our ability to consummate such transaction, we may extend a Deferral Period from 45 calendar days to 60 calendar days in any 90-calendar day period without incurring such additional interest or additional amounts; provided, however, that any such extension of a Deferral Period shall be included in calculating the 90 calendar days referred to above.

We will give notice of our intention to file the shelf registration statement, which we refer to as a filing notice, to each of the holders of the debentures in the same manner as we would give notice to holders of debentures under the indenture. The filing notice will seek, among other things, a determination from each of such holders as to whether such holder elects to have its debentures and the common stock issuable upon conversion thereof registered for sale pursuant to the shelf registration statement.

We will give notice to all holders who have provided us with the notice and questionnaire described below of the effectiveness of the shelf registration statement. You will need to complete the notice and questionnaire attached as Annex A to this prospectus prior to any intended distribution of your registrable securities pursuant to the shelf registration statement. We refer to this form of notice and questionnaire as the "questionnaire". You are required to deliver the questionnaire prior to the effectiveness of the shelf registration statement so that you can be named as a selling security holder in the prospectus. Upon receipt of your completed questionnaire after the effectiveness of the shelf registration statement, we will file a supplement to the registration statement as promptly as practicable or, if required by applicable law, a post-effective amendment to the shelf registration statement or an additional shelf registration statement as promptly as practicable after the filing of each Form 10-K or Form 10-Q that we file so that a holder whose securities are not registered may use the prospectus, subject to our right to suspend use under certain circumstances.

We will pay all expenses incident to our performance of and compliance with the registration rights agreement, provide each holder that is selling registrable securities pursuant to the shelf registration statement copies of the related prospectus and take other actions as are required to permit, subject to the foregoing, unrestricted resales of the registrable securities.

DESCRIPTION OF CAPITAL STOCK

Common Stock

Our Restated Certificate of Incorporation authorizes the issuance of up to 50,000,000 common shares, par value \$.50 per share. As of April 30, 2005, there were 25,325,244 common shares issued, which included 25,228,278 outstanding common shares, 8,949 shares held in treasury, and 88,017 common shares held by rabbi trust. Holders of our common shares are entitled to one vote per share with respect to each matter presented to our stockholders on which the holders of common shares are entitled to vote. Subject to the preferences applicable to any outstanding preferred stock, the holders of common shares are entitled to receive ratably any dividends declared by our board of directors out of funds legally available for that purpose. In the event of liquidation, holders of common shares will be entitled to receive any assets remaining after the payment of our debts and the expenses of the liquidation, subject to such preferences applicable to any outstanding preferred stock. The holders of our common shares have no pre-emptive, subscription or conversion rights. All issued and outstanding shares of common stock are validly issued, fully paid and non-assessable. The rights of holders of common shares will be subject to, and may be adversely affected by, the rights of holders of preferred stock, if any.

As of April 30, 2005, the Company had options outstanding to purchase 1,132,689 shares of the Company's common stock at a weighted average exercise price of \$26 per share.

Preferred Stock

Our Restated Certificate of Incorporation authorizes the issuance of up to 1,000,000 shares of preferred stock, no par value. As of April 30, 2005, no shares of preferred stock were issued and outstanding. Our board of directors has the authority, without action by our stockholders, to provide for the issuance of shares of preferred stock in one or more series and to designate the rights, preferences and privileges of each series, which may be greater than the rights of our common shares. The issuance of preferred stock with voting and conversion rights may adversely affect the voting power of the holders of common shares, including the loss of voting rights to others.

The issuance of shares of preferred stock could be utilized, under certain circumstances, in an attempt to prevent an acquisition of the Company. We have no present intention to issue any shares of preferred stock. Shares of preferred stock designated for use in connection with our rights plan are described below.

Limitation of Director Liability

Our Restated Certificate of Incorporation contains a provision that limits the liability of the Company's directors as permitted under Delaware law. The provision eliminates the liability of a director to the Company or its stockholders for monetary damages for breach of fiduciary duty of the director, except for liability (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or involving intentional misconduct or knowing violation of law, (iii) under Section 174 of the General Corporation Law of the State of Delaware, or (iv) on any transaction from which the director derived an improper personal benefit.

Rights Plan

Attached to each share of the Company's common stock is one Preferred Stock Purchase Right (a "Right"). These Rights are intended to assure that all stockholders would receive fair treatment in the event of a proposed takeover of the Company and to provide the Board of Directors of the Company with needed flexibility in responding to abusive takeover tactics. Each Right, when exercisable, entitles the holder to purchase ¹/1000th of a share of the Company's Series A Junior Participating Preferred

Stock at an exercise price of \$90. Each ¹/1000th of a share of Series A Junior Participating Preferred Stock will be entitled to a dividend equal to the greater of \$.01 or the dividend declared on each share of common stock, and will be entitled to ¹/1000th of a vote, voting together with the shares of common stock. The Rights will be exercisable only if, without the Company's prior consent, a person or group of persons acquires or announces the intention to acquire 20% or more of the Company's common stock. If the Company is acquired through a merger or other business combination transaction, each Right will entitle the holder to purchase \$120 worth of the surviving company's common stock for \$90. Additionally, if someone acquires 20% or more of the Company's common stock, each Right not owned by the 20% or greater stockholder, would permit the holder to purchase \$120 worth of the Company's common stock for \$90. The Rights are redeemable, at the option of the Company, at \$.02 per Right at any time until ten days after someone acquires 20% or more of the common stock. The Rights expire April 15, 2009.

Delaware Anti-Takeover Law

We are a Delaware corporation subject to Section 203 of the Delaware General Corporation Law. Under Section 203, certain "business combinations" between a Delaware corporation and an "interested stockholder" are prohibited for a three-year period following the date that such stockholder became an interested stockholder, unless:

- the business combination or the transaction which resulted in the stockholder becoming an interested stockholder was approved by the board of
 directors of the corporation before such stockholder became an interested stockholder;
- upon consummation of the transaction that resulted in such stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (a) by directors who are also officers and (b) by employee stock plans in which the employees do not have a confidential right to tender stock held by the plan in a tender or exchange offer; or
- the business combination is approved by the board of directors of the corporation and authorized at a meeting by two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

The three-year prohibition also does not apply to some business combinations proposed by an interested stockholder following the announcement or notification of an extraordinary transaction involving the corporation and a person who had not been an interested stockholder during the previous three years or who became an interested stockholder with the approval of a majority of the corporation's directors.

Under the Delaware General Corporation Law, the term "business combination" is defined generally to include mergers or consolidations between a Delaware corporation and an interested stockholder, transactions with an interested stockholder involving the assets or stock of the corporation or its majority-owned subsidiaries, and transactions that increase an interested stockholder's percentage ownership of stock. The term "interested stockholder" is defined generally as those stockholders who become beneficial owners of 15% or more of a Delaware corporation's voting stock, together with the affiliates or associates of that stockholder.

Anti-Takeover Effects of Our Restated Certificate of Incorporation and Bylaws

In addition, our Restated Certificate of Incorporation provides that certain corporate actions require an affirmative vote of holders of at least 80% of the voting power of the then outstanding capital stock entitled to vote generally in the election of directors. These actions include:

- the adoption of any agreement for, or approval of, the merger or consolidation of the Company or any subsidiary with or into any other person (as therein defined);
- the authorization of any sale, lease, transfer, exchange, mortgage, pledge or other disposition of all or substantially all of the assets of the Company or any subsidiary; or
- the authorization of certain issuances or transfers by the Company or any subsidiary of any voting securities of the Company or any subsidiary to a 5% beneficial owner of the Company in exchange or payment for the securities or assets of any other person.

Our Restated Certificate of Incorporation also provides that stockholders may act only at an annual or special meeting of stockholders and not by written consent except under certain circumstances. Our Bylaws provide that special meetings of the stockholders can be called only by the President or Secretary, and then only at the written request of at least a majority of the directors. These provisions could have the effect of delaying until the next annual stockholders meeting stockholder actions that are favored by the holders of a majority of the outstanding voting securities. These provisions may also discourage another person or entity from making an offer to stockholders for the common stock. This is because the person or entity making the offer, even if it acquired a majority of our outstanding voting securities, might be unable to call a special meeting of the stockholders and might be unable to obtain unanimous written consent of the stockholders. As a result, any meeting as to matters they endorse, including the election of new directors or the appraisal of a merger, might have to wait for the next duly called stockholders meeting.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Wells Fargo Bank, N.A.

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS

The following discussion describes the material U.S. federal income tax considerations relevant to persons holding the debentures and our common stock into which the debentures may be converted. This discussion applies only to holders that hold the debentures and our common stock as capital assets. This discussion does not describe all of the tax considerations that may be relevant to a holder in light of its particular circumstances or to holders subject to special rules, such as:

- certain financial institutions;
- insurance companies;
- tax-exempt organizations;
- dealers and certain traders in securities;
- persons holding the debentures or our common stock as part of a "straddle", "hedge", "conversion" or similar transaction;
- United States Holders (as defined below) whose functional currency is not the U.S. dollar;
- certain former citizens or residents of the United States;
- partnerships or other entities classified as partnerships for U.S. federal income tax purposes; and
- persons subject to the alternative minimum tax.

This discussion is based on the Internal Revenue Code of 1986, as amended (the "Code"), administrative pronouncements, judicial decisions and final, temporary and proposed Treasury regulations, changes to any of which subsequent to the date of this prospectus may affect the tax consequences described herein, possibly with retroactive effect. This discussion does not describe any tax consequences arising out of the tax laws of any state, local or foreign jurisdiction or any possible applicability of the U.S. federal gift or estate tax laws.

No ruling has been requested from the IRS with respect to any of the U.S. federal income tax consequences of the matters which are discussed herein and the IRS may not agree with some of the conclusions set forth herein. If the IRS contests a conclusion set forth herein, no assurance can be given that a holder of the debentures would ultimately prevail in a final determination by a court.

THIS DISCUSSION DOES NOT CONSTITUTE LEGAL ADVICE TO ANY HOLDER. HOLDERS OF THE DEBENTURES ARE URGED TO CONSULT THEIR TAX ADVISORS WITH REGARD TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES ARISING UNDER THE LAWS OF ANY STATE, LOCAL OR FOREIGN TAXING JURISDICTION.

Classification of the Debentures

Under the indenture governing the debentures, we have agreed, and by acceptance of a beneficial interest in a debenture, each holder of a debenture has been deemed to have agreed, to treat the debentures as indebtedness for U.S. federal income tax purposes that is subject to the Treasury regulations governing contingent payment debt instruments (the "contingent payment debt regulations"). Pursuant to the terms of the indenture, we and every holder have agreed (in the absence of an administrative determination or judicial ruling to the contrary) to be bound by our application of the contingent payment debt regulations to the debentures, including our determination of the projected payment schedule (as described below) and the comparable yield (as described below), which is the rate at which interest will be deemed to accrue on the debentures for U.S. federal income tax purposes.

The Internal Revenue Service ("IRS") has issued a ruling addressing the U.S. federal income tax classification and treatment of instruments similar, although not identical, to the debentures, and concluded that the instruments addressed in that published guidance were subject to the contingent payment debt regulations. In addition, the IRS clarified various aspects of the potential applicability of certain other provisions of the Code to the instruments addressed in that published guidance. However, the ruling is limited to its particular facts, and, the proper application of the contingent payment debt regulations to the debentures is uncertain in a number of respects, and no assurance can be given that the IRS will not assert that the debentures should be treated differently. A different treatment of the debentures upon a successful challenge by the IRS or a change in law could significantly affect the amount, timing and character of income, gain or loss with respect to holders of the debentures. Accordingly, you are urged to consult your tax advisor regarding the U.S. federal income tax consequences of holding the debentures and the applicability of any proposed legislation (and the prospects of applicable future legislation) as well as with respect to any tax consequences arising under the laws of any state, local or foreign taxing jurisdiction, and the possible effects of changes in tax laws.

The remainder of this discussion assumes that the debentures will be treated as indebtedness subject to the contingent payment debt regulations as described above.

Fulbright & Jaworski L.L.P., in its capacity as our tax counsel, has participated in the preparation of this discussion. Subject to the assumptions, qualifications and limitations set forth in this discussion, the statements in this discussion, insofar as such statements constitute conclusions of law and describe the material U.S. federal income tax considerations relevant to persons holding the debentures and the common stock into which the debentures may be converted, are the opinion of our tax counsel. An opinion of tax counsel is not binding upon the IRS or any court, and no assurance can be given that the legal conclusions reached by our tax counsel herein would be sustained by a court if contested by the IRS.

Tax Consequences to United States Holders

As used herein, the term "United States Holder" means a beneficial owner of a debenture or our common stock that is for U.S. federal income tax purposes:

- a citizen or resident of the United States;
- a corporation, or other entity taxable as a corporation for U.S. federal income tax purposes, created or organized in or under the laws of the United States or of any political subdivision thereof;
- an estate the income of which is includible in gross income for U.S. federal income tax purposes regardless of its source; or
- a trust, if a U.S. court is able to exercise primary supervision over administration of the trust and one or more U.S. persons have the authority to control all substantial decisions of the trust.

Interest Accruals on the Debentures

Under the contingent payment debt regulations, a United States Holder, regardless of its method of accounting for U.S. federal income tax purposes, will be required to accrue interest income on the debentures on a constant yield basis at an assumed yield (the "comparable yield") determined at the time of issuance of the debentures. Accordingly, United States Holders generally will be required to include interest in income, in each year prior to maturity, in excess of the regular interest payments on the debentures. The comparable yield for the debentures is based on the yield at which we could have issued, as of the issue date, a nonconvertible fixed rate debt instrument with no contingent payments, but with terms and conditions otherwise similar to those of the debentures. We have determined the comparable yield to be 5.86%.

Solely for purposes of determining the amount of interest income that a United States Holder will be required to accrue, we have prepared a "projected payment schedule" in respect of the debentures representing a series of payments the amount and timing of which would produce a yield to maturity on the debentures equal to the comparable yield. The projected payment schedule includes the amount of each noncontingent payment and an estimate for each contingent payment, taking into account the conversion feature. Holders that wish to obtain the projected payment schedule may do so by submitting a written request for such information to Quanex Corporation, Attention: Chief Financial Officer and Treasurer, 1900 West Loop South, Suite 1500, Houston, Texas 77027.

Neither the comparable yield nor the projected payment schedule constitutes a projection or representation by us regarding the actual amount that will be paid on the debentures, or the value at any time of the common stock into which the debentures may be converted. Pursuant to the terms of the indenture, we and every holder have agreed (in the absence of an administrative determination or judicial ruling to the contrary) to be bound by our determination of the comparable yield and projected payment schedule.

It is possible that the IRS could challenge our determination of the comparable yield and projected payment schedule. The yield, if redetermined as a result of such a challenge, could be greater or less than the comparable yield provided by us, and the projected payment schedule could differ materially from the projected payment schedule we have provided. In such case, the taxable income of a holder arising from the ownership, sale, exchange, conversion, redemption or retirement of a debenture could be increased or decreased.

Based on the comparable yield and the issue price of the debentures, a United States Holder of a debenture (regardless of its accounting method) will be required to accrue interest as the sum of the daily portions of interest on the debentures for each day in the taxable year on which the United States Holder holds the debenture, adjusted upward or downward to reflect the difference, if any, between the actual and projected amount of any contingent payments on the debentures (as set forth below). The issue price of the debentures is the first price at which a substantial amount of the debentures were sold to the public, excluding sales to bond houses, brokers or similar persons or organizations acting in the capacity as underwriters, placement agents or wholesalers (the "issue price"). If you purchase a debenture at a price other than its issue price, see the discussion under "—Debentures Purchased at a Price other than the Adjusted Issue Price".

The daily portions of interest in respect of a debenture are determined by allocating to each day in an accrual period the ratable portion of interest on the debenture that accrues in the accrual period. The amount of interest on a debenture that accrues in an accrual period is the product of the comparable yield on the debenture (adjusted to reflect the length of the accrual period) and the adjusted issue price of the debenture as of the beginning of the accrual period. The adjusted issue price of a debenture at the beginning of the first accrual period will equal its issue price and for any accrual periods thereafter will be (x) the sum of the issue price of such debenture and any interest previously accrued thereon (disregarding any positive or negative adjustments described below) minus (y) the amount of any noncontingent payment and the amount of any projected payments on the debentures for previous accrual periods.

In addition to the interest accrual discussed above, a United States Holder will be required to recognize interest income equal to the amount of the excess of actual payments over projected payments (a "positive adjustment") in respect of a debenture for a taxable year. For this purpose, the payments in a taxable year include the fair market value of property (including our common stock) received in that year. If a United States Holder receives actual payments that are less than the projected payments in respect of a debenture for a taxable year, the United States Holder will incur a "negative adjustment" equal to the amount of such difference. This negative adjustment will (i) first reduce the amount of interest in respect of the debenture that a United States Holder would otherwise

be required to include in income in the taxable year and (ii) to the extent of any excess, give rise to an ordinary loss equal to that portion of such excess that does not exceed the excess of (A) the amount of all previous interest inclusions under the debenture over (B) the total amount of the United States Holder's net negative adjustments treated as ordinary loss on the debenture in prior taxable years. Any negative adjustment in excess of the amounts described in (i) and (ii) will be carried forward to offset future interest income in respect of the debentures or, if there is a negative adjustment carryforward on the debenture in a taxable year in which the debenture is sold, converted, exchanged, redeemed or retired, to reduce the amount realized on a sale, conversion, exchange, redemption or retirement of the debentures. A net negative adjustment is not subject to the two percent floor limitation imposed on miscellaneous deductions under Section 67 of the Code.

Amounts treated as interest under the contingent payment debt regulations are treated as original issue discount for all purposes of the Code.

Debentures Purchased at a Price other than the Adjusted Issue Price

If a United States Holder purchases a debenture for an amount that differs from the adjusted issue price of the debentures at the time of the purchase, such holder will be required to accrue interest income on the debenture in accordance with the projected payment schedule based on the comparable yield even if market conditions have changed since the date of issuance. The normal rules for accruing bond premium, acquisition premium and market discount will not apply; instead, a United States Holder must reasonably determine whether the difference between the purchase price for a debenture and the adjusted issue price of such debenture is attributable to a change in expectations as to the contingent amounts potentially payable in respect of the debentures, a change in interest rates since the debentures were issued, or both, and allocate reasonably the difference according to such determination. To the extent that the difference between purchase price and adjusted issue price is attributable to a change in interest rates, it must be allocated reasonably to the daily portions of interest over the remaining term of the debentures. To the extent that such difference is attributable to a change in expectations as to the contingent amounts payable in respect of the debentures, it must be allocated reasonably to the contingent payments based on the projected payment schedule.

If the purchase price of a debenture is less than its adjusted issue price, the amount of the difference is treated as a positive adjustment on the date the daily portion of interest accrues or the contingent payment is made (depending on how such difference was allocated, as discussed in the preceding paragraph). This positive adjustment will increase (a) the amount of interest (including with respect to contingent payments) that the United States Holder otherwise would accrue and include in income each year or (b) the amount of ordinary income (or decrease the amount of ordinary loss) recognized upon redemption or maturity, or both. If the purchase price of a debenture is more than its adjusted issue price, the amount of the difference is treated as a negative adjustment on the date the daily portion of interest accrues or the contingent payment is made (depending on how such difference was allocated, as discussed above). This negative adjustment will decrease (a) the amount of interest (including with respect to contingent payments) that the United States Holder must include in income each year or (b) the amount of ordinary income (or increase the amount of ordinary loss) recognized upon redemption or maturity, or both. Any positive or negative adjustment that a United States Holder is required to make during its holding period as a result of purchasing a debenture at a price other than the debenture's adjusted issue price will increase or decrease, respectively, such holder's tax basis in the debenture.

Certain United States Holders will receive Form 1099-OID reporting interest accruals on their debentures. Those forms will not, however, reflect the effect of any positive or negative adjustments resulting from a United States Holder's purchase of a debenture at a price that differs from its adjusted issue price on the date of purchase. **United States Holders are urged to consult their tax**

advisors as to whether, and how, the adjustments should be made to the amounts reported on any Form 1099-OID.

Sale, Conversion, Exchange, Redemption or Retirement of the Debentures

Upon a sale, conversion, exchange, redemption or retirement of a debenture for cash or our common stock, a United States Holder will generally recognize gain or loss equal to the difference between the amount realized on the sale, conversion, exchange, redemption or retirement (including the fair market value of our common stock received, if any) and such United States Holder's adjusted tax basis in the debenture. A United States Holder's adjusted tax basis in a debenture will generally be equal to the United States Holder's purchase price for the debenture, increased by any interest income previously accrued by the United States Holder (determined without regard to any positive or negative adjustments to interest accruals described above) and decreased by the amount of any noncontingent payment and the projected amount of any contingent payment previously made on the debentures to the United States Holder. A United States Holder generally will treat any gain as interest income, and any loss as ordinary loss to the extent of the excess of previous interest inclusions over the total negative adjustments previously taken into account as ordinary loss, and the balance as capital loss. The deductibility of capital losses is subject to limitations. A United States Holder who sells the debentures at a loss that meets certain thresholds may be required to file a disclosure statement with the IRS.

A United States Holder's tax basis in our common stock received upon a conversion of a debenture will equal the then current fair market value of such common stock. The United States Holder's holding period for the common stock received will commence on the day immediately following the date of conversion.

Constructive Dividends

If at any time we increase the conversion rate of the debentures, either at our discretion or pursuant to the anti-dilution provisions, the increase may be deemed to be the payment of a taxable dividend to the United States Holders of the debentures.

Generally, a reasonable increase in the conversion rate in the event of stock dividends or distributions of rights to subscribe for our common stock will not be a taxable dividend.

Taxation of Distributions on Common Stock

Distributions paid on our common stock received upon conversion of a debenture, other than certain pro rata distributions of common shares, will be treated as a dividend to the extent paid out of current or accumulated earnings and profits (as determined under U.S. federal income tax principles) and will be includible in income by the United States Holder and taxable as ordinary income when received. If a distribution exceeds our current and accumulated earnings and profits, the excess will be first treated as a tax-free return of the United States Holder's investment, up to the United States Holder's tax basis in the common stock. Any remaining excess will be treated as a capital gain. Under recently enacted legislation, dividends received by noncorporate United States Holders on common stock may be subject to U.S. federal income tax at lower rates than other types of ordinary income if certain conditions are met. United States Holders should consult their own tax advisors regarding the implications of this new legislation in their particular circumstances.

Sale or Other Disposition of Common Stock

Gain or loss realized by a United States Holder on the sale or other disposition of our common stock received upon conversion of a debenture will be capital gain or loss for U.S. federal income tax purposes, and will be long-term capital gain or loss if the United States Holder held the common stock for more than one year. The amount of the United States Holder's gain or loss will be equal to the

difference between the United States Holder's tax basis in the common stock disposed of and the amount realized on the disposition. A United States Holder who sells the stock at a loss that meets certain thresholds may be required to file a disclosure statement with the IRS.

Tax Consequences to Non-United States Holders

As used herein, the term "Non-United States Holder" means a beneficial owner (other than a partnership) of a debenture or our common stock that is not a United States Holder.

Payments on Debentures

All payments on the debentures made to a Non-United States Holder, including a payment in our common stock or cash pursuant to a conversion, exchange, redemption or retirement and any gain realized on a sale of the debentures, will be exempt from U.S. federal income and withholding tax, provided that:

- the Non-United States Holder does not own, actually or constructively, 10% or more of the total combined voting power of all classes of our stock entitled to vote and is not a controlled foreign corporation related, directly or indirectly, to us through stock ownership and is not a bank receiving certain types of interest;
- the Non-United States Holder provides, prior to payment, its name and address, and certifies, under penalties of perjury, that it is not a U.S. person (which certification may be made on an IRS Form W-8BEN (or successor form));
- such payments are not effectively connected with the conduct by such Non-United States Holder of a trade or business in the United States;
- our common stock continues to be actively traded within the meaning of Section 871(h)(4)(C)(I) of the Code; and
- in the case of gain realized on the sale, conversion, exchange, redemption or retirement of the debentures (which is treated as ordinary interest income), we are not, and have not been within the shorter of the five-year period preceding such sale, conversion, exchange, redemption or retirement and the period the Non-United States Holder held the debentures, a United States real property holding corporation. We believe that we are not, and do not anticipate becoming, a United States real property holding corporation for U.S. federal income tax purposes.

However, if a Non-United States Holder were deemed to have received a constructive dividend (see "Tax Consequences to United States Holders—Constructive Dividends" above), the Non-United States Holder generally will be subject to U.S. withholding tax at a 30% rate, subject to reduction by an applicable treaty, on the taxable amount of the dividend. A Non-United States Holder who is subject to withholding tax under such circumstances should consult its own tax advisor as to whether it can obtain a refund for all or a portion of the withholding tax.

With respect to the second bullet point above, special certification rules apply to Non-United States Holders that are pass-through entities rather than corporations or individuals. Prospective investors should consult their tax advisors regarding the certification requirements for Non-United States Holders.

If a Non-United States Holder cannot satisfy the requirements described in the bullet points above, payments of interest (including original issue discount) will be subject to the 30% U.S. withholding tax, unless such Non-United States Holders provide us with a properly executed (1) IRS Form W-8BEN (or successor form) claiming an exemption from or reduction in withholding under the benefit of an applicable income tax treaty or (2) IRS Form W-8ECI (or successor form) stating that interest (including original issue discount) paid on the debentures is not subject to withholding tax

because it is effectively connected with such Non-United States Holder's conduct of a trade or business in the United States.

If a Non-United States Holder of a debenture is engaged in a trade or business in the United States, and if payments on the debenture are effectively connected with the conduct of this trade or business, the Non-United States Holder, although exempt from U.S. withholding tax (assuming the certification requirements described above are met), will generally be taxed in the same manner as a United States Holder (see "Tax Consequences to United States Holders" above). Such Non-United States Holders should consult their own tax advisors with respect to other tax consequences of the ownership of the debentures, including the possible imposition of a 30% branch profits tax.

Distributions on Common Stock

Dividends paid to a Non-United States Holder of our common stock generally will be subject to U.S. withholding tax at a 30% rate, subject to reduction under an applicable treaty. In order to obtain a reduced rate of withholding, a Non-United States Holder will be required to provide a properly executed IRS Form W-8BEN certifying its entitlement to benefits under a treaty. A Non-United States Holder who is subject to withholding tax under such circumstances should consult its own tax advisor as to whether it can obtain a refund for all or a portion of the withholding tax.

If a Non-United States Holder of our common stock is engaged in a trade or business in the United States, and if the dividends are effectively connected with the conduct of this trade or business, the Non-United States Holder, although exempt from U.S. withholding tax, will generally be taxed in the same manner as a United States Holder (see "Tax Consequences to United States Holders" above), except that the Non-United States Holder will be required to provide a properly executed IRS Form W-8ECI in order to claim an exemption from withholding tax. These Non-United States Holders should consult their own tax advisors with respect to other tax consequences of the ownership of our common stock, including the possible imposition of a 30% branch profits tax.

Sale or Other Disposition of Common Stock

A Non-United States Holder generally will not be subject to U.S. federal income and withholding tax on gain realized on a sale or other disposition of the common stock received upon a conversion of a debenture, unless:

- the gain is effectively connected with the conduct by such Non-United States Holder of a trade or business in the United States;
- in the case of a Non-United States Holder who is a nonresident alien individual, the individual is present in the United States for 183 or more days in the taxable year of the disposition and certain other conditions are met; or
- we are or have been a United States real property holding corporation at any time within the shorter of the five-year period preceding such sale, exchange or disposition and the period the Non-United States Holder held the common stock.

We believe that we are not, and do not anticipate becoming, a United States real property holding corporation for U.S. federal income tax purposes. If we are or become a United States real property holding corporation and our common stock is and continues to be regularly traded on an established securities market, only a Non-United States Holder of common stock who holds or held (at any time during the shorter of the five year period preceding the date of disposition or the holder's holding period) more than 5% of our common stock will be subject to U.S. federal income tax on the disposition of our common stock.

If a Non-United States Holder of our common stock is engaged in a trade or business in the United States, and if the gain on the common stock is effectively connected with the conduct of this trade or business, the Non-United States Holder will generally be taxed in the same manner as a United States Holder (see "Tax Consequences to United States Holders" above). These Non-United States Holders should consult their own tax advisors with respect to other tax consequences of the disposition of the common stock, including the possible imposition of a 30% branch profits tax.

Backup Withholding and Information Reporting

Information returns may be filed with the IRS in connection with payments on the debentures, the common stock into which the debentures may be converted and the proceeds from a sale or other disposition of the debentures or the common stock. In addition, copies of these information returns also may be made available under the provisions of a specific treaty or other agreement to the tax authorities of the country in which the Non-United States Holder resides. A United States Holder may be subject to U.S. backup withholding tax on these payments if it fails to provide its taxpayer identification number to the paying agent and comply with certification procedures or otherwise establish an exemption from backup withholding. A Non-United States Holder may be subject to U.S. backup withholding tax on these payments unless the Non-United States Holder complies with certification procedures to establish that it is not a U.S. person. The certification procedures required of Non-United States Holders to claim the exemption from withholding tax on certain payments on the debentures, described above, will satisfy the certification requirements necessary to avoid the backup withholding tax as well. The amount of any backup withholding from a payment will be allowed as a credit against the holder's U.S. federal income tax liability and may entitle the holder to a refund, provided that the required information is timely furnished to the IRS.

PLAN OF DISTRIBUTION

The securities to be offered and sold using this prospectus are being registered to permit public secondary trading of these securities by the selling security holders from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling security holders of the debentures and shares of our common stock issuance upon conversion of the debentures offered by this prospectus. The term "selling security holders" includes transferees, distributees, pledgees, donees or other successors selling debentures and shares of our common stock issuable upon conversion of the debentures received after the date of this prospectus from a selling security holders as a gift, pledge, partnership distribution or other non-sale related transfer.

The selling security holders will act independently of us in making decisions with respect to the timing, manner and size of each sale. A selling security holder reserves the right to accept and, together with its agents, to reject, any proposed purchases of debentures or common stock to be made directly or through agents.

If the debentures and the shares of our common stock issuable upon conversion of the debentures are sold through underwriters, broker-dealers or agents, the selling security holders will be responsible for underwriting discounts or commissions and/or agents' commissions. Such debentures and shares may be sold in one or more transactions at fixed prices, prevailing market prices at the time of sale, prices related to such prevailing market prices, varying prices determined at the time of sale or negotiated prices.

These sales may be effected in transactions:

- on any national securities exchange or quotation service on which the debentures and shares of our common stock issuable upon conversion of the debentures may be listed or quoted at the time of the sale;
- in the over-the-counter market;
- in transactions otherwise than on such exchanges or services or in the over-the-counter market;
- through the writing and exercise of options, whether such options are listed on an options exchange or otherwise;
- through the settlement of short sales; or
- through any combination of the foregoing.

These transactions may include block transactions or crosses. Crosses are transactions in which the same broker acts as an agent on both sides of the trade.

In addition, any debentures and shares of our common stock that qualify for sale pursuant to Rule 144, Rule 144A or Regulation S under the Securities Act may be sold under Rule 144A or Regulation S rather than pursuant to this prospectus.

In connection with the sales of debentures and shares of our common stock issuable upon conversion of the debentures or otherwise, the selling security holders may enter into hedging transactions with broker-dealers or other financial institutions. These broker-dealers or other financial institutions may in turn engage in short sales of debentures and shares of our common stock issuable upon conversion of the debentures in the course of hedging their positions. The selling security holders may also sell the debentures and shares of our common stock issuable upon conversion of the debentures short and deliver debentures and shares of our common stock issuable upon conversion of the debentures or shares of our common stock issuable upon conversion of the debentures to broker-dealers that in turn may sell the debentures and shares of our common stock issuable upon conversion of the debentures.

Credit Suisse First Boston LLC, KBC Financial Products USA Inc. and UBS Securities LLC are identified as registered broker-dealers under "Selling Security Holders" and are "underwriters" within the meaning of the Securities Act of 1933 in connection with the sale of the debentures or the common stock. Other selling security holders that sell the debentures or shares of common stock hereunder may also be deemed to be "underwriters" within the meaning of the Securities Act. Any commissions such

persons receive and any profits on the sale of the debentures and shares of our common stock issuable upon the conversion of the debentures may be deemed to be underwriting discounts and commissions under the Securities Act. Neither we nor any selling security holder can presently estimate the amount of any such compensation.

We understand that several of the selling security holders are affiliates of broker-dealers. Each of these selling security holders has informed us that: (1) such selling security holder purchased its debentures in the ordinary course of business, and (2) at the time that the debentures were purchased, the selling security holder had no agreements or understandings, directly or indirectly, with any person to distribute the debentures.

To the extent required, this prospectus may be amended or supplemented from time to time to describe a specific plan of distribution. Any selling security holder may pledge or grant a security interest in some or all of the debentures and the shares of our common stock issuable upon conversion of the debentures owned by it and, if such selling security holder defaults in performance of its secured obligations, the pledgees or secured parties may offer and sell the pledged debentures and the shares of our common stock issuable upon conversion of the debentures from time to time pursuant to this prospectus. The selling security holders may also transfer and donate the debentures and the shares of our common stock issuable upon conversion of the debentures in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling security holder for purposes of this prospectus.

To our knowledge, there are currently no plans, arrangements or understandings between any selling security holders and any underwriter, broker-dealer or agent regarding the sale of the debentures or the underlying common stock by the selling security holders. Selling security holders may decide to sell all or a portion of the debentures or the underlying common stock offered by them under this prospectus. In addition, any selling security holder may transfer, devise or give the debentures or the underlying common stock by other means not described in this prospectus.

Our common stock is quoted on the New York Stock Exchange under the symbol "NX". We do not intend to apply for listing of the debentures on any securities exchange or national market system. Accordingly, no assurance can be given as to the liquidity of, or development of any trading markets for, the debentures.

The selling security holders and any other person participating in the distribution of the debentures or underlying common stock will be subject to the Exchange Act. The Exchange Act rules include, without limitation, Regulation M, which may limit the timing of purchases and sales of any of the debentures and the underlying common stock by the selling security holders and any such other person. In addition, Regulation M of the Exchange Act may restrict the ability of any person engaged in the distribution of the debentures and the underlying common stock to engage in market making activities with respect to the particular debentures and underlying common stock being distributed for a period of up to five business days prior to the commencement of such distribution. This may affect the marketability of the debentures and the underlying common stock and the ability to engage in market making activities with respect to the debentures and the underlying common stock.

Under the registration rights agreement that has been filed as an exhibit to the registration statement of which this prospectus is a part, we and the selling security holders will each indemnify the other against certain liabilities, including certain liabilities under the Securities Act, or will be entitled to contribution in connection with these liabilities.

We have agreed to pay substantially all of the expenses incidental to the registration, offering and sale of the debentures and the underlying common stock to the public other than commissions, fees and discounts of underwriters, brokers, dealers and agents.

From time to time and in the ordinary course of business, the initial purchasers of the debentures in the private placement and their affiliates have provided financial advisory, investment banking and other general financing services to us and our affiliates for customary fees.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the information and reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), under which we file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy materials that we have filed with the SEC at the SEC's public reference room located at 450 Fifth Street, N.W., Room 1024, Washington, DC 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. Our SEC filings also are available to the public on the SEC's website at www.sec.gov, which contains reports, proxies and information statements and other information regarding issuers that file electronically. In addition, Quanex's SEC filings are available on the Quanex website at www.quanex.com.

We have agreed that if at any time the debentures or the shares of common stock issuable upon the conversion thereof are "restricted securities" within the meaning of the Securities Act and we are not subject to the information reporting requirements of the Exchange Act, we will furnish to holders of the debentures and such common stock and to prospective purchasers designated by them the information required to be delivered pursuant to Rule 144A(d)(4) under the Securities Act to permit compliance with Rule 144A in connection with resales of the debentures and such common stock.

We incorporate by reference into this prospectus the documents listed below and any future filings made with the SEC under Sections 13(a) or 15(d) of the Exchange Act, including any filings after the date of this prospectus and until this offering is complete. The information incorporated by reference is an important part of this prospectus. Any statement in a document incorporated by reference into this prospectus will be deemed to be modified or superseded to the extent a statement contained in (1) this prospectus or (2) any other subsequently filed document that is incorporated by reference into this prospectus modifies or supersedes such statement.

- Our Annual Report on Form 10-K for the fiscal year ended October 31, 2004, as amended.
- Our Quarterly Reports on Form 10-Q for the quarters ended January 31, 2005 and April 30, 2005.
- Our Current Reports on Form 8-K filed on December 14, 2004, as amended, January 5, 2005, January 12, 2005, January 26, 2005, February 7, 2005 March 10, 2005, March 10, 2005 and May 4, 2005 (including the information furnished under Item 7.01).
- The description of our common stock contained in the prospectus included in our registration statement that we filed (File No. 2-70313) on January 12, 1981 included in our company's registration statement (Registration No. 2-70313) and filed with the SEC pursuant to Rule 424(b) of the Securities Act of 1933, including any amendment or reports filed for the purpose of updating such description.
- The description of the rights that accompany the common stock to purchase our Series A Junior Participating Preferred Stock contained in the Amended and Restated Certificate of Designation, Preferences and Rights that we filed as Exhibit 1 to Amendment No. 1 to Form 8-A on April 28, 1989, as amended by the Third Amended and Restated Rights Agreement between Quanex Corporation and American Stock Transfer Co., as Rights Agent, that we filed as Exhibit 4.1 to our report on Form 8-K on September 17, 2004.

You may request a copy of these filings and copies of the indenture, debentures and registration rights agreement at no cost, by writing or telephoning us at the following address:

Quanex Corporation 1900 West Loop South, Suite 1500 Houston, Texas 77027 Attn: General Counsel (713) 961-4600

LEGAL MATTERS

The validity of the debentures offered hereby and of the shares of common stock issuable upon the conversion thereof and certain other legal matters will be passed upon for us by Fulbright & Jaworski L.L.P., Houston, Texas. Michael W. Conlon, a partner in the firm of Fulbright & Jaworski L.L.P., is the Assistant Secretary of the Company.

EXPERTS

The consolidated financial statements and related financial statement schedule incorporated in this Prospectus by reference from Quanex's Annual Report on Form 10-K/A have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report which is incorporated herein by reference, and have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

PART II INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 14. Other Expenses Of Issuance And Distribution.

The following table sets forth the estimated expenses in connection with the distribution of the securities covered by the registration statement of which this prospectus is a part. We will bear all of these expenses.

| Registration fee under the Securities Act | \$ 15,837.50 |
|---|------------------|
| Printing and engraving expenses* | 10,000.00 |
| Legal fees and expenses* | 100,000.00 |
| Accounting fees and expenses* | 50,000.00 |
| Miscellaneous* | 4,162.50 |
| | |
| Total | \$ 180,000.00 |
| | |

Estimated solely for the purpose of this Item. Actual expenses may be more or less.

Item 15. Indemnification Of Officers And Directors.

Section 145 of the General Corporation Law of the State 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.

The Registrant's Restated Certificate of Incorporation eliminates the personal monetary liability of a director to the Registrant and its stockholders for breach of his fiduciary duty of care as a director to the extent currently allowed under the Delaware General Corporation Law. Article XVII of the Registrant's Restated Certificate of Incorporation provides that a director of the Registrant shall not be personally liable to the Registrant or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the Registrant or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) based on the payment of an improper dividend or an improper repurchase of the Registrant's stock under Section 174 of the General Corporation Law of the State of Delaware, or (iv) for any transaction from which the director derived an improper personal benefit.

The Amended and Restated Bylaws of the Registrant provide that, under certain circumstances, the Registrant is required to indemnify any person who was, is, or is threatened to be made a party in any action, suit or proceeding because such person is or was a director or officer of the Registrant. The Registrant's Amended and Restated Bylaws were amended in February 1987 to provide for indemnification by the Registrant of its officers and directors to the fullest extent authorized by the General Corporation Law of the State of Delaware. This right to indemnification under the Registrant's Amended and Restated Bylaws is a contract right, and requires the Registrant to provide for the payment of expenses in advance of the final disposition of any suit or proceeding brought against the director or officer of the Registrant in his official capacity as such, provided that such director or officer delivers to the Registrant an undertaking to repay any amounts advanced if it is

ultimately determined that such director or officer is not entitled to indemnification. The Registrant also maintains a directors' and officers' liability insurance policy.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been informed that in the opinion of the Commission, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

Item 16. Exhibits

Exhibit Number **Description Of Exhibits** 1.1 Purchase Agreement dated April 29, 2004, between Quanex Corporation, Credit Suisse First Boston LLC, Bear, Stearns & Co. Inc., Robert W. Baird & Co. Incorporated, and KeyBanc Capital Markets, A Division of McDonald Investments Inc., relating to the Company's 2.50% Convertible Senior Debentures due May 15, 2034 filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q (Reg. No. 001-05725) dated April 30, 2004. 3.1 Restated Certificate of Incorporation of the Registrant dated as of November 10, 1995, filed as Exhibit 3.1 of the Registrant's Annual Report on Form 10-K (Reg. No. 001-05725) for the fiscal year ended October 31, 1995 and incorporated herein by reference. 3.2 Certificate of Amendment to Restated Certificate of Incorporation of the Registrant dated as of February 27, 1997, filed as Exhibit 3.2 of the Registrant's Annual Report on Form 10-K (Reg. No. 001-05725) for the fiscal year ended October 31, 1999 and incorporated herein by reference. 3.3 Amendment to Certificate of Designation, Preferences and Rights of Series A Junior Participating Preferred Stock of the Registrant dated as of April 15, 1999, filed as Exhibit 3.3 of the Registrant's Annual Report on Form 10-K (Reg. No. 001-05725) for the fiscal year ended October 31, 1999 and incorporated herein by reference. 3.4 Certificate of Correction of Amendment to Certificate of Designation, Preferences and Rights of Series A Junior Participating Preferred Stock dated as of April 16, 1999, filed as Exhibit 3.4 of the Registrant's Annual Report on Form 10-K (Reg. No. 001-05725) for the fiscal year ended October 31, 1999 and incorporated herein by reference. 3.5 Amended and Restated Bylaws of the Registrant, as amended through June 1, 2005 filed as Exhibit 3.5 to the Registrant's Quarterly Report on Form 10-Q (Reg. No. 001-05725) for the fiscal quarter ended April 30, 2005, and incorporated herein by reference. Form of Registrant's Common Stock certificate, filed as Exhibit 4.1 of the Registrant's Quarterly Report on Form 10-Q (Reg. No. 001-4.1 05725) for the quarter ended April 30, 1987, and incorporated herein by reference. Third Amended and Restated Rights Agreement dated as of September 15, 2004, between the Registrant and Wells Fargo Bank, N.A. as 4.2 Rights Agent, filed as Exhibit 4.1 to the Registrant's Current Report on Form 8-K (Reg. No. 001-05725) dated September 17, 2004, and incorporated herein by reference.

- 4.3 Revolving Credit Agreement dated as of November 26, 2002, by and among Quanex Corporation, the financial institutions from time to time signatory thereto and Comerica Bank, as agent for the banks filed as Exhibit 4.4 to the Registrant's Annual Report on Form 10-K (Reg. No. 001-05725) dated October 31, 2002. Certain schedules and exhibits to this Revolving Credit Agreement were not filed with this exhibit. The Company agrees to furnish supplementally any omitted schedule or exhibit to the SEC upon request.
- 4.4 First Amendment to Security Agreement, dated February 17, 2003, effective November 26, 2002, filed as Exhibit 4.5 to the Registrant's Quarterly Report on Form 10-Q (Reg. No. 001-05725) dated April 30, 2003.
- 4.5 Consent and First Amendment to Revolving Credit Agreement dated December 19, 2003, by and among Quanex Corporation, the financial institutions from time to time signatory thereto and Comerica Bank, as agent for the banks filed as Exhibit 4.5 to the Registrant's Annual Report on Form 10-K (Reg. No. 001-05725) dated October 31, 2003. Certain schedules and exhibits to this Consent and First Amendment to Revolving Credit Agreement have not been filed with this exhibit. The Company agrees to furnish supplementally any omitted schedule or exhibit to the SEC upon request.
- 4.6 Waiver and Second Amendment to Revolving Credit Agreement dated March 11, 2004, by and among Quanex Corporation, the financial institutions from time to time signatory thereto and Comerica Bank, as agent for the banks filed as Exhibit 4.6 to the Registrant's Quarterly Report on Form 10-Q (Reg. No. 001-05725) dated January 31, 2004.
- 4.7 Form of Consent to Requested Extension to Revolving Credit Maturity Date under the Quanex Corporation Revolving Credit Agreement dated April 7, 2004 filed as Exhibit 4.7 to the Registrant's Quarterly Report on Form 10-Q (Reg. No. 001-05725) dated April 30, 2004.
- 4.8 Form of Consent and Third Amendment to Revolving Credit Agreement dated April 9, 2004, by and among Quanex Corporation, the financial institutions from time to time signatory thereto and Comerica Bank, as agent for the banks filed as Exhibit 4.8 to the Registrant's Quarterly Report on Form 10-Q (Reg. No. 001-05725) dated April 30, 2004.
- 4.9 Form of Consent and Fourth Amendment to Revolving Credit Agreement dated November 18, 2004, by and among Quanex Corporation, the financial institution from time to time signatory thereto and Comerica Bank, as agent for the banks, filed as Exhibit 4.11 to the Registrant's Annual Report on Form 10-K (Reg. No. 001-05725) dated October 31, 2004.
- 4.10 Indenture dated as of May 5, 2004 between Quanex Corporation and Union Bank of California, N.A., as trustee filed as Exhibit 4.9 to the Registrant's Quarterly Report on Form 10-Q (Reg. No. 001-05725) dated April 30, 2004.
- 4.11 Registration Rights Agreement dated as of May 5, 2004 among Quanex Corporation, Credit Suisse First Boston LLC, Bear, Stearns & Co. Inc., Robert W. Baird & Co. Incorporated, and KeyBanc Capital Markets, A Division of McDonald Investments Inc., filed as Exhibit 4.10 to the Registrant's Quarterly Report on Form 10-Q (Reg. No. 001-05725) dated April 30, 2004.
- 4.12 Fifth Amendment to Revolving Credit Agreement dated March 11, 2005, by and among Quanex Corporation, the financial institutions from time to time signatory thereto and Comerica Bank, as agent for the banks, filed as Exhibit 4.12 to the Registrant's Quarterly Report on Form 10-Q (Reg. No. 001-05725) dated January 31, 2005.

- 4.13 Supplemental Indenture dated as of January 25, 2005 by and between the Company and Union Bank of California, N.A., as trustee, to the indenture governing the Company's 2.50% Convertible Senior Debentures due May 15, 2034, filed as exhibit 99.1 to the Registrant's Current Report on Form 8-K (Reg. No. 001-05725) dated January 26, 2005, and incorporated herein by reference.
- 5.1 Opinion of Fulbright & Jaworski L.L.P. regarding the legality of the securities to be offered hereby (filed as Exhibit 5.1 to Amendment No. 2 to this Registration Statement on October 26, 2004 and incorporated herein by reference).
- 8.1 Opinion of Fulbright & Jaworski L.L.P. regarding tax matters (filed as Exhibit 8.1 to Amendment No. 2 to this Registration Statement on October 26, 2004 and incorporated herein by reference).
- *12.1 Statement of Computation of Ratios.
- *23.1 Consent of Deloitte & Touche LLP.
- 23.2 Consent of Fulbright & Jaworski L.L.P. (included in Exhibit 5.1 and Exhibit 8.1).
- 24.1 Powers of Attorney (included on the signature pages of the initial filing of this Registration Statement on July 6, 2004 and incorporated herein by reference).
- 25.1 Statement of Eligibility and Qualification of Trustee under the Trust Indenture Act of 1939, as amended, on Form T-1 (filed as Exhibit 25.1 to the initial filing of this Registration Statement on July 6, 2004 and incorporated herein by reference).

Filed herewith

As permitted by Item 601(b)(4)(iii)(A) of Regulation S-K, the Registrant has not filed with this Registration Statement certain instruments defining the rights of holders of long-term debt of the Registrant and its subsidiaries because the total amount of securities authorized under any of such instruments does not exceed 10% of the total assets of the Registrant and its subsidiaries on a consolidated basis. The Registrant agrees to furnish a copy of any such agreements to the Securities and Exchange Commission upon request.

Item 17. Undertakings

- A. 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:
 - (a) To include any prospectus required by Section 10(a)(3) of the Securities Act;
 - (b) 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 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 the prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price

- set forth in the "Calculation of Registration Fee" table in the effective registration statement;
- (c) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to the information in this registration statement;

provided, however, that paragraphs A(l)(a) and A(l)(b) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in this registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act, each of the post-effective amendments shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of the securities at that 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.
- B. The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, the filing of our annual report pursuant to Section 13(a) or Section 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 herein, and the offering of the securities at that time shall be deemed to be the initial bona fide offering thereof.
- C. 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 provisions described in Item 15 above, or otherwise, that registrant has been advised that in the opinion of the SEC that indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against any liability (other than the payment by a registrant of expenses incurred or paid by a director, officer, or controlling person of a registrant in the successful defense of any action, suit or proceeding) is asserted by a director, officer, or controlling person in connection with the securities being registered, that 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 indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of the issue.
- D. The undersigned registrant hereby undertakes:
 - (1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus or any prospectus supplement filed as part of this registration statement in reliance on Rule 430A and contained in a form of prospectus or prospectus supplement filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
 - (2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus or prospectus supplement 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.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, each 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 Post-Effective Amendment No. 3 to the registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Houston, State of Texas, on the 8th day of June, 2005.

QUANEX CORPORATION

| | Ву: | /s/ RAYMOND A. JEAN | | |
|---|------------|--|--|--|
| | | Raymond A. Jean Chairman of the Board, President and Chief Executive Officer | | |
| Pursuant to the requirements of the Securities Act of 1933, t following persons in the capacities indicated on the 8th day of Ju- | | e Amendment No. 3 to the registration statement has been signed by the | | |
| Signature | Title | | | |
| /s/ RAYMOND A. JEAN | Chairma | n of the Board of Directors, President and Chief Executive Officer (principal executive officer) | | |
| Raymond A. Jean /s/ TERRY M. MURPHY | Senior Vic | e President of Finance and Chief Financial Officer (principal financial officer) | | |
| Terry M. Murphy /s/ BRENT L. KORB Brent L. Korb | | Vice President—Corporate Controller (principal accounting officer) | | |
| * Vincent R. Scorsone | | Director | | |
| * Joseph J. Ross | | Director | | |
| * Richard L. Wellek * | | Director | | |
| Donald G. Barger, Jr. | | Director | | |
| | II-6 | 5 | | |

| | * | |
|-----|----------------------------------|----------|
| | Susan F. Davis | Director |
| | * | |
| | Russell M. Flaum | Director |
| *By | /s/ TERRY M. MURPHY | |
| | Terry M. Murphy Attorney-in-Fact | |
| | | II-7 |

EXHIBIT INDEX

Exhibit Number

Description Of Exhibits

- 1.1 Purchase Agreement dated April 29, 2004, between Quanex Corporation, Credit Suisse First Boston LLC, Bear, Stearns & Co. Inc., Robert W. Baird & Co. Incorporated, and KeyBanc Capital Markets, A Division of McDonald Investments Inc., relating to the Company's 2.50% Convertible Senior Debentures due May 15, 2034 filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q (Reg. No. 001-05725) dated April 30, 2004.
- 3.1 Restated Certificate of Incorporation of the Registrant dated as of November 10, 1995, filed as Exhibit 3.1 of the Registrant's Annual Report on Form 10-K (Reg. No. 001-05725) for the fiscal year ended October 31, 1995 and incorporated herein by reference.
- 3.2 Certificate of Amendment to Restated Certificate of Incorporation of the Registrant dated as of February 27, 1997, filed as Exhibit 3.2 of the Registrant's Annual Report on Form 10-K (Reg. No. 001-05725) for the fiscal year ended October 31, 1999 and incorporated herein by reference.
- 3.3 Amendment to Certificate of Designation, Preferences and Rights of Series A Junior Participating Preferred Stock of the Registrant dated as of April 15, 1999, filed as Exhibit 3.3 of the Registrant's Annual Report on Form 10-K (Reg. No. 001-05725) for the fiscal year ended October 31, 1999 and incorporated herein by reference.
- 3.4 Certificate of Correction of Amendment to Certificate of Designation, Preferences and Rights of Series A Junior Participating Preferred Stock dated as of April 16, 1999, filed as Exhibit 3.4 of the Registrant's Annual Report on Form 10-K (Reg. No. 001-05725) for the fiscal year ended October 31, 1999 and incorporated herein by reference.
- 3.5 Amended and Restated Bylaws of the Registrant, as amended through June 1, 2005 filed as Exhibit 3.5 to the Registrant's Quarterly Report on Form 10-Q (Reg. No. 001-05725) for the fiscal quarter ended April 30, 2005, and incorporated herein by reference.
- 4.1 Form of Registrant's Common Stock certificate, filed as Exhibit 4.1 of the Registrant's Quarterly Report on Form 10-Q (Reg. No. 001-05725) for the quarter ended April 30, 1987, and incorporated herein by reference.
- 4.2 Third Amended and Restated Rights Agreement dated as of September 15, 2004, between the Registrant and Wells Fargo Bank, N.A. as Rights Agent, filed as Exhibit 4.1 to the Registrant's Current Report on Form 8-K (Reg. No. 001-05725) dated September 17, 2004, and incorporated herein by reference.
- 4.3 Revolving Credit Agreement dated as of November 26, 2002, by and among Quanex Corporation, the financial institutions from time to time signatory thereto and Comerica Bank, as agent for the banks filed as Exhibit 4.4 to the Registrant's Annual Report on Form 10-K (Reg. No. 001-05725) dated October 31, 2002. Certain schedules and exhibits to this Revolving Credit Agreement were not filed with this exhibit. The Company agrees to furnish supplementally any omitted schedule or exhibit to the SEC upon request.
- 4.4 First Amendment to Security Agreement, dated February 17, 2003, effective November 26, 2002, filed as Exhibit 4.5 to the Registrant's Quarterly Report on Form 10-Q (Reg. No. 001-05725) dated April 30, 2003.

- 4.5 Consent and First Amendment to Revolving Credit Agreement dated December 19, 2003, by and among Quanex Corporation, the financial institutions from time to time signatory thereto and Comerica Bank, as agent for the banks filed as Exhibit 4.5 to the Registrant's Annual Report on Form 10-K (Reg. No. 001-05725) dated October 31, 2003. Certain schedules and exhibits to this Consent and First Amendment to Revolving Credit Agreement have not been filed with this exhibit. The Company agrees to furnish supplementally any omitted schedule or exhibit to the SEC upon request.
- 4.6 Waiver and Second Amendment to Revolving Credit Agreement dated March 11, 2004, by and among Quanex Corporation, the financial institutions from time to time signatory thereto and Comerica Bank, as agent for the banks filed as Exhibit 4.6 to the Registrant's Quarterly Report on Form 10-Q (Reg. No. 001-05725) dated January 31, 2004.
- 4.7 Form of Consent to Requested Extension to Revolving Credit Maturity Date under the Quanex Corporation Revolving Credit Agreement dated April 7, 2004 filed as Exhibit 4.7 to the Registrant's Quarterly Report on Form 10-Q (Reg. No. 001-05725) dated April 30, 2004.
- 4.8 Form of Consent and Third Amendment to Revolving Credit Agreement dated April 9, 2004, by and among Quanex Corporation, the financial institutions from time to time signatory thereto and Comerica Bank, as agent for the banks filed as Exhibit 4.8 to the Registrant's Quarterly Report on Form 10-Q (Reg. No. 001-05725) dated April 30, 2004.
- 4.9 Form of Consent and Fourth Amendment to Revolving Credit Agreement dated November 18, 2004, by and among Quanex Corporation, the financial institutions from time to time signatory thereto and Comerica Bank, as agent for the banks, filed as Exhibit 4.11 to the Registrant's Annual Report on Form 10-K (Reg. No. 001-05725) dated October 31, 2004.
- 4.10 Indenture dated as of May 5, 2004 between Quanex Corporation and Union Bank of California, N.A., as trustee filed as Exhibit 4.9 to the Registrant's Quarterly Report on Form 10-Q (Reg. No. 001-05725) dated April 30, 2004.
- 4.11 Registration Rights Agreement dated as of May 5, 2004 among Quanex Corporation, Credit Suisse First Boston LLC, Bear, Stearns & Co. Inc., Robert W. Baird & Co. Incorporated, and KeyBanc Capital Markets, A Division of McDonald Investments Inc., filed as Exhibit 4.10 to the Registrant's Quarterly Report on Form 10-Q (Reg. No. 001-05725) dated April 30, 2004.
- 4.12 Fifth Amendment to Revolving Credit Agreement dated March 11, 2005, by and among Quanex Corporation, the financial institutions from time to time signatory thereto and Comerica Bank, as agent for the banks, filed as Exhibit 4.12 to the Registrant's Quarterly Report on Form 10-Q (Reg. No. 001-05725) dated January 31, 2005.
- 4.13 Supplemental Indenture dated as of January 25, 2005 by and between the Company and Union Bank of California, N.A., as trustee, to the indenture governing the Company's 2.50% Convertible Senior Debentures due May 15, 2034, filed as exhibit 99.1 to the Registrant's Current Report on Form 8-K (Reg. No. 001-05725) dated January 26, 2005, and incorporated herein by reference.
- 5.1 Opinion of Fulbright & Jaworski L.L.P. regarding the legality of the securities to be offered hereby (filed as Exhibit 5.1 to Amendment No. 2 to this Registration Statement on October 26, 2004 and incorporated herein by reference).
- 8.1 Opinion of Fulbright & Jaworski L.L.P. regarding tax matters (filed as Exhibit 8.1 to Amendment No. 2 to this Registration Statement on October 26, 2004 and incorporated herein by reference).

- *12.1 Statement of Computation of Ratios.
- *23.1 Consent of Deloitte & Touche LLP.
- 23.2 Consent of Fulbright & Jaworski L.L.P. (included in Exhibit 5.1 and Exhibit 8.1).
- 24.1 Powers of Attorney (included on the signature pages of the initial filing of this Registration Statement on July 6, 2004 and incorporated herein by reference).
- 25.1 Statement of Eligibility and Qualification of Trustee under the Trust Indenture Act of 1939, as amended, on Form T-1 (filed as Exhibit 25.1 to the initial filing of this Registration Statement on July 6, 2004 and incorporated herein by reference).
- * Filed herewith

Statement of Computation of Ratios

Ratio of earnings to fixed charges is computed by dividing income before taxes and fixed charges by fixed charges. Fixed charges consist of interest charges, capitalized interest and amortization of debt issuance costs. The computation is as follows:

| | | Fiscal years ended October 31, | | | | Six months ended | |
|------------------------------------|----|---|-----------|-----------|--------|---------------------|-------------------|
| | | 2000 | 2001 | 2002 | 2003 | 2004 | April 30, 2005 |
| | | (dollars in thousands, except per share data) | | | | | |
| Income (loss) before income taxes | \$ | (14,856) \$ | 45,622 \$ | 81,614 \$ | 65,823 | \$ 88,775 | \$ 129,199 |
| Add: | | | | | | | |
| Interest expense | | 15,255 | 16,555 | 14,812 | 2,517 | 5,514 | 5,058 |
| Debt issuance amortization | | 502 | 367 | 121 | 312 | 535 | 292 |
| Capitalized interest | | (1,941) | (1,666) | (1,879) | _ | _ | _ |
| | _ | | | | | | |
| Earnings (loss) as defined | \$ | (1,040) \$ | 60,878 \$ | 94,668 \$ | 68,652 | \$ 94,824 | \$ 134,549 |
| Interest expense | \$ | 15,255 \$ | 16,555 \$ | 14,812 \$ | 2,517 | \$ 5,514 | \$ 5,058 |
| Debt issuance amortization | | 502 | 367 | 121 | 312 | 535 | 292 |
| Capitalized interest | | (1,941) | (1,666) | (1,879) | _ | _ | _ |
| | _ | | | | | | |
| Fixed charges as defined | \$ | 13,816 \$ | 15,256 \$ | 13,054 \$ | 2,829 | \$ 6,049 | \$ 5,350 |
| Ratio of earnings to fixed charges | | * | 4.0x | 7.3x | 24.3x | 15.7x | 25.1x |

^{*} For the fiscal year ended October 31, 2000, fixed charges exceeded earnings by approximately \$14.9 million.

QuickLinks

Exhibit 12.1

Statement of Computation of Ratios

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Post-Effective Amendment No. 3 to Registration Statement No. 333-117183 on Form S-3 of our report dated December 21, 2004, relating to the financial statements and financial statement schedule of Quanex Corporation appearing in the Annual Report on Form 10-K/A of Quanex Corporation for the year ended October 31, 2004, and to the reference to us under the heading "Experts" in the prospectus which is part of this Registration Statement.

DELOITTE & TOUCHE LLP

Houston, Texas June 8, 2005

QuickLinks

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM