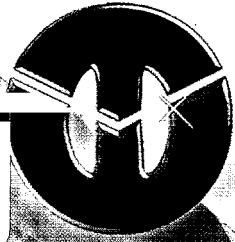




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# TITAN

TITAN INTERNATIONAL, INC.

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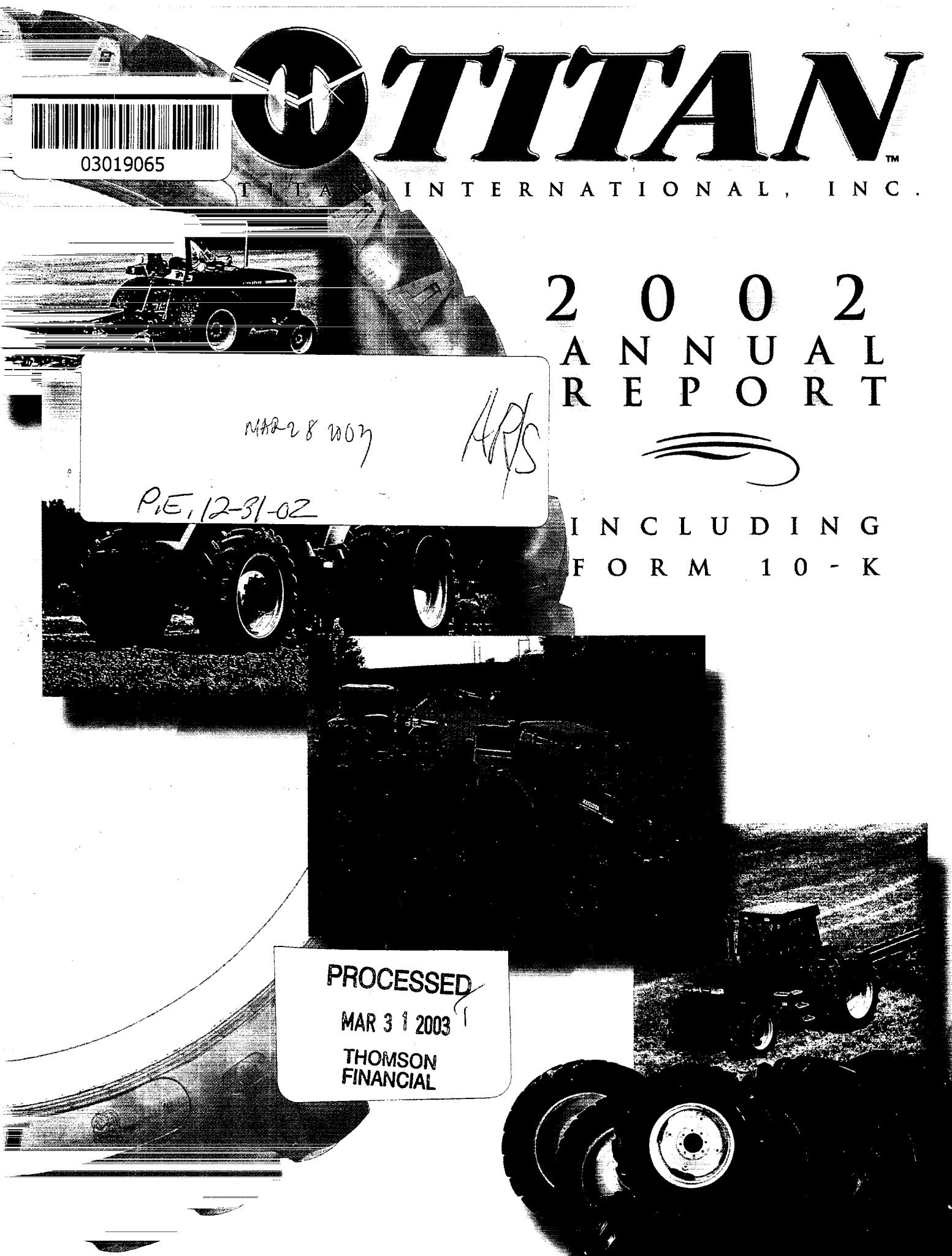
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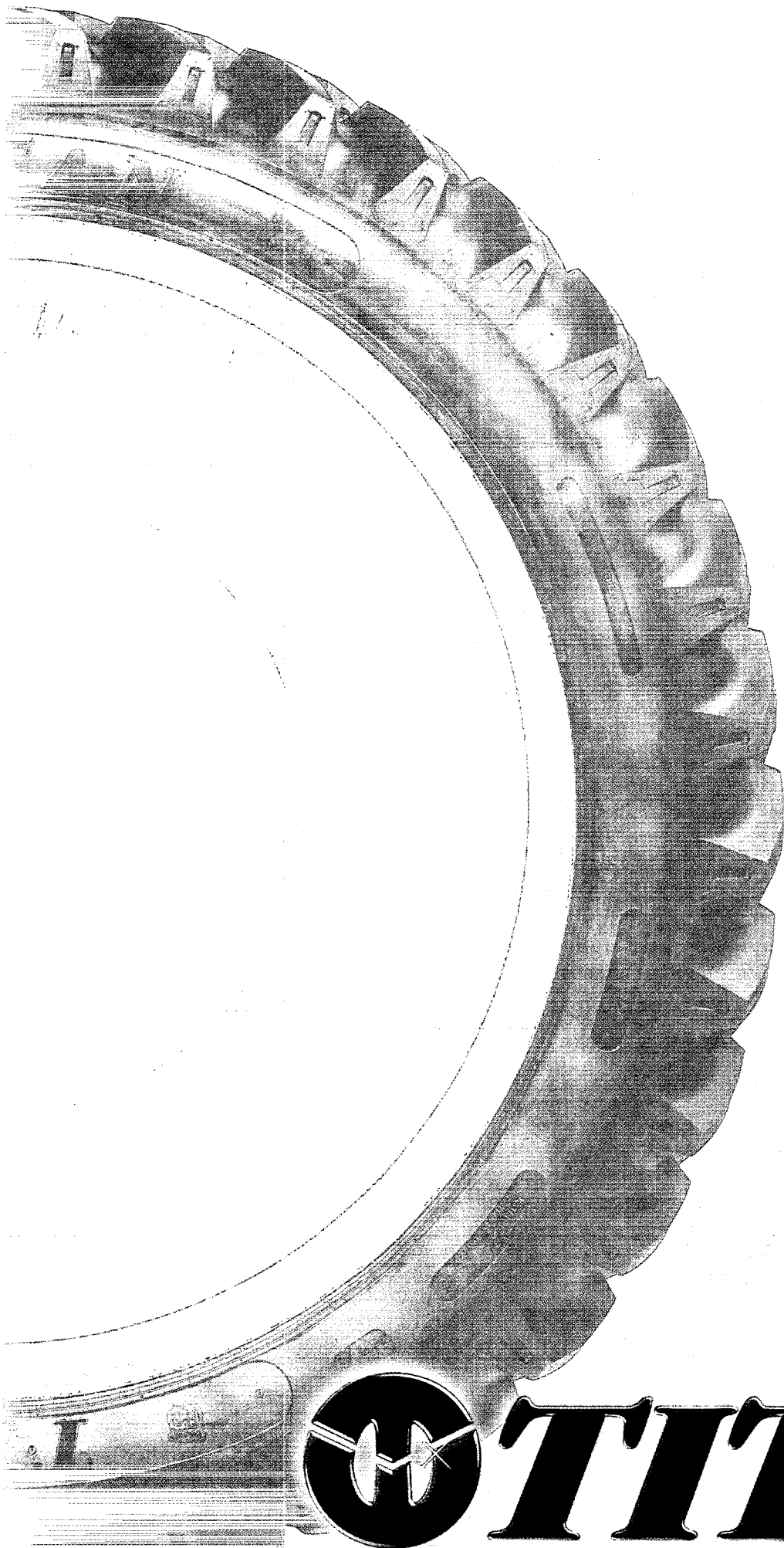
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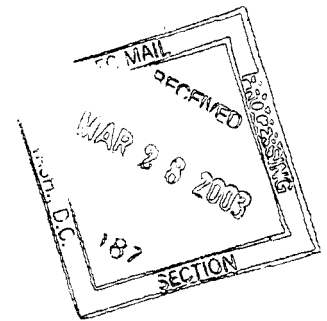




**TITAN**™

# 2002 Annual Report

## Including Form 10-K

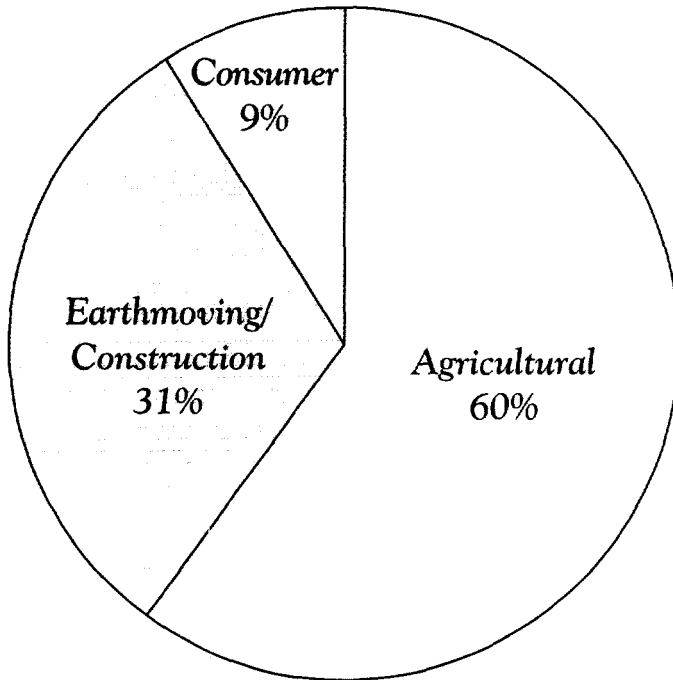


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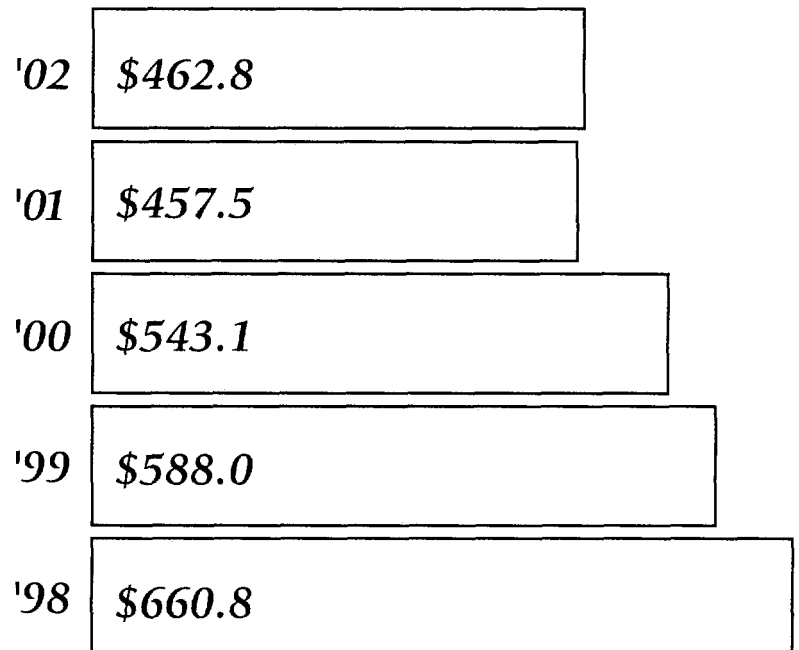
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# Financial Highlights

## 2002 Sales By Market



## Net Sales (in millions)



## Selected Financial Data — Five Year Summary

(Amounts in thousands, except per share data.)

	2002	2001	2000	1999	1998
Net sales	\$462,820	\$457,475	\$543,069	\$588,023	\$660,781
Gross profit	29,741	18,664	40,145	61,694	91,129
(Loss) income from operations	(14,086)	(33,465)	(8,646)	3,770	31,163
(Loss) income before income taxes	(44,293)	(46,386)	8,702	(18,445)	13,146
Net (loss) income	(35,877)	(34,789)	4,525	(11,436)	8,151
Net (loss) income per share – basic	\$ (1.73)	\$ (1.68)	\$ .22	\$ (.55)	\$ .38
Net (loss) income per share – diluted	(1.73)	(1.68)	.22	(.55)	.38
Dividends declared per common share	.02	.03	.06	.06	.06

## Financial Position

	2002	2001	2000	1999	1998
Working capital	\$170,263	\$180,684	\$186,116	\$170,783	\$170,465
Current assets	254,569	262,723	285,556	279,078	312,195
Total assets	531,999	568,954	591,641	637,181	678,274
Long-term debt	249,119	256,622	227,975	255,521	247,584
Stockholders' equity	144,027	185,907	228,705	228,866	247,037

# A Message to our Stockholders

Dear Stockholder:

Admittedly 2002 did not bring the economic recovery that we had expected for our nation nor for Titan International, Inc. It would be less than candid not to acknowledge the disappointment of Titan's stockholders, employees and other associates. We, as large stockholders and committed executives, certainly recognize this frustration first hand. However, Titan's corporate culture is one of resolve and determination when faced with obstacles and we are committed to the company's resurgence.

Titan's 2002 sales figures were up slightly from the previous year. Operating results, though still a loss, improved despite a difficult economic environment. Raw material costs for both steel and rubber increased, yet Titan's gross profit percentage rose due to lower cost of sales attributed to heightened efficiencies. Given these trends, the impact of anticipated sales growth will be magnified.

Although Titan's management has always made every effort to operate as a lean organization, further reductions and efficiencies are being sought. Certainly, some of the sacrifices this necessitates are distressing on the personal level, but are required for the greater health of the corporation. During 2002, our distribution network was reviewed and the determination was made that several facilities could be closed without compromising customer service. The cost savings from this action will be more fully realized in the coming year. Other support functions were also examined and streamlined when possible. Manufacturing operations were rationalized, schedules were adjusted and production was

relocated as warranted for the more efficient use of resources and labor. Inventory reduction initiatives were continued following the significant progress in 2001 toward instituting more appropriate inventory levels. Titan will continue to identify and conduct such cost-cutting measures while maintaining our commitment to product quality and customer service.



**Maurice Taylor Jr., President & CEO**

## New Avenues

Profitability, however, cannot be achieved solely by reductions. Therefore, in Titan's trademark innovative manner, the company is pursuing new channels for increasing sales. Equipment dealers traditionally develop close relationships with their customers through years of repeat business. Titan is approaching equipment dealers with an opportunity to offer Titan wheels, tires and assemblies through their dealerships. Taking advantage of this program is beneficial for all involved – dealers realize increased sales and profits from their parts business, original equipment manufacturers reap a percentage of that increase, customers enjoy convenience and greater selection from their trusted dealer, and of course Titan's brand

gains visibility in the aftermarket. Some equipment dealers are electing to invest in the tools and training necessary to also perform tire service, while others choose to partner with a local tire dealer for that function. Good old-fashioned sales calls introducing this program are proving that dealers are quite interested in this initiative to increase profitability.

In October 2002, Titan's high capacity radial tires became available directly through AgChem, a division of AGCO Corporation. This marketing agreement allows tires for row-crop spraying equipment to be ordered through *sprayparts.com*, AgChem's virtual parts store. The high-capacity wheel and radial tire assemblies are designed to excel in the conditions required by custom applicator users. This application-specific engineering is just one example of the advances possible due to Titan's unique position as a manufacturer of both wheels and tires.

In addition to the valued long-term relationships Titan has established with the largest agricultural and construction original equipment manufacturers (OEMs), we are cultivating associations with many smaller, emerging companies and divisions of large OEMs that are dedicated to more narrowly defined specialties. These are particularly appropriate matches for Titan's flexibility, engineering expertise and commitment to the off-highway sector. Titan collaborates with customers to develop new products that enhance equipment performance and address the specific working conditions and challenges for a given application. Ultimately, the equipment operators benefit most from this exchange of knowledge and insight.

## Proven Expertise

Our focus on the off-highway industry means dedicated engineering resources to continuously improve the quality of our products. The flagship facility in Quincy, Illinois, received renewed ISO 9001 quality certification to 2000 standards with no major or minor nonconformances cited by the QMI auditing body. This early recognition of Titan's preventive measures has changed the facility's categorization to that of a proactive company.

While our competitors in the tire industry are narrowing their range of tires in the off-highway category to further focus on passenger and truck fitments, Titan added more than 70 new sizes in 2002. Titan's additions include specialty tires designed for aerial lift service, as well as increased agricultural and construction offerings. Despite the challenging market conditions, Titan is realizing aftermarket growth in key areas such as radial and bias rear tractor, R-4 industrial tractor and L-2 loader tires.

## European Developments

The strong reputation enjoyed by Titan's wheels in Europe has helped Titan Europe weather the difficult market and high steel prices. The agricultural market strengthened slightly during the year and Titan Europe also increased market share through the acquisition of business with AGCO U.K. Development continues for the 50 kph agricultural wheels, with increased capacity for large diameter wheels at the Italian facilities. Several manufacturing upgrades have been implemented throughout the European facilities to increase capacity and to provide better quality and service for customers.

A new integral flange three-piece wheel was introduced for the construction market. In addition, advances were made in manufacturing construction wheels with pressed flanges and machined

gutters using plain steel rather than hot rolled sections. The focused drive toward quality and cost-control ensures that Titan Europe is well-positioned to benefit from any growth possibilities in both the agricultural and construction markets.

## Moving Forward

Industry analysts are cautiously predicting an upturn in the agricultural market during the second half of 2003. Although crop prices and other indicators were generally stronger in 2002 than in 2001, fluctuations have prevented a



**Erwin Billig, Chairman of the Board**

more optimistic outlook for early 2003. The Farm Security and Rural Investment Act, signed in May 2002 and extending six years, governs the farm payment program and provides counter-cyclical income support. Positive impact from the farm bill is expected to be somewhat delayed as farmers wade through the associated paperwork and remain cautious with respect to large equipment purchases. Unfortunately, the global construction market is expected to deteriorate further in 2003. The halting of large road building projects and mine closures are creating a highly competitive situation as OEMs reduce their equipment output. Small to mid-size industrial equipment sales are also being pinched by the uncertain economy.

More than a year after the resolution of Titan's protracted labor strikes, the company is focused on returning to the prosperous levels previously enjoyed. Titan's stock performance was clearly unsatisfactory during 2002. As the economy strengthens and the general market rebounds, we expect Titan's stock price to more accurately reflect the value of this company. Furthermore, as the investment community recognizes the measures we are actively undertaking to increase stockholder value, the price should be further bolstered.

The testimonials presented in this Annual Report illustrate the advantages Titan offers as the only major wheel and tire manufacturer focused on the off-highway markets. We will continue to share our story with the industry decision-makers and as the monetary and associated benefits of partnering with Titan are acknowledged, the support of our stockholders will be rewarded. Titan is fortunate to be able to depend on the skills of our work force to drive the company forward.

Best regards,

A handwritten signature in black ink, appearing to read "Erwin Billig".

Erwin Billig  
Chairman of the Board

A handwritten signature in black ink, appearing to read "Maurice Taylor Jr.".

Maurice Taylor Jr.  
President &  
Chief Executive Officer



**A**s a leading regional John Deere organization, we have developed strong relationships with hundreds of producers in our area of responsibility by building our business model on being their single aftermarket supplier. It didn't take a lot of thought to see how well tires and tire service fit into this model. After all, what equipment won't need new tires and tire service at some point? It's as sure as an oil and filter change! So becoming a full service Titan Tire dealer has been a solid answer to our continuing goal to increase our aftermarket business and customer support.

What has been especially positive about this new partnership is that we have been able to show our customers the quality that is built into every Titan tire and give them competitive pricing on every tire and wheel that we sell. In addition our territory manager has worked hard to make the relationship with Titan more productive every day.

*Don Van Houweling*

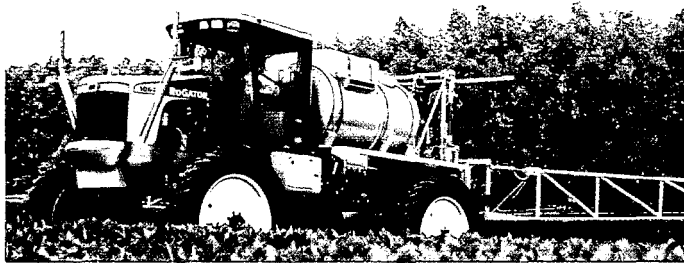
Don Van Houweling  
President  
The Van Wall Group  
Perry, Iowa



# Agricultural Market

Titan's agricultural market segment expanded during 2002. This market has always been the backbone of the company and Titan's results typically reflect the health of the agricultural industry. Overall, crop prices and the state of the sector generally improved. However, the unpredictability of sustaining these positive trends led most farmers to resist the temptation to make large investments in equipment.

In 2002, compact tractor sales continued to outpace higher horsepower options. The versatility and relatively low cost of these machines make them popular alternatives in various applications, even extending into some construction site applications. Titan has been quite successful in gaining supply agreements with several



manufacturers for complete wheel and tire assemblies. Case, New Holland Class I, II, III and IV, and AGCO's Massey Ferguson and Challenger lines of compact tractors all feature Titan assemblies. In addition, Titan is driving sales for both radial and bias rear tractor tires.

The custom applicator market has also acknowledged Titan's expertise. Titan's high-capacity wheel and radial tire assemblies excel in the conditions required



for row-crop spraying equipment. Therefore, these tires are now available directly through AgChem, a division of AGCO Corporation and a leading producer of spraying equipment.

With the rising popularity of ag technology such as global positioning systems (GPS), tire choice becomes ever more critical to ensuring optimal performance and crop output.

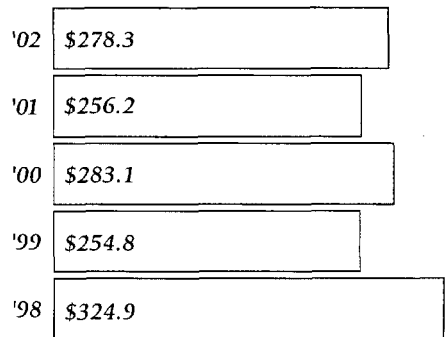
Titan's engineers are at the forefront in developing tires to reduce soil compaction, enhance on-road drivability, increase traction, excel in muddy conditions and address a

number of other special considerations. Unlike other tire manufacturers, Titan's resources are largely concentrated on designing products to meet the evolving face of agriculture. Titan's dominance in the wheel market presents a unique opportunity to provide a complete assembly to address customer needs in the most effective manner.

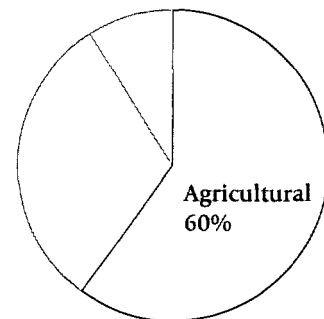
As a result of China joining the World Trade

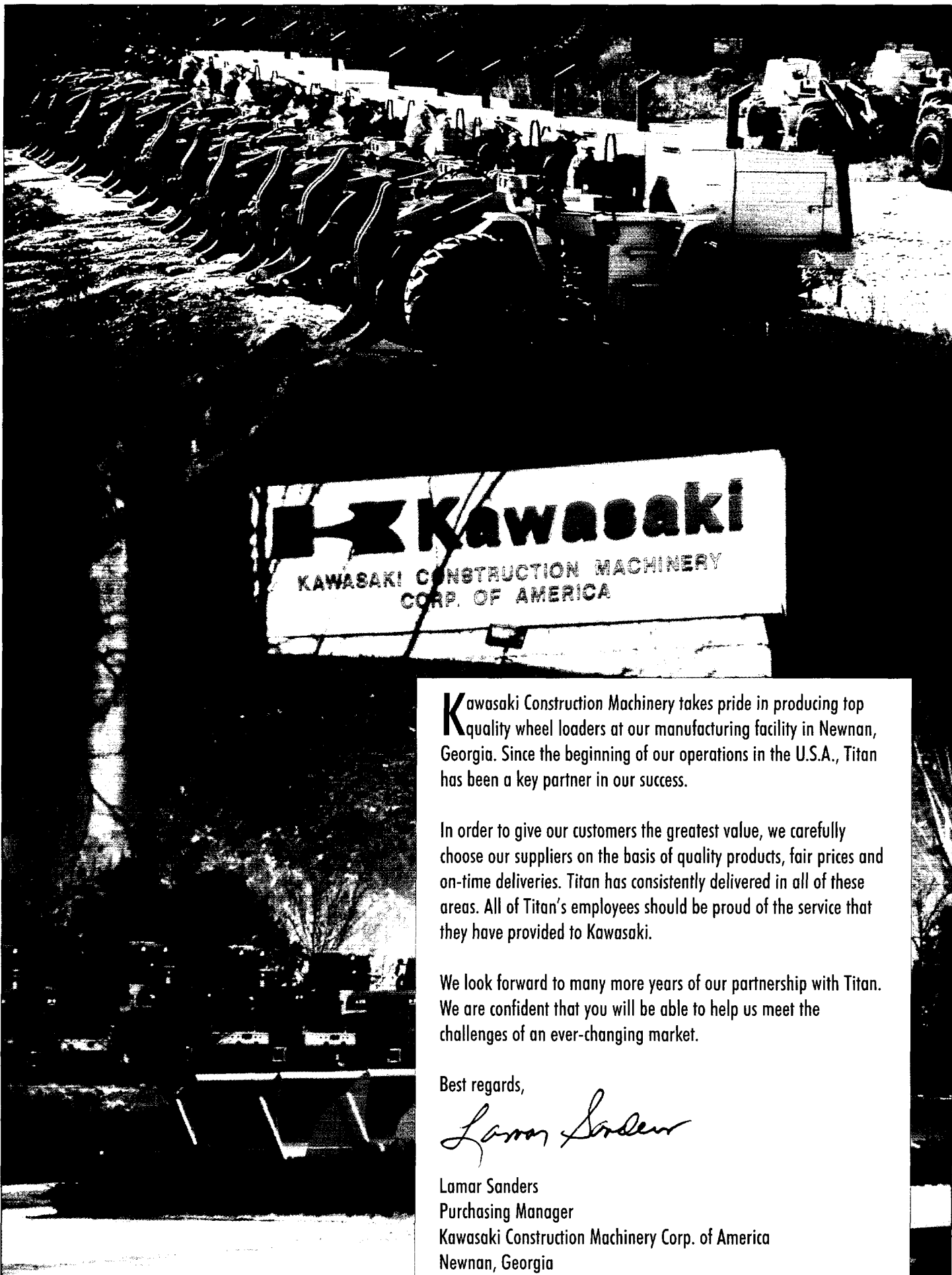
Organization in December 2001, trade with that country has opened to more efficient producers of wheat, corn and soybeans. This development is predicted to benefit U.S. grain farmers and should eventually generate more money for equipment purchases. In addition, the six-year farm bill signed in May 2002 is expected to supplement the income of farmers and positively impact equipment sales. The general industry sentiment calls for the agricultural market to improve in the second half of 2003. In anticipation of this positive shift, Titan continues to refine our products and explore niche opportunities to augment our share of this market.

Net Sales (in millions)



Market (percentage of sales)





**K**awasaki Construction Machinery takes pride in producing top quality wheel loaders at our manufacturing facility in Newnan, Georgia. Since the beginning of our operations in the U.S.A., Titan has been a key partner in our success.

In order to give our customers the greatest value, we carefully choose our suppliers on the basis of quality products, fair prices and on-time deliveries. Titan has consistently delivered in all of these areas. All of Titan's employees should be proud of the service that they have provided to Kawasaki.

We look forward to many more years of our partnership with Titan. We are confident that you will be able to help us meet the challenges of an ever-changing market.

Best regards,

Lamar Sanders  
Purchasing Manager  
Kawasaki Construction Machinery Corp. of America  
Newnan, Georgia

# Earthmoving/Construction Market

Difficult economic conditions continue to take their toll on the global earthmoving/construction market. Although there was hope of a recovery early in 2002, the remainder of the year proved to be disappointing. Mine closures, as well as commercial and infrastructure project suspensions, marked the year and negatively impacted equipment manufacturing schedules. Equipment rental agencies continued to see decreased demand as well. In a bid to increase Titan's share of the market under these circumstances, the company is focusing on assemblies to optimize the performance of industrial equipment.

Titan's products continue to be well-received by the skid steer market. Designing tires for special market segments ranging from light to extreme-duty usage



and for specialty concerns, such as a non-marking tire, is proving to be a successful strategy. Daewoo, Volvo, Gehl, New Holland and Case skid steers are equipped with Titan wheels and tires as original equipment. LSW (low sidewall) and standard options provide the variety



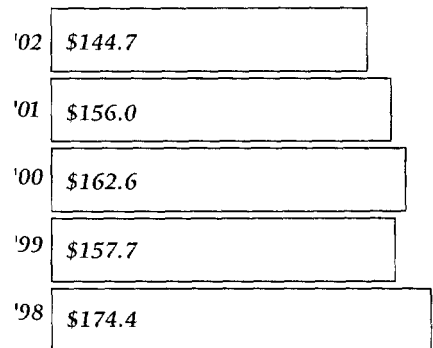
desired by both manufacturers and equipment operators.

Titan's reputation for high quality skid steer wheel and tire assemblies is filtering more business to Titan for other construction equipment fitments. Titan custom brands Caterpillar tires for use on skid steers, telescopic handlers and backhoes. Loader backhoes, telescopic handlers and recently introduced mini-loader backhoes from manufacturers including Ingersoll Rand, Bobcat, CNH and JCB also offer the benefits of Titan's innovative, practical designs. The Lift Rigger II is a robust tire design in a slightly smaller-than-average size to accommodate a new generation of telescopic handlers being imported from Europe and other areas. A new LSW trencher assembly has been built to resolve rim slippage and sidewall wind-up caused by high horsepower trenchers, such as those produced by Ditch Witch, Vermeer and Case. Titan also launched three new choices in the Super Rigger E-3 line for severe applications including abrasive, stony conditions in the Western and Southwestern United States. The LSW version of the E-3 reduces

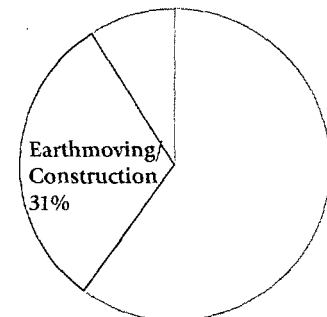
urethane fill use by approximately 200 pounds per tire in addition to providing increased tire durability. Pulled tandem scrapers, initially used in land leveling, are now being utilized for heavier-duty road building, construction site preparation, pond building and other projects. Titan has introduced several products aimed at capturing this emerging market. Titan Europe also developed a new integral flange three-piece wheel for the construction market.

The earthmoving/construction market is expected to remain at depressed levels worldwide into 2003. Notable economic recovery is needed to stimulate an upturn in this segment.

Net Sales (in millions)



Market (percentage of sales)





**T**itan Turf Tamers are my tires of choice. I've tried most other brands of ATV tires and none seem to perform as well as the Turf Tamer. I've found that this tire really hooks up well in most conditions: wet, dry, clay or sand. The Titan Turf Tamer is an excellent race or recreational tire and I would recommend it to anyone. Personally, I have had much fun and success with these tires and I will continue to use them.

Sincerely,

Dale Ouellette  
Pro Am & Open Pro ATV Racer  
Terryville, CT

\* This photo depicts a professional driver and the stunt shown should not be attempted.

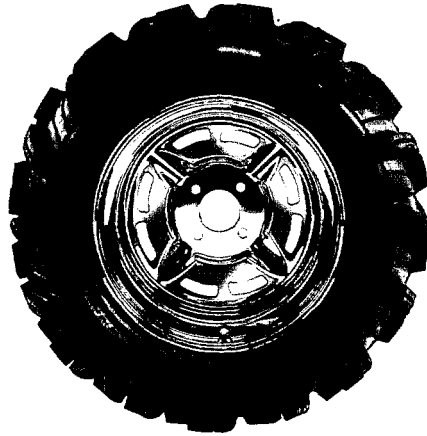
# Consumer Market

Titan continues to sharpen its focus within the consumer market segment. The all-terrain vehicle (ATV) and trailer component niches present the most growth potential for Titan and the company is tailoring its manufacturing accordingly.

With recreational spending down, the ATV market continues to expand, though at a slower rate of eight to nine percent rather than the double-digit growth experienced in recent years. Titan's share of the ATV tire aftermarket has been bolstered by increased sales through Parts Unlimited, one of the highest rated distributors in the industry. The 489 X/T and 589 M/T tire series introduced in 2001 continue to gain in popularity with ATV enthusiasts. Likewise,



the LSW 589 M/T is seeing increased demand due to the enhanced traction, stability and run-flat capability of this premium tire. In 2002, professional racer Tim Farr won his eighth national



championship using Titan Turf Tamers on his ATV. Building on that reputation and industry demand, in 2003 Titan will introduce new Turf Tamer Knobby II tires for increased traction and longer life.

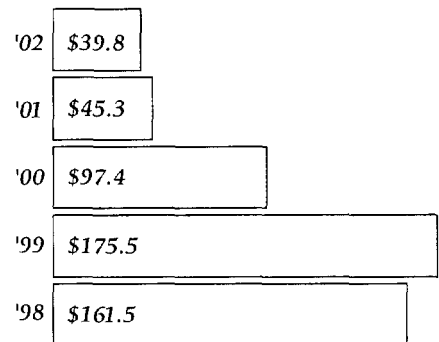
Bobcat's new utility machine, the Tool Cat, is a new addition to the consumer/turf market. Titan will supply wheel and tire assemblies using both Multi Trac C/S and Trac Loader tires to address the specific applications of end-users.

Titan is being widely recognized for trailer component innovations. The relatively new venture into disc brakes continues to solidify Titan's position in the market. In 2002, the Ultra 70 slimline actuator was unveiled. Cosmetically, the outer case of the Ultra 70 is designed to be mounted to the trailer and painted to match for a streamlined appearance. The cast ball latch and high strength steel case make this a rugged actuator choice. Coupled with Titan's disc brakes, this package should gain popularity in the marketplace.

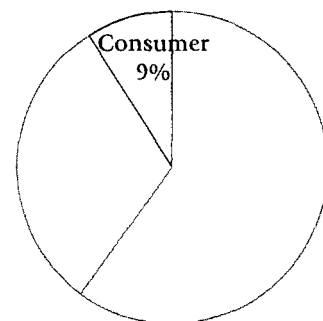
The BrakeRite EHB electric over hydraulic

actuator, introduced in early 2002, is being heralded as an emerging leader for commercial trailers weighing over 10,000 pounds. Independent testing confirms that the BrakeRite has a faster response time and requires a shorter stopping distance than other units on the market. The BrakeRite is designed to install easily and brake up to four axles. The enthusiastic response to this product is leading Titan to introduce the BrakeRite SDS (speed deceleration sensor) actuator in 2003.

Net Sales (in millions)



Market (percentage of sales)



# TITAN INTERNATIONAL, INC.

## Board of Directors



### **Erwin H. Billig** Chairman of the Board

Mr. Billig is chairman of MSX International and previously served as vice chairman of MascoTech. He is also a director and vice chairman of Delco Remy International.

(a,c)



### **Edward J. Campbell**

Mr. Campbell was employed for 27 years by Tenneco. He spent 13 of those years as president of Newport News Shipbuilding Company, and 14 years at J.I. Case, three of those (1992-94) as president.

(b,c,d)



### **Richard M. Cashin Jr.**

Mr. Cashin is chairman of One Equity Partners, the private equity investment unit of Bank One, which manages \$3.7 billion of Bank One's capital.

(a,c)



### **Albert J. Febbo**

Mr. Febbo retired from GE after 30 years - 18 years with the plastics business in sales and marketing leadership roles in the U.S. and Europe, and 12 years as a corporate officer leading the automotive and corporate marketing teams. He also serves as a director of Med Panel, Inc.

(b,c,d)



### **Mitchell I. Quain**

Mr. Quain is chairman of Register.com, an internet services provider. He is also a principal at Charterhouse Group, as well as a director of MagneTek, Inc. and Strategic Distribution, Inc.

(b,c,d)



### **Anthony L. Soave**

Mr. Soave is president, CEO and founder of Soave Enterprises L.L.C., a Detroit-based holding company which owns and operates businesses in distribution, environmental, and metals recycling, as well as other diversified industries.

(a,b,c,d)



### **Maurice M. Taylor Jr.** President and CEO

Mr. Taylor has been president and chief executive officer of Titan since the 1990 acquisition, and before that had a significant role in the development of the company.

(a)

### **Corporate Officers**

Erwin H. Billig  
Chairman of the Board

Maurice M. Taylor Jr.  
President & Chief Executive Officer

J. Michael A. Akers  
Vice President

Kent W. Hackmack  
Vice President of Finance & Treasurer

Cheri T. Holley  
Vice President, Secretary & General Counsel

(a) Member of Executive Committee (b) Member of Audit Committee (c) Member of Compensation Committee (d) Member of Nominating Committee

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

**FORM 10-K**

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2002

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934

Commission file number 1-12936

**TITAN INTERNATIONAL, INC.**

(Exact name of registrant as specified in its charter)

**Illinois**

(State or other jurisdiction of  
incorporation or organization)

**36-3228472**

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

**2701 Spruce Street, Quincy, IL 62301**

(Address of principal executive offices, including Zip Code)

**(217) 228-6011**

(Telephone Number)

**Securities registered pursuant to Section 12(b) of the Act:**

<u>Title of each class</u>	<u>Name of each exchange on which registered</u>
Common stock, no par value	New York Stock Exchange

**Securities registered pursuant to Section 12(g) of the Act: None**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

As of January 31, 2003, 20,900,728 shares of common stock of the registrant were outstanding. The aggregate market value of the shares of common stock of the registrant held by non-affiliates was \$19,398,013 based upon the closing price of the common stock on the New York Stock Exchange on January 31, 2003.

**DOCUMENTS INCORPORATED BY REFERENCE**

Part III incorporates information by reference from the registrant's definitive proxy statement for its annual meeting of stockholders to be held May 15, 2003.

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## PART I

### Item 1. Business

#### General

Titan International, Inc. (Titan or the Company) is a global manufacturer of off-highway wheels and tires for agricultural, earthmoving/construction and consumer equipment. Titan manufactures both wheels and tires for the majority of these applications, allowing the Company to provide the value-added service of delivering complete wheel and tire assemblies. The Company offers a broad range of products that are manufactured in relatively short production runs to meet the specifications of original equipment manufacturers (OEMs) and/or the requirements of aftermarket customers.

As one of the very few companies dedicated to the off-highway wheel and tire market, Titan's engineering and manufacturing resources are focused on addressing the real-life concerns of the end-users of our products. Titan's commitment to product innovation is demonstrated by the development of the LSW series of wheel and tire assemblies, which considerably enhances the performance of off-highway vehicles.

In 2002, Titan's agricultural market sales represented 60% of net sales, the earthmoving/construction market represented 31% and the consumer market represented 9%. For information concerning the revenues, certain expenses, income from operations and assets attributable to each of the segments in which the Company operates, see Note 26 to the consolidated financial statements of Titan International, Inc., included in Item 8 herein.

#### Agricultural Market

Titan's agricultural wheels, rims and tires are manufactured for use on various agricultural and forestry equipment, including tractors, combines, skidders, plows, planters and irrigation equipment and are sold to OEMs and independent distributors. The wheels and rims range in diameter from 9" to 54" with the 54" diameter being the largest agricultural wheel manufactured in North America. Basic configurations are combined with distinct variations (such as different centers and a wide range of material thickness) allowing the Company to offer a broad line of product models to meet customer specifications. Titan's agricultural tires range in diameter from 8" to 85" and in width from 4.8" to 44". The Company offers the added value of delivering a complete wheel and tire assembly to customers. The aftermarket tires are marketed through a network of independent distributors, equipment dealers, and Titan's own distribution centers.

#### Earthmoving/Construction Market

The Company manufactures wheels and rims for various types of earthmoving, mining and construction equipment, including skid steers, aerial lifts, cranes, graders and levelers, scrapers, self-propelled shovel loaders, load transporters, haul trucks and backhoe loaders. The Company provides customers with a broad range of earthmoving/construction wheels ranging in diameter from 20" to 63", in width from 8" to 60" and in weight from 125 pounds to 7,000 pounds. The 63" diameter wheel is the largest manufactured in North America for the earthmoving/construction market. The majority of the earthmoving/construction wheels produced by Titan are sold directly to OEMs. In addition, Titan produces a range of tires for the earthmoving/construction market. The Company offers the added value of wheel and tire assembly for many applications in the earthmoving/construction market. Also included in this market segment are the various wheels, tires and components Titan manufactures for the United States Government, primarily for certain military vehicles (i.e.; trucks, trailers, tanks and personnel carriers).



## **Consumer Market**

Titan builds a variety of products for all terrain vehicles (ATVs), turf, golf, and trailer applications. The Company exited the OEM business for lawn and garden equipment and ATVs in 2002, concentrating instead on the aftermarket for ATV and turf products. Consumer wheels and rims range in diameter from 4" to 16". Likewise, Titan produces a variety of tires for the consumer market. New ATV tire tread patterns for the replacement market have been designed and introduced in the past few years. For the domestic boat, recreational and utility trailers markets, the Company produces wheels and tires, and assembles brakes, actuators and components. The Company also offers the value-added service of a wheel and tire system for the consumer market.

## **Market Conditions Outlook**

Industry analysts are predicting that the market segments in which Titan does business will not improve dramatically during 2003. The agricultural market may strengthen somewhat during the second half of 2003, thanks in part to the stabilizing impact of the Farm Security and Rural Investment Act. The earthmoving/construction industry, however, is anticipated to experience continued adversity throughout the year. Consumer market performance is largely tied to recreational spending habits. Overall, these circumstances, combined with positive economic developments, may result in slightly improved market conditions for the Company in 2003 when compared to 2002.

## **Operations**

### *Wheel Manufacturing Process*

Most agricultural wheels are produced using a rim and a center disc. A rim is produced by first cutting large steel sheets to required width and length specifications. These steel sections are rolled and welded to form a circular rim, which is flared and formed in the rollform operation. The majority of discs are manufactured using presses that both blank and form the center to specifications in multiple stage operations. The Company e-coats wheels using a multi-step process prior to the final top coating.

Large earthmoving/construction steel wheels are manufactured from hot and cold rolled steel sections. Hot rolled sections are generally used to increase cross section thickness in high stress areas of large diameter wheels. A special cold forming process for 25" wheels is used to increase cross section thickness while eliminating two components. Rims are built from a series of hoops that are welded together to form a rim base. The complete rim base is made from either three or five separate parts that then lock together after the rubber tire has been fitted to the wheel and inflated.

Smaller wheels (usually 12" or less in diameter), the majority of which are produced for consumer markets, are manufactured by a process in which half-wheels are press-formed, then two half-wheel stampings are welded together to form a complete wheel. Generally, for larger wheels (12" or more in diameter) produced for the consumer market, the Company manufactures rims and centers, welds the rims to the centers and then paints the assembled product.

## **Operations (continued)**

### *Tire Manufacturing Process*

The first step in tire production is the mixing of rubber, carbon black and chemicals to form various rubber compounds. These rubber compounds are then extruded and processed with textile or steel materials to make specific components. These components - beads (wire bundles that anchor the tire with the wheel), plies (layers of fabric that give the tire strength), belts (fabric or steel fabric wrapped under the tread in some tires), tread and sidewall - are then assembled into an uncured tire. The uncured tire is placed into a press that molds and vulcanizes the carcass under set time, temperature and pressure into a finished tire.

### *Wheel and Tire Assemblies*

The Company's position as a manufacturer of both wheels and tires allows Titan to mount and deliver one of the largest selections of off-highway assemblies in the world. Titan offers this value-added service of one-stop shopping for wheel and tire assemblies for the agricultural, earthmoving/construction and consumer markets. Customer orders are entered into the Company's system either through electronic data interchange or manually. The appropriate wheel-tire assembly delivery schedule is formulated based on each customer's requirements and the product is received by the customer just-in-time.

### *Quality Control*

The Company is ISO 9000 certified at seven of its manufacturing facilities. The ISO 9000 series is a set of related and internationally recognized standards of management and quality assurance. The standards specify guidelines for establishing, documenting and maintaining a system to ensure quality. The ISO 9000 certifications are a testament to Titan's dedication to providing quality products for its customers.

## **Raw Materials**

Steel and rubber are the primary raw materials used by the Company in all segments. To ensure a consistent steel supply, Titan purchases raw steel from key steel mills and maintains relationships with steel processors for steel preparation. The Company is not dependent on any single producer for its steel supply. Rubber and other raw materials for tire manufacture are some of the Company's largest commodity expenses. Titan buys rubber in markets where there are numerous supply sources. In addition to the development of key domestic suppliers, the Company's strategic procurement plan includes international suppliers to assure competitive price and quality in the global marketplace. As is customary in the industry, the Company does not have long-term contracts for the purchase of steel or rubber and, therefore, purchases are subject to price fluctuations.

## **Customers**

The Company's 10 largest customers accounted for approximately 54% of net sales for the year ended December 31, 2002, compared to 51% for the year ended December 31, 2001. Net sales to Deere & Company in Titan's agricultural, earthmoving/construction, and consumer markets represented 15% of the Company's consolidated revenues for the year ended December 31, 2002. Net sales to CNH Global N.V. in Titan's three markets represented 12% of the Company's consolidated revenues for the year ended December 31, 2002. No other customer accounted for more than 10% of the Company's net sales in 2002.

## **Marketing and Distribution**

The Company employs an internal sales force and utilizes several manufacturing representative firms for sales in the United States and Europe. In the United States, sales representatives are organized within geographical regions. The international sales force includes employees in France, Germany, Italy and the United Kingdom. Titan believes international sales efforts are enhanced when sales representatives sell primarily within their native countries.

Titan distributes wheels and tires directly to OEMs. The distribution of aftermarket tires occurs primarily through a network of independent and OEM dealers. The Company distributes wheel and tire assemblies directly to OEMs and aftermarket customers through its own distribution network consisting of nine facilities throughout the United States and Europe.

## **Research, Development and Engineering**

The Company's research, development and engineering staffs test new designs and technologies and develop new manufacturing methods to improve product performance. These services enhance the Company's relationships with customers. The Company has spent \$3.5 million, \$3.1 million, and \$4.7 million on research and development for the years ended December 31, 2002, 2001 and 2000, respectively. These costs were primarily incurred in developing the LSW series of wheels and tires, which considerably enhances the performance of off-highway vehicles. The ongoing cost of research and development for the LSW has declined, although Titan continues to introduce new LSW wheel and tire assemblies for the agricultural, earthmoving/construction, and consumer markets.

The LSW wheel and tire assemblies reduce bounce, power hop, road lope and heat build-up and provide more stability and safety for operators, which in turn leads to greater productivity. The key to the success of the LSW is an increase in wheel diameter while maintaining the original outside tire diameter. This is accomplished by lowering the sidewall (LSW is an acronym for low sidewall) and increasing its strength. Maintaining the original outside diameter of the tire allows the LSW to improve the performance of agricultural, earthmoving/construction and consumer equipment without further modification.

## **Employees**

At December 31, 2002, the Company employed approximately 2,900 people in the United States and Europe. Approximately 34% of the Company's employees in the United States are covered by three collective bargaining agreements. The majority of employees at Titan's foreign facilities are represented by collective bargaining agreements that are renewed from time to time depending on terms of the agreements and the laws of the foreign jurisdictions. The employees of the Company's Walcott, Iowa, facility ratified a three-year contract in July of 2002. In September of 2001, employees of the Company's Des Moines, Iowa, facility approved a new labor agreement effective through the year 2006. In December of 2001, former workers at the Company's Natchez, Mississippi, facility approved a new labor agreement also effective through the year 2006. Before ratifying these contracts, the employees or former workers at the Des Moines and Natchez facilities had been on strike for 40 and 39 months, respectively. The Natchez, Mississippi, facility is not currently in operation. The strikes at these facilities had an adverse effect on the Company's financial position, cash flows and results of operations in 2001 and 2000. The Company believes the resolution of these two strikes has improved employee relations at these facilities and that employee relations at the other facilities are generally good.

## **International Operations**

In addition to the Company's facilities in the United States, Titan also operates distribution and wheel manufacturing facilities in Europe. For the year ended December 31, 2002, the Company generated \$119.4 million, or 26% percent, of its net sales from foreign operations. International operations and exports to foreign markets are subject to a number of special risks, including, but not limited to, risks with respect to currency exchange rates, economic and political destabilization, other disruption of markets, and restrictive actions by foreign governments (such as restrictions on transfer of funds, export duties and quotas and foreign customs). Other risks include changes in foreign laws regarding trade and investment, difficulties in obtaining distribution and support, nationalization, reforms of laws and policies of the United States affecting trade, foreign investment and loans, and foreign tax laws. There can be no assurance that one, or a combination, of these factors will not have a material adverse effect on the Company's ability to increase or maintain its foreign sales or on its results of operations. The Company had total aggregate export sales of approximately \$81.5 million, \$70.8 million, and \$79.4 million, for the years ended December 31, 2002, 2001 and 2000, respectively. For financial information regarding international operations, see Note 26 to the consolidated financial statements of Titan International, Inc., included in Item 8 herein.

The Company has significant manufacturing operations in foreign countries and purchases a portion of its raw materials from foreign suppliers. The production costs, profit margins and competitive position of the Company are affected by the strength of the currencies in countries where Titan manufactures or purchases goods, relative to the strength of the currencies in countries where products are sold. The Company's results of operations, cash flows and financial position may be adversely affected by fluctuations in foreign currencies and by translation of the financial statements of the Company's foreign subsidiaries from local currencies into United States dollars.

## **Order Backlog**

As of January 31, 2003, Titan estimates \$149 million in firm orders compared to \$110 million at February 28, 2002. Orders are considered firm if the customer would be obligated to accept the product if manufactured and delivered pursuant to the terms of such orders. The Company believes that the majority of the current order backlog will be filled during the current year.

## **Patents and Trademarks**

The Company owns various United States and foreign patents and trademarks and continues to apply for patent protection for many new products. While patents are considered significant to the operations of the business, Titan does not consider any one of them to be of such importance that the patent's expiration or invalidity could materially affect the Company's business.

## **Environmental Compliance**

In the ordinary course of business, like other industrial companies, the Company is subject to extensive and evolving federal, state, local and foreign environmental laws and regulations, and has made provisions for the estimated financial impact of environmental cleanup. The Company's policy is to accrue environmental cleanup-related costs of a noncapital nature when those costs are believed to be probable and can be reasonably estimated. Expenditures that extend the life of the related property or mitigate or prevent future environmental contamination are capitalized. The Company does not currently anticipate any material capital expenditures for environmental control facilities. The quantification of environmental exposures requires an assessment of many factors, including changing laws and regulations, advancements in environmental technologies, the quality of information available related to specific sites, the assessment stage of the site investigation, preliminary findings and the length of time involved in remediation or settlement. The Company does not include anticipated recoveries from insurance carriers or other third parties in its accruals for environmental liabilities. Due to the difficult nature of predicting future environmental costs, the Company cannot anticipate or predict the material adverse effect on its operations, cash flows or financial condition as a result of efforts to comply with, or its liabilities under, environmental laws.

## **Competition**

The Company competes with several domestic and international companies, some of which are larger and have greater financial and marketing resources than Titan. The Company believes it is the primary source of steel wheels and rims to the majority of its North American customers. Major competitors in the wheel market include GKN Wheels, Ltd. and Topy Industries, Ltd. Major competitors in the tire market include Goodyear Tire & Rubber Co. and Bridgestone/Firestone. The Company competes primarily on the basis of price, quality, customer service, design capability and delivery time. The Company's ability to compete with international competitors may be adversely affected by currency fluctuations. In addition, certain of the Company's OEM customers could, under individual circumstances, elect to manufacture the Company's products to meet their requirements or to otherwise compete with the Company. There can be no assurance that the Company will not be adversely affected by increased competition in the markets in which it operates, or that competitors will not develop products that are more effective, less expensive, or otherwise render certain of Titan's products less competitive. From time to time, certain competitors of the Company have reduced their prices in particular product categories, which has prompted the Company to reduce prices as well. There can be no assurance that in the future, competitors of the Company will not further reduce prices or that any such reductions would not have a material adverse effect on the Company.

## Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

### Results of Operations

The following table sets forth the Company's statement of operations expressed as a percentage of net sales for the periods indicated. This table and subsequent discussions should be read in conjunction with the Company's audited consolidated financial statements and notes thereto.

	As a Percentage of Net Sales		
	Year ended December 31,		
	<u>2002</u>	<u>2001</u>	<u>2000</u>
Net sales	100.0%	100.0%	100.0%
Cost of sales	<u>93.6</u>	<u>95.9</u>	<u>92.6</u>
Gross profit	6.4	4.1	7.4
Selling, general and administrative expenses	8.7	10.7	8.1
Research and development expenses	<u>0.7</u>	<u>0.7</u>	<u>0.9</u>
(Loss) income from operations	(3.0)	(7.3)	(1.6)
Interest expense	(4.5)	(4.6)	(4.1)
Loss on investments	(2.7)	0.0	0.0
Gain on sale of assets	0.0	0.4	7.1
Gain on early retirement of debt	0.0	1.0	0.0
Other income	<u>0.6</u>	<u>0.4</u>	<u>0.2</u>
(Loss) income before income taxes	(9.6)	(10.1)	1.6
(Benefit) provision for income taxes	<u>(1.8)</u>	<u>(2.5)</u>	<u>0.8</u>
Net (loss) income	<u>(7.8)%</u>	<u>(7.6)%</u>	<u>0.8%</u>

In addition, the following table sets forth components of the Company's net sales classified by segment for the periods indicated (in thousands):

	<u>2002</u>	<u>2001</u>	<u>2000</u>
Agricultural	\$278,266	\$256,140	\$283,058
Earthmoving/Construction	144,725	156,033	162,591
Consumer	<u>39,829</u>	<u>45,302 (a)</u>	<u>97,420 (a)</u>
Total	<u>\$462,820</u>	<u>\$457,475</u>	<u>\$543,069</u>

(a) Consumer market sales decreased as result of the sale of certain assets in April 2000.