



YENGST ASSOCIATES

Machinery Market Research



COMPANY PROFILE

North America

Deere & Company
March 2006



Information has been obtained from sources believed to be reliable, but Yengst Associates does not warrant its completeness or accuracy. Opinions and estimates constitute our judgment as of the date of this material and are subject to change without notice. Past performance is not indicative of future results.

Any form of reproduction, copying or distribution of this material is strictly prohibited without prior written consent from Yengst Associates. International copyright laws protect all materials published by Yengst Associates. All rights reserved.

YENGST ASSOCIATES

Machinery Market Research

COMPANY PROFILE **North America**

Deere & Company **March 2006**

Yengst Associates, Inc.
35 Old Ridgefield Rd.
P.O. Box 781
Wilton, CT 06897
Telephone +1 203 762-8096
Facsimile +1 203 762 8330
Web: www.yengstassociates.com
E-mail: mail@yengstassociates.com

European Marketing Office:
Off-Highway Research Limited
35 Great James Street
London WC1N 3HB
UNITED KINGDOM
Telephone +44 (0) 20 7404 1128
Facsimile +44 (0) 20 7404 1129
Website: www.offhighway.co.uk
E-mail: mail@offhighway.co.uk

Japanese Marketing Office:
Rayden Research Limited
Yurakucho Denki Bldg.
South Tower 10F
1-7-1 Yurakucho
Tokyo 100-0006, JAPAN
Telephone +81 3 3212 3671
Facsimile +81 3 3212 3675
E-mail: kawahara@ff.ij4u.or.jp

TABLE OF CONTENTS

DEERE & COMPANY OVERVIEW.....	1
EXECUTIVE SUMMARY	2
OUTLOOK.....	3
OPERATING RESULTS	4
Sales Analysis	5
Employment.....	8
Manufacturing	9
Marketing and Distribution	10
Corporate Leadership.....	11
CORPORATE STRATEGY.....	12
Alliances	12
Technology	13
Distribution.....	13
PRODUCT ANALYSIS	13
North American Machinery Production	14
North American Machinery Sales	14
Agricultural Equipment	15
Farm Tractors	16
Harvesting Combines	17
Other Agricultural Equipment and Implements	17
Construction Equipment.....	18
Articulated Haulers	18
Backhoe Loaders.....	18
Compact Track Loaders	19
Crawler Dozers	19
Crawler Loaders	19
Hydraulic Excavators	20
Mini-Excavators	20
Motor Graders.....	21
Motor Scraper Bowls	21
Skid-Steer Loaders	21
Wheel Loaders.....	22
Forestry Equipment	22
Power Systems Group.....	23
OEM Markets Served	24
Parts Operations.....	24

Deere & Company

U.S. Headquarters:	One John Deere Place Moline, Illinois 61265
Telephone / Fax:	Telephone : 309.765.8000 Facsimile : 309.765.5761
Internet:	www.deere.com www.johndeereag.com
Major Product Offerings / Key Markets:	<p><u>Agricultural Equipment</u> Farm Tractors; Combines; Cotton Pickers; Sugarcane Harvesters; Seeding, Tillage and Soil Preparation Machinery; Hay & Forage Equipment; Material Handling Equipment, Integrated Management Systems Technology.</p> <p><u>Construction & Forestry Equipment</u> Backhoe Loaders; Crawler Dozers & Loaders; 4- Wheel-Drive Loaders; Landscape Loaders; Motor Graders; Articulated Dump Trucks; Hydraulic Excavators; Mini-Excavators; RT Fork Lifts; Skid- Steer Loaders; Log Skidders, Loaders, Feller Bunchers, Forwarders, Harvester and related attachments; Diesel/Natural Gas Engines; Drivetrain Components</p> <p><u>Commercial & Consumer Equipment</u> Lawn/Garden/Commercial/Utility Tractors; Utility Vehicles; Walk-Behind Mowers; Golf Course Equipment; Snowblowers; Landscape & Irrigation Equipment</p> <p><u>Credit Services</u> Finances Sales and Leases by John Deere dealers, provides wholesale financing to Deere dealers and provides operating loans and finances retail revolving charge accounts.</p>
Manufacturing Area:	Approx. 41 million square feet, including approx. 11 million square feet outside the U.S.
2005 Net Sales:	\$21,931 million worldwide; \$15,502 million in North America
Fiscal Year:	November 1 – October 31
2003 Employees:	47,400 worldwide; 27,000 in North America
Ownership:	Publicly Held Company (NYSE: DE)

**EXECUTIVE
SUMMARY**

Deere & Company is one of the oldest industrial companies in the United States. It was founded in 1837 as a one-person blacksmith shop. Today, it does business in more than 160 countries worldwide, manufactures products in 17 countries, and employs more than 47,000 people worldwide. The company is organized under two broad segments – equipment operations and financial services – doing business in two broad geographic areas: U.S. and Canada and non-U.S. and Canada.

John Deere has been the world’s largest producer of agricultural equipment since 1963 and is a leading producer of construction and forestry equipment. The company and its subsidiaries (*collectively called John Deere*) manufacture, distribute, and finance a full line of agricultural equipment; a broad range of construction and forestry equipment; and a variety of commercial and consumer equipment. The company also provides credit plans for businesses and the general public. It markets its equipment products through a worldwide network of independent dealers supported by a decentralized marketing organization. John Deere is also a significant supplier of parts for its own products as well as those of other manufacturers.

In 2005, Deere became the first OEM to use biodiesel as a factory fill in its U.S. manufacturing locations. As a result, virtually all John Deere tractors, combines and other diesel-powered machinery are filled with biodiesel when they are shipped to the dealers. The company also developed John Deere Credit, a new business unit, in 2005 to assist a segment of agricultural customers in harvesting wind energy above their fields.

The bulk of Deere’s sales and production occur in the U.S. and Canada with fiscal year 2005 sales making up almost 70 percent of total equipment sales. On a consolidated level, 2005 equipment sales of \$19,401 million were almost 89 percent of consolidated sales, with agricultural equipment sales of \$10,567 million representing 54 percent of total equipment sales.

**Table 1: Deere & Company
Consolidated Financial Results of Operations: Fiscal 2002 – 2005**

\$ Millions	Year Ending October 31				3 Months Ending	
	2002	2003	2004	2005	1/31/06	1/31/05
Total Sales / Revenue	\$13,947	\$15,535	\$19,986	\$21,931	\$4,202	\$3,935
Equip. Sales//Revenue	11,703	13,349	17,673	19,401	3,691	3,526
Cost of Sales	9,608	10,753	13,568	15,163	2,896	2,770
Gross Profit	817	1,212	2,376	2,374	390	388
% Sales of Equip.	7.0	9.1	13.4	12.2	9.3	9.9
Research & Develop	528	577	612	677	161	149
% Total Sales /Revenue	3.8	3.7	3.1	3.1	3.8	3.8
Net Income(Loss)	\$319	\$643	\$1,406	\$1,447	\$239	\$223
% Sales Equipment	2.7	4.8	8.0	7.5	6.5	6.3
% Total Sales/Revenues	2.3	4.1	7.0	6.6	5.7	5.7
Other Financial Data						
Total Assets	23,768	26,258	28,754	33,637	36,235	32,995
Long-Term Debt	8,950	10,404	11,090	11,739	12,201	10,954
Capital Expenditures	358	313	364	512	n/a	n/a

Source: Deere & Company

For the past several years, Deere has taken steps in terminating business relationships, closing manufacturing facilities with duplication and excess production capacity, forging new alliances to maximize production capabilities and developing and marketing new products to improve their bottom line and manufacturing efficiencies. Unfortunately, the company didn't see the level of benefit they hoped for with these improvements in 2005 because of lower-than-expected production levels, especially for commercial and consumer equipment.

Fiscal 2005 was a very strong year for Deere, reaching almost \$22 billion in consolidated sales. The construction and forestry division had a record year while the agricultural machinery division was profitable but was negatively affected by the slowing European market and a sharp downturn in Brazil. Field and company-owned inventory held steady in dollar terms in 2005 but have reached their lowest point as a percent of sales in recent times.

The company was able to take advantage of improved market conditions and the introduction of new products. Its net income did not keep pace with the earnings growth, however, due to cost of sales increases resulting from higher raw material prices, selling and administrative expenses and increased manufacturing overhead costs related to production system improvements, higher research and development costs and the impact of currency valuation. There was some relief from the margin from higher shipments and improved price realization.

Agricultural Equipment sales remain the core segment of Deere's business, holding steady at approximately 54 percent of total equipment sales. The company's investment in research and development (R&D), as noted in Table 1 above, has fluctuated for the past five years. During this time, R&D expenses as a percentage of total sales and revenues held steady at 3.1 percent over 2004 and 2005. Equipment Operations capital expenditures for the same period have grown from a low of \$304 million in 2003 to \$465 million in Fiscal 2005 or almost 53 percent. For fiscal 2006, they are expected to reach \$580 million.

Operating profit remained flat at almost \$2,400 million in 2005, while net income increased only 3 percent to \$1,447 million from \$1,406 million in 2004, despite a 10 percent increase in sales over the same period. For the first three months of fiscal 2006, equipment operations operating profit was flat with first quarter of 2005 at approximately \$260 million. Operating profit was negatively affected by lower manufacturing volumes and the expensing of stock options and was offset by higher shipments, improved price realization and lower retirement benefit costs. During the first quarter of fiscal 2004, the company acquired a majority interest in Nortrax, Inc. and it was consolidated beginning in December 31, 2003. It had previously been recorded as an equity investment in the Construction and Forestry operations.

Worldwide equipment sales, excluding the effect of currency translation and price changes, increased 4 percent for the first quarter of 2006 whereas equipment sales in the U.S. and Canada increased 9 percent for the quarter. A further breakdown of Deere's sales by market region appears later in this report.

OUTLOOK

The company expects industry sales for the farm sector in the U.S. and Canada to decrease 5 to 10 percent and retail sales in Western Europe and South America to decrease approximately 5 percent in 2006. Deere projects that its agricultural sales will be down by 2 to 4 percent, commercial and consumer equipment will increase 10 to 12 percent and construction and forestry equipment sales will increase 5 to 7

percent. There are many outside influences that could affect the company's expectations. These factors include: the availability and price of raw materials requiring a high content of natural gas and petroleum, for example tires; the impact of farm subsidies and farmer confidence in both the U.S. and Europe; the continued production of engines meeting both performance and emission standards, and the risk associated with the success of new product initiatives and customer acceptance of new products.

OPERATING RESULTS

The following are highlights of Deere & Company and its subsidiaries from the start of fiscal 2004 by operating division. (Our last profile of Deere & Company was issued August 2004.)

Deere & Company, Timeline
[Fiscal 2004 to Present](#)

2004

Agricultural Equipment

Broke ground for new tractor factory in the state of Rio Grande do Sul in Brazil. Initial production is planned for 2006 and is intended for the South American market.

Waterloo factory redevelopment proceeds on schedule projected completion 2006.

Construction and Forestry Equipment

Acquired a majority interest in **Nortrax, Inc.** increasing its interest to 83 percent in December 2003.

Sold its minority ownership in **Sunstate Equipment Co., LLC**, a venture engaged in the rent-to-rent business, in November 2003.

2005

Agricultural Equipment

Introduced John Deere 8530 tractor a 275 horsepower row crop tractor.

Opened an assembly facility in Orenburg, Russia to provide seeding carts and air seeding tools to customers in Russia and other CIS markets in February 2005.

Purchased remaining ownership interest in Chinese combine factory.

Purchased virtually all of the remaining interest (up to 98 percent ownership) in its Indian tractor venture (John Deere Equipment Private Ltd in September 2005).

Broke ground in Tianjin, China for its new wholly-owned drive train component facility which will manufacture transmissions for small John Deere tractors worldwide.

Construction and Forestry

Introduced 21 new and updated products including a line of compact track loaders.

Began production of articulated dump trucks at Davenport, Iowa factory.

Introduced the 844J loader, the largest ever with 7 cubic yard capacity.

Signed agreement to be priority supplier for Russia's' largest pulp and paper manufacturer.

Commercial & Consumer Equipment

Expanded marketing effort of merchandising through The Home Depot. Lowe's will carry the John Deere brand in 2006.

Acquired United Green Mark, Inc. in June 2005 which is expected to provide access to key western U.S. states.

2006

Construction and Forestry

The company expects to close its forestry equipment manufacturing operation in Woodstock, Ontario, Canada in September 2006. Production of all machines will be moved to existing Deere operations in Davenport and Dubuque, Iowa.

Other

Sold John Deere Health Care to United Healthcare for approximately \$500 million.

Sales Analysis

Worldwide Equipment Sales is comprised of three segments: agricultural; construction and forestry; and commercial consumer equipment. Data for sales of engines are incorporated in construction and forestry equipment figures. Special Technologies Group's results have been reported as part of Agricultural Equipment, and Health Care Operations as Other, since fiscal 2004. An overview of the company's Parts business appears at the end of this company profile.

Like most OEMs in the agricultural and construction equipment markets, Deere has enjoyed tremendous growth due to favorable market conditions for the past few years. Deere's total sales and revenues have increased each year for more than five years, growing to record high levels in fiscal years 2004 and 2005. Equipment sales increased almost 10 percent in 2005 from the prior year as a result of the translation effect of stronger exchange rates, improved price realization and improved retail sales. Most growth occurred in the Agricultural and Construction and Forestry Equipment segments.

Agricultural Equipment is the largest sales segment, representing 48 percent of Deere and Company's total sales and revenues and 54 percent of total equipment sales for 2005. **Sales** in this segment reached almost \$10.6 billion in fiscal 2005, a nearly nine percent increase over 2004. This increase was largely due to improved price realization, higher shipments and the translation effect of currency exchange rates. Sales for the first quarter of fiscal 2006 declined 6 percent from the prior year as a result of lower shipments and currency translation, partially offset by improved price realization. **Operating Profit** in fiscal 2005 decreased almost 10 percent over 2004, largely due to the increase in manufacturing overhead costs, research and development costs, and selling and administrative expenses. The decrease was

partially offset by the margin on higher shipments and improved price realization. First quarter 2006 operating profit declined by \$57 million, or 35 percent, due to lower shipments and resulting worldwide production inefficiencies, partially offset by improved price realization and lower retirement benefit costs. In the past five years, Deere & Company's Agricultural Equipment sector has generated the most profit of any other segment except for 2003, when the Credit segment generated \$474 million profit versus Agriculture's \$337 million.

Table 2: Sales by Business Segment 2003 – 2005

\$ Millions	Year Ending October 31, 2005			3 Months Ending	
	2003	2004	2005	1/31/06	1/31/05
Agricultural					
Sales	\$7,390	\$9,717	\$10,567	\$1,894	\$2,010
Profit	329	1,072	970	\$106	\$163
Construction & Forestry					
Sales	2,728	4,214	5,229	1,169	993
Profit	152	587	689	136	101
Commercial / Consumer					
Sales	3,231	3,742	3,605	628	523
Profit	227	246	183	19	(2)
Total Equipment					
Sales	\$13,349	\$17,673	\$19,401	\$3,691	\$3,526
Profit	\$708	\$1,905	\$1,842	\$261	\$262
Other¹					
Sales	2,186	2,313	2,530	511	409
Profit	504	471	532	129	126
Total: Sales & Revs	\$15,535	\$19,986	\$21,931	\$4,202	\$3,935
Total: Profits	1,212	2,376	2,374	390	\$398

Source: Deere & Company; ¹ Includes Credit and Other Revenues

Sales of agricultural equipment are affected by total farm cash receipts and weather and climatic conditions and influenced by general market conditions. Farm tractors and combines are the leading products in this segment. In 2005, Deere continued to outpace all other suppliers of tractors with almost one quarter of the North American tractor sales market and over half of tractor production in North America. In addition, Deere also had 55 percent of North American sales and production of harvesting combines in 2005.

Construction & Forestry Equipment segment sales jumped to \$5,229 million in fiscal 2005, an increase of 24 percent over 2004 as a result of higher sales and production volumes and improved price realization. Sales in this segment represented 27 percent of total equipment sales in fiscal 2005. Fiscal 2005 also marked the third year in a row that this segment has reported double digit growth in sales. Deere has been focusing on expanding its forestry equipment line for the last couple of years for the global market. The North American forestry industry has changed radically since 2000 and is producing today half of the volume that it did in 2000. This downturn has caught Deere and the other forestry equipment OEMs by surprise and helps explain Deere's closing of the Woodstock Ontario plant and moving its operations to Dubuque and Davenport, Iowa facilities. Sales for the first quarter of fiscal 2006 increased 18 percent, indicating strong activity at the retail

level. **Operating profit** in fiscal 2005 increased to \$689 million or 17 percent over fiscal 2004. This increase was largely due to higher sales and efficiencies related to stronger production volumes. Improved price realization offset the impact of higher raw material costs. Operating profit for 2004 includes a \$30 million pre-tax gain from the sale of Sunstate Equipment Co. LLC, a rental equipment company. Operating profit for the first quarter of 2006 was \$136 million, a gain of nearly 35 percent over the prior year largely due to the increased efficiencies and shipments brought on by higher production volumes, partially offset by expenses to close its manufacturing facility in Woodstock, Ontario, Canada in September 2006.

In addition to the equipment manufactured by the Construction and Forestry division, John Deere purchases certain products from other manufacturers for resale. Deere and Hitachi have a joint venture for the manufacture of hydraulic excavators and track log loaders in the United States and Canada. Deere also distributes Hitachi brands of construction and mining equipment in North, Central and South America. The company has other supply agreements with Hitachi, wherein a range of construction, earthmoving, material handling and forestry products manufactured by John Deere in the United States and Canada are distributed by Hitachi in certain Far East markets.

Fiscal 2005 was disappointing for the **Commercial and Consumer Equipment** segment as **sales** fell 4 percent to \$3,605 million. The decrease was due to unfavorable weather conditions during the critical selling season of 2005. This segment's sales as a percentage of equipment sales have fallen for the last three years from 24 percent in 2003 to less than 19 percent in 2005. The first quarter of 2006 is looking better, as sales increased 20 percent primarily due to higher sales in the landscape business. **Operating profit** in fiscal 2005 fell 26 percent over 2004 to \$183 million due to the low level of shipments and production volumes. Increased price realization more than offset the increase in raw materials. The segment had an operating profit of \$19 million for the first quarter of 2006 as opposed to an operating loss of \$2 million in 2005, due to the profitability of the landscape business. Deere is looking to the landscape business to continue to grow and become a larger share of this segment.

Deere has expanded its offering of utility vehicles with new products focused on residential, commercial, agricultural, and consumer markets. Lawn and garden tractors, utility tractors, mowers, snow blowers and the recently expanded products in the landscape and irrigation equipment segment, make up the major products offered by this division and are gaining popularity and increasing demand. The Company has offered products for sale through Home Depot stores since 1999 and expects to add Lowe's to its distribution channel in 2006. The company expects growth in this area, which is dependent on consumer spending.

Table 3: Equipment Sales & Revenues by Geographical Market 2002 – 2005

\$ millions	2002	2003	2004	2005	% Change
N. American Sales	\$8,199	\$9,249	\$12,332	\$13,511	9.6
Overseas Sales	3,504	4,100	5,340	5,890	10.3
Total Equip. Sales	\$11,703	\$13,349	\$17,672	\$19,401	9.8

Source: Deere & Company; Year Ending October 31

Over the past four years, the North American market has accounted for about 70 percent of Deere's worldwide equipment sales, while overseas sales have held steady at approximately 30 percent. U.S. and Canadian sales increased due to higher shipments, reflecting strong retail demand in construction and forestry

equipment, and improved price realization in all equipment segments. Sales increased nearly 10 percent in 2005 while the physical volume increased 5 percent, compared to 2004. Non-U.S. and Canada 2005 sales were just over 10 percent higher than 2004 while the physical volume increased 3 percent.

For the first quarter of 2006, excluding the effect of currency translation and price changes, equipment sales in the U.S. and Canada increased four percent over the prior year's first quarter. On a reported basis, equipment sales in the U.S. and Canada increased nine percent for the quarter. Outside the U.S. and Canada, sales increased by one percent excluding currency translation but were down five percent as reported.

**Table 4: Operating Profit
Industry Segment and Geographic Area: 2003 - 2005**

\$ Millions	Years Ending October 31		
	2003	2004	2005
Operating Profit			
Equipment	\$708	\$1,905	\$1,842
Non-Equipment	504	471	532
Total Operating Profit	\$1,212	\$2,376	\$2,374
Geographic Area			
U.S. and Canada			
Equipment	\$386	\$1,284	\$1,298
Non-Equipment	469	418	472
U.S. and Canada Op. Profit	855	1,702	1,770
Non U.S. and Canada			
Equipment	322	621	544
Non-Equipment	35	53	60
Non U.S. and Canada Op. Profit	357	674	604
Total Operating Profit	\$1,212	\$2,376	\$2,374

Source: Deere & Company

As shown in Table 4, Deere's non-equipment operating profit as a percent of total operating profit has grown from 20 percent in 2004 to 22 percent in 2005. When examined by geographical area, operating profit for the U.S. and Canada accounts for about 75 percent of total 2005 operating profit, and U.S. and Canada equipment operating profit alone is almost 55 percent of the company's total 2005 operating profit.

Employment

As of October 31, 2005, Deere & Company and its subsidiaries employed approximately 47,400 full-time professional and technical persons worldwide. Though reductions occurred in the years 2002 and 2003, total employment increased by 7.5 percent in 2004 and then by another two percent in 2005. The 2005 employee total represents an increase of more than 5 percent from 2001.

Total sales per employee have grown to over \$460,000, or 58 percent, from 2001. By comparison, companies in the same industry had approximate sales and/or revenues per employee as follows (for their most recent fiscal year): AGCO, \$419,200; Caterpillar, \$426,900 and CNH, \$473,900.

Table 5: Worldwide Employment/Sales Data 2001 - 2005

(\$millions)	2001	2002	2003	2004	2005
North America*	28,369	26,951	27,021	28,565	27,023
Outside U.S. and Canada	16,700	16,100	16,200	17,900	20,400
Total Number of Employees	45,069	43,051	43,221	46,465	47,423
Total Sales per Employee (000s)	\$293.5	\$323.6	\$359.4	\$430.1	\$462.4

Source: Deere & Company; Year Ending October 31; * estimated

Manufacturing

Deere's North America Equipment Operations owns 20 factory locations and leases and operates another three locations that total approximately 29.5 million square feet of floor space. Of these 23 factories: 12 are devoted primarily to agricultural equipment; one to non-forestry construction equipment; one to construction and forestry equipment; one to engines; two to hydraulic and power train components; four to commercial and consumer equipment, and two to forestry equipment.

In 2005, the Equipment Operations announced plans to build an additional components factory in China. The company is also building a tractor manufacturing facility in the state of Rio Grande do Sul in Brazil, slated to open in 2006. For the past two years, Deere has been redeveloping its Waterloo, Iowa factory, also scheduled to be completed in 2006.

Table 6: Worldwide Manufacturing Facilities: 2005

North American Locations	Products
Alpharetta, GA	Landscape & Irrigation Products & Services
Coffeyville, KS	Power Transmission Equipment
Coon Rapids, MN	Hydraulic Cylinders
Davenport, IA	4 Wheel Drive Loaders, Motor Graders, Skidders, Artic Dump Trucks
Des Moines, IA	Cotton Harvesting, Tillage, Planting
Dubuque, IA	Crawler Bulldozers, Backhoe Loaders, Skid Steer Loaders,
East Moline, IL	Combines, Front-End Equipment
Fargo, ND	Electronics design and manufacturing
Fuquay-Varina, NC	Commercial and Golf & Turf Mowers
Greeneville, TN	Walk-Behind Mowers , Lawn Tractors
Grovetown, GA	Compact Utility Tractors
Horicon, WI	Lawn and Garden Tractors, Gator™ Utility Vehicles, Golf and Turf Reel Mowers
Kernersville, NC ³	Hydraulic Excavators
Moline, IL	Planting/Seeding Equipment, Hydraulic Cylinders
Ottumwa, IA	Balers, Mower Conditioners, Windrowers, Mowers And Rakes
Piqua, OH	Components
Rock Hill, SC	Transaxles
Springfield, MO	Remanufactured Engines
Thibodaux, LA	Sugarcane Harvesters, Scraper s, Landscape Loaders
Urbandale, IA	Production Ag Equipment Technology
Valley City, ND	Air Seeding Equipment
Waterloo, IA	7000, 8000, and 9000 Series Tractors, Foundry, Engines, Gray and Ductile Iron Casings
Alberta, ON Canada	Remanufactured Components
Langley, BC, Canada	Forestry Swing Machines (Log Loaders, Delimbers, Road Builders)
Welland, ON, Canada	Rotary Cutters, Loaders, and Gator™ Utility Vehicles
Woodstock, ON, Canada	Log Skidders, Knuckleboom Loaders, Tracked and Wheeled Feller Bunchers

Worldwide Manufacturing Facilities: 2005 (cont'd)

Overseas Locations	Products
Arc-les-Gray, France	Balers, Forage Equipment, Material Handling Equipment
Bruschal, Germany	Tractor and Combine Cabs and ROPS
Catalao, Brazil	Sugarcane Harvesters
Donguzskaya, Russia	Seeding Carts, Air Seeding Tools
Empangeni, South Africa	Articulated Dump Trucks
Enschede, The Netherlands ²	Commercial Riding Mowers
Garza Garcia, Mexico	Implements, Tractors, Components, Construction Equipment
Gummersbach, Germany ²	John Deere and SABO-branded Walk-behind Mowers, Commercial Mowers, Consumer Riding Mowers, Scarifiers, Shredders
Horizontina, Brazil ¹	Ag Tractors, other implements
Horst, The Netherlands	Spraying Equipment
Jiamusi, China ³	Combine Harvesters
Joensuu, Finland	Log Forwarders, Wheeled Harvesters, Energy Wood Bundler
Madrid, Spain	Components
Mannheim, Germany	6000 Series Tractors
Monterrey, Mexico ¹	Agricultural Equipment
Nigel, South Africa	Tillage Planting Equipment
Pune, India	Tractors, Transmissions and Engines
Santa Fe, Argentina	Engines, Seeding Equipment
Saltillo, Mexico ¹	5000, 6000, 7000 Series Tractors and Excavators
Santiago, Chile	Remanufactured Hydraulic Pumps and Motors
Saran, France	Diesel Engines
Stadtlohn, Germany	Headers for Self-Propelled Forage Harvesters
Tianjin, China	Agricultural Tractors and Engines
Torreón, Mexico	Diesel Engines
Waikato, New Zealand	Forestry Harvesting Heads
Zweibrücken, Germany	Combines, Self-Propelled Forage Harvesters, and Telescopic Loaders

Source: Deere and Company; ¹ Affiliated Company, ² Majority—Owned Subsidiary, ³ Joint Venture

Marketing and Distribution

Deere and its subsidiaries offer its machinery, engines, and related products through dealers and distributors in over 160 countries. In the U.S. and Canada, Deere sells products through approximately 3,033 dealer locations, a decrease of 134 locations from December 2003, most of which are independently owned. Of these locations, approximately 1,600 sell agricultural equipment while 536 sell construction, earth-moving, material handling and/or forestry equipment. Nortrax's 52 dealers in 13 states are included in these 536 locations. There are 40 fewer construction, earth-moving, material handling and/or forestry equipment locations in 2005 than 2004.

Commercial and consumer equipment is sold by most John Deere agricultural equipment dealers, a few of the 536 dealers mentioned above, and approximately 897 commercial and consumer equipment dealers, a decrease from 991 dealers in 2003. The commercial and consumer dealers often market competitive brands and dissimilar lines of products in the U.S. and Canada. In addition, certain lawn and garden product lines are sold through mass merchandisers of consumer goods, specifically Home Depot, with Lowe's starting in 2006.

In North America, Equipment Operations distributes equipment and service parts through one agricultural equipment and one commercial and consumer equipment sales and administration office (each supported by seven agricultural equipment and commercial and consumer equipment sales branches) and through one construction, earthmoving, material handling and forestry equipment sales and administration office. Outside the U.S. and Canada, John Deere agricultural equipment is sold to distributors and dealers for resale in over 160 countries. In addition, the company has

pecially designed rental programs for John Deere dealers and expanded cooperation with major national rental companies as well. Deere Power Systems Group's North American distributors of John Deere engines are identified in a chart located in the last section of this company profile.

Corporate Leadership

Deere's management is made up of individuals who have been part of the organization for many years. Current operating officers of Deere & Company as of January 5, 2006 are listed in Table 7.

Table 7: Deere & Company Corporation Operating Officers as of January 5, 2006

Name, age, office and year elected to office				Principal Occupation for last 5 years
Robert W. Lane	56	Chairman, President and Chief Executive Officer	2000	2000 President and Chief Executive Officer; 1999-2000 Division President; 1998-1999 Senior Vice President, Ag. Division, and Managing Director, Region II (Europe, Africa and the Middle East); 1996-1998 Senior Vice President and CFO
Samuel R. Allen	52	Division President (Worldwide Construction and Forestry)	2005	2003-2005 President, Global Financial Services, John Deere Power Systems and Corporate Human Resources,; 2001-2002 Senior Vice President, Global Human Resources and Industrial Relations; 1999-2001 Vice President Region I (Latin America, the Far East, Australia and South Africa)
David C. Everitt	53	Division President (Agricultural Division, N A, Australia, Asia and Global Tractor and Implement Sourcing)	2006	2001-2006 President Agricultural Division- Europe, Africa, South America and Global Harvesting Equipment Sourcing.
David P. Werning	n/a	Division President (J Deere Landscapes)	2001	Director of Business Development , Worldwide Commercial & Consumer Equipment Division
James R. Jenkins	60	Senior Vice President and General Counsel	2000	Has held this position for the last five years
John J. Jenkins*	60	Division President (Worldwide Commercial & Consumer Equipment)	2000	Has held this position for the last five years
Nathan J. Jones	49	Division President (Worldwide Commercial & Consumer Equipment)	2006	1998-2006 Senior Vice President and Chief Financial Officer
H. J. Markley	55	Division President (Agricultural Division- Europe, Africa, South America and Global Harvesting Equipment Sourcing)	2006	2001-2006 President Agricultural Division, North America, Australia, Asia and Global Tractor and Implement Sourcing
James A. Israel	n/a	President, John Deere Credit	2006	2001-2006 Senior Vice President, World Wide Equipment Lending for John Deere Credit.
Michael J. Mack, Jr.	n/a	Senior Vice President and CFO	2006	2004 -2006 Vice President and Treasurer

Source: Deere & Company; * expected to retire in 2006.

Officers below the Division President level can be found listed at the company web site, www.deere.com. Each of the four businesses: Agricultural Equipment, Construction and Forestry Equipment, Commercial & Consumer Equipment, and Financial Services divisions report directly to Chairman Robert W. Lane.

CORPORATE STRATEGY

John Deere is looking to global expansion as its main vehicle for growth over the next several years. They are looking to expand both their global markets and customer base. This is after an aggressive and multi-faceted strategy of the last several years that included broadening their product lines and improving asset utilization by consolidating production operations. Deere started the redevelopment of farm tractor operations in Waterloo, IA in 2004, and it is slated to be completed in 2006. This strategy paid off in 2004 and 2005 when the U.S. economy picked up; however, in 2005, reduced production volumes due to the slowdown of the market prevented the company from enjoying the benefits they expected.

Deere has high expectations for global expansion as seen in the forestry equipment division, where more than half of the sales are currently from outside North America. The company sees Russia as an attractive new market with its vast and largely untouched forests. In February 2005, Deere opened a factory in Russia to manufacture seeding equipment and also signed an agreement to be the primary supplier for Russia's pulp and paper manufacturer. Deere has also opened a forestry harvesting head manufacturing operation in New Zealand and is now manufacturing forestry swing machines in Langley, British Columbia.

The company is continuing to establish a foothold in China and India by serving customers with locally produced John Deere tractors and engines. In China, Deere assumed full ownership of its combine manufacturing operation and broke ground in Tianjin for a wholly-owned drive-train component factory, which will provide transmissions for small John Deere tractors worldwide. In 2005, Deere purchased most of the remaining interest in its Indian tractor venture, and its new technology center in Pune is still slated to open in 2006.

As the populations of both China and India increase and continue to grow and prosper, the company expects that farming will become more mechanized as people in rural areas head for jobs in the cities, and that people will upgrade their diets and eat more meat. These factors will have an impact on future demand for both farm machinery and feed grains such as corn.

Deere is also looking to expand its product platform in South America. The company still regards Brazil as an area for strong growth despite last year's sharp downturn. Deere already manufactures some farm equipment and engines there and is currently building a new tractor plant in Montenegro where it will manufacture more tractors of a greater range of models, particularly in the high power class. Initial production is expected to be in 2006.

Alliances

Deere has formed and dissolved key strategic alliances in the last couple of years, often resulting in new products as part of its corporate strategy. Some new products introduced include spraying and large-scale baling machines and larger excavators and graders. The company expects further large-model rollouts in

2006. In addition, Deere has broadened its line of compact utility tractors, skid steer loaders and utility vehicles.

The company continues to have a 50/50 relationship with Hitachi on excavators and various other products including track log loaders. Deere is managing the sales of the products in North America for both itself and Hitachi, while Hitachi handles some distribution networks for the Deere brand in certain Far East markets.

Technology

Deere has employed Global Positioning Systems (GPS) and Geographic Information Systems (GIS) on its farm equipment. They have also incorporated key technologies such as data base management systems, expert systems, remote data collections, modeling and multimedia and visualization on various products.

Distribution

Over the past several years, Deere has embarked on a strategy to gain greater control over its distribution channels and to provide those channels with advanced technologies. Nortrax is the largest Deere dealership group in the world.

The company has an 80 percent interest of Shanghai GE Construction Equipment Engineering Co., Ltd., a joint venture construction equipment rental company based in Shanghai, China. It also has formed John Deere Tiantuo Company, Ltd. (JDT), a joint venture tractor manufacturing operation with Tianjin Tractor Manufacturing Company based in Tianjin, China. JDT, 51 percent owned by Deere, manufactures and sells tractors for the China market. In 2005 Deere also purchased the remaining ownership interest in Chinese combine factory.

In India, Deere purchased most of Larsen & Toubro Limited's equity and now holds 98 percent equity in the Pune tractor facility. John Deere Limited produces tractors and engines for customers in India.

PRODUCT ANALYSIS

Deere is the North American industry leader in agricultural equipment sales, and is a major competitor in both the construction and forestry equipment markets.

**Table 8: Deere & Company
North American Divisional Product Offering**

Agricultural	Construction and Forestry	
Agricultural Tractors	Articulated Trucks	Wheel Loaders
Combines	Backhoe Loaders	RT Vertical Mast Lift Trucks
Other machines	Compact Track Loader	Telescopic RT Lift Trucks
Implements	Crawler Dozers	Feller Bunchers
	Crawler Loaders	Log Skidders
	Hydraulic Excavators	Wheeled Forwarders
	Motor Graders	Wheeled Harvesters
	Skid-Steer Loaders	Engines

Source: Company Information

A large portion of the major components used in Deere equipment – including engines, axles, and transmissions — are manufactured by the Deere Power Systems Group and the Group's subsidiaries.

**North American
Machinery
Production**

The following table summarizes Deere's North American production relative to industry production of agricultural tractors, and construction and forestry equipment from 2003 through 2005. It should be noted that these production statistics are estimated for industry shipments of the various machines, and shipments to both domestic and overseas markets.

Deere manufactures most of its agricultural, construction and forestry product lines for the North American market in North America. Some exceptions include: utility tractors made in Mannheim, Germany; some hydraulic excavators manufactured by Hitachi in Japan; the forestry oriented excavator line manufactured in British Columbia; and small wheel loaders and some crawler loaders and crawler dozers manufactured in Austria by Liebherr.

Deere's 2005 manufacturing levels for most products increased significantly over 2003. The greatest increases in production occurred in skid steers (124 percent), crawler dozers (103 percent), crawler excavators (80 percent), compact backhoe loaders (67 percent) and wheel loaders (65 percent). Other changes to North American production since our last report include the addition of compact track loaders and articulated haulers to North American production facilities, and the elimination of crawler loaders and telescopic rough terrain lift trucks from North American lines.

**Table 9: North American Equipment Production
Deere vs. Industry 2003 - 2005**

Products-units	2003		2004		2005		%
	Industry	Co	Industry	Co	Industry	Co	
Agricultural							
Agricultural Tractors	95,000	49,500	110,000	57,000	116,525	59,000	50.6
Harvesting Combines	6,075	3,200	8,600	4,700	8,825	4,900	55.5
Construction							
Articulated Haulers	350	-	-	-	450	350	77.7
Backhoe/Loaders	21,000	5,450	26,700	7,500	29,050	8,500	29.3
Cmpt Backhoe/Ldr	4,735	600	4,125	1,000	3,425	1,000	29.2
Compact Track Ldr	8,050	-	15,600	-	23,150	400	1.8
Crawler Dozers	8,000	3,050	11,000	4,600	13,600	6,200	45.6
Crawler Loaders	130	130	-	-	-	-	-
Crawler Excavators	11,600	944	13,370	1,500	15,735	1,700	10.8
Motor Graders	4,500	710	4,350	850	4,665	950	20.4
Skid-Steer Loaders	71,700	3,800	85,000	5,250	85,560	8,500	9.9
Wheel Loaders	13,010	2,600	19,185	3,750	21,775	4,300	19.7
Telescopic RLTs	7,085	-	10,600	-	18,000	-	-
Vertical Mast RLTs	1,990	125	2,800	175	4,350	270	6.2
Forestry¹							
Feller Bunchers	650	160	700	200	735	210	28.6
Log Skidders	1,555	950	2,100	1,250	2,145	1,275	59.4
Wheeled Forwarders	125	n/a	225	90	215	100	46.5
Wheeled Harvesters	40	n/a	65	55	70	60	85.7

Source: Yengst Associates; ¹ Reflects Timberjack and Deere

**North American
Machinery Sales**

Table 10 summarizes our estimates of Deere's market share and industry sales for the past three years for each of the major product areas. A large portion of Deere's

total agricultural equipment sales in the U.S. is comprised of tractors over 100 horsepower, self-propelled cotton pickers, self-propelled forage harvesters and self-propelled sprayers. Except for agricultural tractors, Deere's sales in 2005 increased for all its product lines since 2003. The company added to its product line in 2005, introducing compact track loaders. The line is produced in Dubuque, IA, and we estimate the company sold 350 units in its first offering year.

Deere's North American unit sales for 2005 increased over 2003 by double digits in all categories except agricultural tractors, which grew 9 percent. The largest increases occurred in articulated haulers (204 percent), motor graders (165.5 percent), skid steer loaders (150 percent), telescopic rough terrain (150 percent) and vertical (110 percent) lift trucks.

**Table 10: North American Equipment Unit Sales
Deere vs. Total Industry 2003 - 2005**

Sales-units	2003		2004		2005		%
	Industry	Deere	Industry	Deere	Industry	Deere	
Agricultural							
Agricultural Tractors	227,226	57,000	258,400	63,200	260,499	62,100	23.8
Harvesting Combines	5,890	3,090	8,247	4,500	8,272	4,550	55.0
Construction							
Articulated Haulers	2,060	230	3,075	330	3,700	700	18.9
Backhoe/Loaders	22,400	5,350	28,700	7,000	29,600	7,800	26.4
Comp Bkhoe Ldr	5,350	500	6,825	750	6,600	950	14.4
Comp Track Ldr	9,125	-	16,500	-	24,000	350	1.5
Crawler Dozers	9,800	3,000	13,000	3,930	17,500	5,800	33.1
Crawler Loaders	1,250	150	1,700	-	1,740	300	17.2
Crawler Excavators	16,700	3,000	24,500	4,300	28,900	5,000	17.3
Mini Excavators	15,500	1,400	21,700	2,000	26,300	2,500	9.5
Motor Graders	3,400	725	3,700	800	4,165	1,925	46.2
Skid-Steer Loaders	58,150	3,200	69,000	4,900	68,050	8,000	11.8
Wheel Loaders	13,840	2,525	19,710	3,550	21,800	4,100	18.8
Tel RT Lift Trucks	8,800	10	13,300	15	21,400	25	0.1
Vert RT Lift Trucks	1,700	100	2,500	135	3,900	210	5.4
Forestry¹							
Feller Bunchers	550	145	675	190	710	200	28.2
Log Skidders	1,775	1,070	2,000	1,200	2,000	1,200	60.0
Wheeled Forwarders ¹	175	70	225	90	230	100	43.5
Wheeled Harvesters	60	30	75	45	75	50	66.7

Source: Yengst Associates estimates; ¹ reflects Timberjack and Deere

Agricultural Equipment

The Agricultural Equipment Division offers combines, tractors, cotton harvesting, hay and forage, cultivating and spraying, planting/seeding, tillage, and farmstead equipment. Deere introduced agricultural telehandlers to their offerings in March 2004 with the 3020 Series, said to be designed for material handling jobs for the farm and ranch.

Deere has approximately 1,600 agricultural dealers in North America. Outside the U.S. and Canada, John Deere agricultural equipment is sold to distributors and dealers for resale in over 160 countries. Some of the competition within the agricultural equipment industry in the last ten years has come from a variety of short-line and specialty manufacturers. Several large integrated competitors have merged

in the past few years, and this has resulted in the agricultural equipment industry undergoing significant changes and ultimately becoming more competitive.

The summer of 2005 hit the agricultural community hard between the drought in a large part of the U.S. and the spiking petroleum product prices. Tractor production started to slow down in response to the slowdown in sales resulting from the above hardships. This was seen for all OEMs, although we expect the larger companies have been hit harder than the smaller ones.

Deere uses Deere diesel engines in its self-propelled models of machinery (windrowers, forage harvesters, cotton pickers and cotton strippers). Specifications and other details for all machines can be found on the Deere agricultural website at www.johndeereag.com.

Farm Tractors

Deere is the largest of the seven farm tractor manufacturers in North America, accounting for 51 percent of all tractors manufactured in 2005. Deere's production increased to 59,000 units in 2005, a more than 19 percent increase since 2003. Recently, many tractor OEMs have begun to reduce their production levels and we expect sales to stay flat if not decrease for the next couple of years.

There are currently 22 suppliers of farm tractors in North America. Industry wide tractor sales in units increased almost 15 percent from 2003 to 2005 as farmers and consumers bought new equipment both to replace old models and in response to the introduction of new models particularly attractive to the non-ag market. Deere's market share has been decreasing for the past five-years as noted in Table 11 below from 27 percent in 2001 to less than 24 percent in 2005. This decrease is largely due to the fact that Deere's share of the compact tractor market has eroded modestly to other competitors. In addition, there has been a great deal of growth in imports of these small machines from Korea, India, Japan and China which are not being reported to AEM and are affecting all OEMs in this size category. The fact that Deere's total unit sales fell in 2005 for the first time since 2002 is a reflection of this lost market share in the small tractor category as well as the general slowdown in the large tractor category.

**Table 11: North American Agricultural Tractors
Unit Sales and Production 2001 - 2005**

(Units)	2001	2002	2003	2004	2005
Sales					
Reporting Companies	181,640	183,080	219,726	246,166	245,849
Non-Reporting Companies	2,625	4,025	7,500	14,000	14,650
Total Sales	184,265	187,105	227,226	258,400	260,499
Deere	49,000	48,800	57,000	63,200	62,100
Percent	26.6	26.1	25.1	24.5	23.8
Total Production	79,000	81,200	95,000	110,000	116,525

Source: Yengst Associates estimates

Deere offers 66 farm tractor models for North America, ranging from compact utility to specialty tractors, 50 wheeled models and 7 rubber-tracked models. For the tractors sold in North America, Deere sources its machines from two plants in the U.S. and one each in Germany, Mexico, Japan and India. The company started to import a few models of utility tractors from India in late 2005. Deere also has tractor manufacturing

facilities in China and Brazil, neither of which manufactures goods for the North American market. Deere's main competitors are New Holland and Kubota, with approximately 22 and 19 percent of the market, respectively. Case is in a distant fourth place with 12 percent of the market. Kubota moved ahead of Case to third in market share in 1999.

Table 12: Deere Agricultural Tractors

Model Name	No. of Models	Op. Wt. lbs.	Manufacturing Location	Engine Mfr.	PTO HP
Comp. Util. 2/4	13	1,125-3,700	US / Japan	Yanmar/Deere	18-50
Utility	19	7,916-10,474	India/US/Mexico/Germany	Deere	42-105
Row-Crop	12	17,603-25,791	Waterloo, IA	Deere	95-275
4 WD	6	30,970-36,090	Waterloo, IA	Deere	230-316
Specialty	9	4,891-7,145	U.S./Germany	Deere	55-95
Track Series	7	27,060-39,000	Waterloo, IA	Deere	200-302

Source: Deere & Company

In addition to its agricultural line listed in Table 12, Deere produces lawn tractors, and yard and garden tractors, for which sales and production figures are included in its Commercial and Consumer Equipment Division. These products have proven to be quite popular since their introduction, particularly the 100 Series riding mowers, and are offered for sale at the Home Depot and Lowe's stores.

[More information on farm and industrial tractors can be found in our latest Equipment Analysis report Farm and Industrial Tractors, dated July 2005]

Harvesting Combines

Deere's combines for the North American market are produced in East Moline, Illinois. Deere had a more than 55 percent market share for both sales and production in 2005. Yengst Associates estimates that industry sales have increased since 2003 but we expect that sales will drop in 2006 due to the hardships suffered by the agricultural community in the summer of 2005.

Table 13: Deere Harvesting Combines

60 Series	No. of Models	Opt. Wt. lbs.	Manufacturing Location	Eng. Mfr.	Net HP
Walker	1	30,026	East Moline, IL	Deere	305
STS	4	27,251-33,611	East Moline, IL	Deere	265-375

Source: Deere & Company

Deere has eliminated its CTS (rice) model since our last report. Other changes to the line include the introduction of a new Walker combine the 9660 WTS. The company offered three WTS models at the time of our last report and is now offering only this model. The Single Tine-Separation (STS) models, including the 375-hp Class 8 9860 STS, continue to be the largest combines John Deere has ever produced.

Other Agricultural Equipment and Implements

Deere's agricultural product line also includes items for the following:

- hay and forage, including balers, rotary mowers, rakes, and tedders
- cultivating and spraying, including sprayers, hoes, and row-crop cultivators
- planting and seeding, including air disk drills, air hoe drills, and air seeders

- tillage, including chisel plows, disks, field cultivators, harrows, finishers, rippers, + plows
- farmstead tools, incl. loaders, blades, shredders, flail shredders, spreaders, rotary cutters
- Material handling; rigid and articulated telescopic rough terrain lift trucks (telehandlers)

Construction Equipment

The Construction Equipment Division was established as a separate Deere division in the mid-1950s. This segment offers equipment that competes for the North American construction market. It also offers a line of forestry equipment and attachments and distributes them under Deere, Timberjack and Waratah labels. **Construction and forestry equipment sales** totaled \$5,229 million in fiscal year 2005, up 24 percent from \$4,214 million in 2004 and up almost 92 percent from 2003. Sales for the first three months of fiscal 2006 are an estimated \$1,169 million versus \$993 million in 2005, an 18 percent increase. A brief summary of the major products follows:

Articulated Haulers

Deere moved the production of its articulated haulers to Davenport, Iowa from South Africa in 2005, making Deere the only OEM manufacturing these machines in North America. This should help the company meet increasing demand for the product as delivery time will be drastically reduced and may assist them in increasing their market share. Deere is moving into the void left in 2004 when Volvo moved production of its products to Sweden.

Table 14: Deere Articulated Haulers

Series	No. of models	Gross Wt.	Payload (m tons)	Mfr. Loc.	Eng. Mfr/ Model	Net HP
< 30 mt	2	90,169-100,310	23-27	Davenport, IA	Deere/6081H	265-265
> 30 mt	2	130,569-154,174	32-37	Davenport, IA	MB/OM501LA	380-413

Source: Deere & Company, * Mercedes Benz

North American demand for articulated haulers has increased for each of the last three years from 2,060 units in 2003 to 3,700 units in 2005. Deere ranks third behind Volvo and Caterpillar. Together, the three companies together account for 73 percent of North American articulated hauler sales.

[More information on farm and Articulated Haulers can be found in our latest Equipment Analysis report Articulated / Rigid Haulers, dated June 2005]

Backhoe Loaders

Deere manufactures six models of backhoe loaders as noted in Table 15 below. The company produced an estimated 8,500 machines in North America in 2005. The majority of its production is to meet North American demands. The company has exported a limited number of machines to Japan for Hitachi to market, although we believe these exports have been negligible during the past two years.

Table 15: Deere Backhoe Loaders

Series	No. of models	Op. Wt. Lbs.	Mfg. Loc.	Eng. Mfr/Model	Net HP	Max Dig Depth
< 14' DD	1	7,600	Grovetown, GA	Yanmar 4TNE84	41	10'1"
14'-15' DD	3	14,700	Dubuque, IA	Deere4045D	70-86	14'6"
15'+	2	23,000	Dubuque, IA	Deere 4045T/6068T	92-118	17'10"

Source: Deere & Company

Industry sales are estimated at 29,600 units in fiscal 2005, with Deere accounting for 26 percent of the market. Deere ranked second after Caterpillar in unit sales in fiscal 2005, having passed Case to take the number two spot in 2004. Deere's and Case's sales have been very close since 2002.

[More information on farm and Backhoe Loaders can be found in our Equipment Analysis report Backhoe Loaders / Compact BHL, dated April 2006]

Compact Track Loaders

Deere introduced its compact track loader line in 2005 and manufactures these machines in Dubuque, Iowa. Compact track loaders are one of the fastest growing market segments in construction equipment. Industry sales have grown from 9,125 units in 2003 to 24,000 units in 2005. We expect demand for these machines to grow over the next few years as customers become more aware of them.

Table 16: Compact Track Loaders

Series	No. of models	Op. Wt. lbs.	Manufacture Location	Engine Mfr.	Engine Model	HP
CTL	2	8,305-10,825	Dubuque, IA	Deere	4024T/5030TW	62-76

Source: Deere & Company

[More information on Compact Track Loaders can be found in our Equipment Analysis report Compact Track Loaders, dated February 2006]

Crawler Dozers

Deere is the second leading supplier of crawler dozers in North America. The company offers 8 models, each with various track options. It reintroduced the 105-200 hp models in 2005 after redesigning the machine. Yengst Associates estimates that the company exports approximately 6 to 8 percent of its production.

Table 17: Deere Crawler Dozers

HP Range	No. of models	Op.Wt. Lbs.	Manufacture Location	Engine Mfr.	Engine Model	Max HP
< 105	3	17,525-19,750	Dubuque, IA	Deere	4045T/H	99
105-200	3	27,900-39,865	Dubuque, IA	Deere	6068T/H/6081H	185
200+	2	56,000-73,985	Austria	Liebherr	D926TI/D9406TI-E	324

Source: Deere & Company, LT-Long Track; LGP-Low Ground Pressure; WT-Wide Track; WXLT-Wide Xtra Long

In terms of North American industry unit sales, Deere had 33 percent of the market selling 5,800 units in 2005, second to market leader, Caterpillar with 47 percent of the market. Komatsu ranked third, with 14 percent. Deere's position is strongest in the smaller dozer category, although it is gaining some ground in the larger machines, particularly the 1050C, which is imported from Austria and manufactured by Liebherr for Deere. Yengst Associates expects the industry growth of crawler dozer sales to continue through 2006 when total unit sales are forecasted to reach a peak of 18,000 units.

Crawler Loaders

The Deere line is comprised of two large crawler loader models manufactured by Liebherr in Austria and branded as Deere. Deere dropped its manufacturing of crawler loaders in early 2003.

Table 18: Deere Crawler Loaders

Model	Op.Wt. Lbs.	Mfg. Loc.	Eng. Mfg.	Eng. Model	Net HP
655C- II	33,950	Austria	Liebherr	D924T-EA1	130
755C-II	46,300	Austria	Liebherr	D924T-EA2	177

Source: Deere & Company

In terms of unit sales, Deere had approximately 17 percent of the North American market in fiscal 2005, with 300 units sold. Caterpillar is the leading supplier of crawler loaders with a 79 percent market share in 2005. Yengst Associates expects a modest industry decline of crawler loader sales in 2006.

Hydraulic Excavators

Deere's crawler hydraulic excavators are manufactured in Japan, Mexico and North Carolina. The smaller excavators, Model 120C, are assembled and shipped from Deere's facility in Saltillo, Mexico. Models 160C LC, 200C LC and 230C LC are assembled or produced in Kernersville, North Carolina under the Deere and Hitachi brand name and shipped to either Deere or Hitachi dealers. The remaining models are manufactured in Japan

Table 19: Deere Hydraulic Excavators

Size Class/Type	No. of Models	Op. Wt. Lbs.	Mfg. Loc.	Engine Mfr.	Engine Model	Max HP
6-40 Metric Tons						
Crawler	10	15,905-81,200	Japan/ U.S.	Isuzu/Deere	Various	246
Wheeled	2	40,785-44,800	Japan	Isuzu	6081H	148
40-80 Metric Tons						
Crawler	3	104,000-168,540	Japan	Deere/Isuzu	Various	454

Source: Deere & Company

[An updated report on Hydraulic Excavators is scheduled for April 2006]

Total industry North American production for fiscal 2005 was 15,735 units, up from 11,600 in 2003. For the same time period, total sales were 28,900 units. There are 21 hydraulic crawler excavator suppliers in North America, with the top three suppliers representing almost 69 percent of the total market in 2005. Deere was third selling 5,000 units or 17 percent of the market, behind Caterpillar and Komatsu, with 33 and 19 percent, respectively.

Mini-Excavators

Competition in the North American mini excavator market has grown tighter over the years. Bobcat is the only manufacturer of mini excavators producing machines in North America. Deere imports its machines from Hitachi's plant in Japan through a licensing agreement. Deere offers a line of four models, all with "Zero Tail Swing" (ZTS).

Table 20: Deere Mini-Excavators

Series	# Models	Op. Wt. Lbs.	Mfg. Loc.	Eng. Mfr.	Eng. Model	Net HP
ZTS	4	3,814-10,428	Japan	Isuzu/Yanmar	Various	12-40

Source: Company Information

[More information on Mini-Excavators can be found in our last Equipment Analysis update last written in October 2005]

Sales of mini-excavators in North America in 2005 increased more than 21 percent over the prior year. Deere's market share is 10 percent. We estimate the company sold about 2,500 units in 2005, a 79 percent increase over 2003. Yengst Associates expects that sales of mini excavators will continue to grow through 2006, at which point they will decline modestly. We anticipate that at some point over-saturation will

occur. Should this happen, we expect that some of the suppliers will drop out of the market due to the increased competition where supply is greater than demand.

Motor Graders

Industry production of motor graders in 2005 was 4,665 units by seven manufacturers, with Deere ranking third with 950 units, or 20 percent of industry output. Caterpillar is the industry leader with 49 percent of production, and Volvo is in second position with 26 percent. Industry production has been declining since 1998 but appears to be more stable today. In fact, output in 2006 is expected to be modestly higher.

Table 21: Deere Motor Graders

# Models	Op. Wt. Lbs	Mfr. Loc.	Eng. Mfr.	Eng. Model	Net HP
6	32,010-36,210	Davenport, IA	Deere	6068H/6081H	145-205

Source: Deere & Company

[[Yengst Associates' last update on Motor Graders was completed in June 2005](#)]

Deere offers six models of motor graders, three of which have six-wheel drive. It dropped the "CH" designation in the model names and replaced it with "D".

Motor Scraper Bowls

Deere manufactures 7 models of scraper "bowls" in Thibodaux, LA. They offer four "carry-all" models and three "ejector" models. These scraper bowls are used in combination with larger farm tractors as pull-behind scrapers, which are much more economical than the older elevating scrapers produced for both agricultural and construction applications.

Skid-Steer Loaders

Deere offers five models of skid steers now designated as the 300 series which replaced the 200 series in mid-2004. Deere only offers machines rated above 1,350 pounds lifting capacity and all carry vertical lift arm designs. The company manufactures its skid steers in Dubuque, Iowa.

North American industry production of skid-steer loaders in 2005 was 85,500 units, with Deere the fourth largest supplier manufacturing approximately 8,500 units, or 10 percent. The top three North American producers manufactured 67percent of the industry total: Bobcat-43 percent, Caterpillar-13 percent, and Case-12 percent.

All of the major North American skid-steer loader manufacturers export their products. Yengst Associates estimates that approximately 19 percent of total 2005 North American production was exported and that Deere exported about 5 to 10 percent of its machines overseas. Deere's exports are made primarily to Latin America.

Table 22: Deere Skid-Steer Loaders

Series	No. of Models	Mfg. Loc.	Engine Mfr.	Eng. Model	Net HP	Lift Capacity (lbs)
300	5	Dubuque, IA	Deere	4024T/5030TW	57-85	1,750-3,175

Source: Deere & Company

[[More information on Skid Steer Loaders can be found in our Equipment Analysis report Skid Steer Loaders, dated February 2006](#)]

Wheel Loaders

North American industry wheel loader production has increased over the last two years to almost 22,000 in 2005. Deere produces its machines in Davenport, IA and imports four small models from Austria manufactured by Liebherr under the Deere label. Several variations to the models shown below are offered by the company.

Table 23: Deere Wheel Loaders

Model	No. of Models	SAE Op. WT. Lbs.	Mfg. Location	Engine Mfr.	Eng. Model	Net HP
304H	2	12,044-13,500	Austria	Yanmar	4TNE98	65
324H, 344H	2	15,642-16,976	Austria	Deere	4045DF	80-98
344J, 444J, 624J	3	22,645-31,691	Davenport, IA	Deere	4045H / 6068H	110-160
644J, 724J, 744J, 824J	4	40,104-57,359	Davenport, IA	Deere	6081H / 6125H	180-275

Source: Deere & Company

[More information on Wheel Loaders can be found in our Equipment Analysis report Wheel Loaders, dated December 2005]

There are currently 11 suppliers of wheel loaders in North America. Deere is the second largest with a 20 percent share, selling 4,300 units in 2005. Caterpillar leads with 32 percent of the market and Komatsu America is third with 12 percent. Both the housing market and non-residential construction market play a great role in the sales of wheel loaders. Deere's production is largely dedicated to North American sales, but it does have some export sales into Latin America and elsewhere outside of Europe.

Forestry Equipment

Deere's product line is sold under the Deere, Timberjack and Waratah brand names. Deere, along with its other brand names, is the global leader in forestry equipment. The company is committed to expanding its presence in the global forestry industry. (Waratah produces logging attachments and is an affiliate company.) Note as we mentioned earlier Deere expects to close its Woodstock, Ontario operations in September 2006 and transfer production to its Davenport and Dubuque facilities.

Deere (including Timberjack) is the biggest producer of log skidders in North America, accounting for 59 percent, or 1,275 units, of the total industry production of skidders in 2005. Caterpillar (22 percent) and Franklin Equipment (9 percent) are the other major manufacturers of log skidders in North America. Deere sold an estimated 1,200 units, or 60 percent share of the market in 2005.

Deere represents about 29 percent of industry feller buncher production (wheeled and tracked versions). Blount is the leader with about 34 percent of industry output, with Tigercat, Franklin and Barko the other North American suppliers. Deere does not compete in the three-wheeled feller buncher product area. Yengst Associates estimates Deere sold 200 feller bunchers in North America in 2005, ranking it second behind Blount. Note that Deere also offers two forestry excavator/logger models.

Table 24: Deere Forestry Equipment

# of Models	Operating Weight	Manufacturing Location	Engine Mfr.	Engine Model	HP
Feller Bunchers- Wheeled					
2	34,290-34,630	Davenport, IA	Deere	6068H	174-225
Feller Bunchers- Tracked					
6	47,360-68,900	Woodstock, ON	Deere	6068H/6081H	181-275
Forwarders					
5	10,970-42,990	Woodstock, ON	Deere	Various	86-215
Wheeled Harvesters					
5	25,463-38,580	Woodstock, ON	Deere	6068H/6081H	115-215
Tracked Harvesters					
3	45,325-57,400	Woodstock, ON	Deere	6081H	181-241
Log Skidders-Cable					
3	22,780-38,350	Woodstock, ON	Deere	6068T	129-177
Log Skidders-Grapple					
4	23.690-38,350	Davenport, IA	Deere	6068T/6081T/A	117-180

Source: Company Information

Power Systems Group

Deere Power Systems Group, located in Waterloo, IA, manufactures diesel and natural gas engines, axles, transmissions, and hydraulic components for both their own equipment and for other OEMs. Deere Power Systems Group dates back to 1985. The Group has recently undergone a reorganization resulting in increased focus on engine and power train integration with Funk Manufacturing Group, which manufactures transmissions and drive-train components for off-highway vehicles.

The Power Systems Group has significantly changed, upgraded and invested in its global engine manufacturing in Waterloo, IA, Saran, France and Torreon, Mexico in the last few years. Deere also has engine manufacturing operations in India and Argentina.

Deere manufactures engines for the North American market in Torreon, Mexico, Saran, France and Waterloo, Iowa. We estimate that Deere produces more than 200,000 diesel and CNG engines annually in its worldwide operations, excluding India and China. We do not have engine production estimates for India or China. The Power Systems Group current engine product line is highlighted in Table 25.

Table 25: Deere Industrial Engine Model Specifications

Series / # Models	Mfg. Loc.	# Cylinders	Displaced Liters
Tier 3 PowerTech E			
4	Mexico / France	4-5	2.4-6.8
Tier 3 PowerTech M			
2	Mexico / France	4	2.5-4.5
Tier 3 PowerTech Plus			
4	Mexico / France / US	4-6	4.5-13.5

Source: Deere & Company

The number of engines Deere produces for internal use is thought to be about 60 percent of the total, or in the range of 120,000 to 130,000 units annually, at present. The remaining 40 percent of production is sold to other OEMs.

As part of the Deere Power Systems Group, Funk Manufacturing provides power-transmission products and planetary gear drives, which are used in some Deere products but also used more heavily by other OEMs in off-highway products. Deere also manufactures a complete line of axles, transmissions, pump drives and a number of other components used on its machines, a very small portion of which are sold to other OEMs. The engine business is the company's leading activity for outside sales to other OEMs, followed by the Funk transmissions.

OEM Markets Served

Deere sells a number of its components, primarily engines, as mentioned above, to other OEMs throughout the world. Following is a summary of key areas where the company's engines and other components are sold.

Ag Specialty, Construction and Forestry

John Deere provides engines, as well as transmissions and other components.

Generator Sets

John Deere Generator Drive Engines power a variety of Gen Set equipment and are the engines of choice of leading generator set manufacturers, worldwide. Customers can choose from non-emissions certified engines for unregulated markets, up to Tier II EPA emission certified engines. Deere competes with many engine manufacturers, including Caterpillar, Cummins, Daewoo, Detroit Diesel, Deutz Motor GmbH, Mitsubishi, Perkins, Volvo Penta and Yanmar.

Marine Engines

Deere offers Tier II PowerTech and non-certified marine diesel engines. Its marine product group targets recreational and commercial markets, displacement vessels and bigger planing-hull cruiser markets.

Alternative Fuels

John Deere Natural Gas (CNG/LNG) engines are used in school buses, shuttle/transit buses and other on-highway applications and deliver low emissions, reliability, low operating costs and diesel-like performance.

Parts Operations

John Deere has a leading position in agricultural equipment and construction equipment parts sales and aftermarket support. It warehouses and distributes many different parts for John Deere and other makes of equipment. Major customers are owners and/or operators of John Deere and other makes of farm, construction, and lawn-care equipment.

The company has two parts distribution centers that serve twenty 20 regional parts depots worldwide. The primary parts distribution center for North America is located in Milan, IL and serves John Deere's nine regional depots and dealers. A facility operated by a third party in Indiana houses and distributes high-activity parts. Outside North America, the primary parts distribution center is located in Bruchsal, Germany. Deere also has a regional parts depot located in Nuevo Leon, Mexico as well as two depots in Australia, and one each in Argentina, Brazil, England, Germany and South Africa.

Table 26: Deere Parts Distribution Centers

Regional Parts Depots – North America	
Atlanta, GA	Milan, IL (N.A. Distribution Center)
Columbus, OH	Portland, OR
Dallas, TX	Regina, SK, Canada
Denver, CO	Stockton, CA
Grimsby, ON, Canada	Syracuse, NY
Kansas City, MO	

Source: Deere & Company

The depots provide same-day shipment of emergency parts to dealers and their customers. Each depot stocks parts to provide support for the products in its geographic area. All depots and distribution centers are linked together.

Table 27: Estimated Deere Parts Sales 2001 - 2005

(\$ millions)	2001	2002	2003	2004	2005
Sales of Equipment	\$11,077	\$11,703	\$13,349	\$17,673	\$19,401
Parts Sales ¹	\$1,975	\$2,100	\$2,200	\$3,050	\$3,300
% Net Sales of Equip.	17.8	17.9	16.5	17.2	17.0

Source: Deere & Company; Year Ending October 31, ¹ Estimated

Parts sales have contributed markedly to Deere's sales of equipment total. We estimate that parts sales account for between 16 to 19 percent of net sales of equipment and continue to be a notable source of the company's sales of equipment. Deere no longer publishes its Parts Sales numbers; however, we expect that they are continuing to increase every year as they have for the last ten years.



Charles Yengst, President

• **YENGST ASSOCIATES** For over two decades, corporations throughout the world have relied on our research and consulting services. Our knowledge of the North American and overseas machinery markets, and our on-going contacts allow us to obtain the most accurate and up to date information available. This makes our reports indispensable tools in all areas of corporate and investment planning. We work closely with our clients, offering the highest level of service in a timely and confidential manner.

• **SUBSCRIPTION SERVICES** Through a series of comprehensive reports, we provide extensive research on machinery markets in North America, covering more than 25 types of equipment used in construction, mining, industrial and agricultural applications. Subscribers receive: Equipment Analyses, Company Profiles, Forecasts, Market Reports and Inquiry Privileges. Coverage includes: sales breakdowns, market share and production information, factors of demand, trade data, component use, field population estimates, forecasts and competitive analyses of industry manufacturers.

• **DATABASE SERVICES** Sales, production and component use in machinery is available to give clients a competitive advantage in the marketplace.

• **ON-LINE SERVICES** Research and database services can be quickly accessed on-line through our website, with the latest news events and commentary.

• **COUNTRY REPORTS** We provide on-going coverage of high-growth markets in global regions.

• **PRIVATE RESEARCH STUDIES** Clients continually seek our help on a wide variety of topics, such as product distribution, pricing, competitive and financial analyses, diversification and acquisitions, market feasibility and end-user surveys, to name a few.

For additional information, please contact:

Yengst Associates, Inc.

P.O. Box 781

35 Old Ridgefield Road

Wilton, Connecticut 06897-0781

USA

Telephone: 1-203-762-8096

Fax: 1-203-762-8330

E-mail: mail@yengstassociates.com

Website: www.yengstassociates.com

