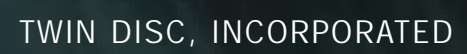
TWIN DISC, INCORPORATED

Annual Report



1999

About the cover: Sea Ray, a renowned manufacturer of quality, high performance boats and a longtime Twin Disc customer, offers this 540 Sundancer and many other models with an array of Twin Disc products including marine transmissions, Arneson Surface Drives and EC-200 Electronic Controls.

Twin Disc, Incorporated is an international manufacturer and distributor of heavy-duty off-highway power transmission equipment. Company engineers work hand-in-hand with customers and engine manufacturers to design products with characteristics unique to their specific applications. ◩ *Twin Disc supplies the commercial, pleasure craft and military segments of the marine market with transmissions, surface and waterjet drives and electronic controls. Its off-highway transmission products are used in agricultural, all-terrain specialty vehicle and military applications. Twin Disc also sells industrial products such as power take-offs, mechanical, hydraulic, and modulating clutches and control systems to the agricultural, environmental and energy and natural resources markets.* ◩ *The Corporation, which is a multinational organization headquartered in Racine, Wisconsin, currently has a diverse shareholder base with approximately one-third of the outstanding shares held by management, active and retired employees and other long-term investors.*

Manson Towing's *Peter M*, equipped with twin Caterpillar 1000-horsepower engines driving through Twin Disc MG-5600 Marine Transmissions and controlled by five-station EC-200 Electronic Propulsion Controls, stays busy moving barges in and out of Seattle waters.

TWIN DISC, INCORPORATED

Financial Highlights

1999

	1999	1998	1997
Net Sales	$168,142	$202,643	$189,942
Net Earnings (Loss)	(1,018)	9,363	7,729
Basic Earnings (Loss) Per Share	(0.36)	3.30	2.78
Diluted Earnings (Loss) Per Share	(0.36)	3.24	2.75
Dividends Per Share	0.805	0.76	0.70
Average Shares Outstanding For The Year	2,834,909	2,833,663	2,781,174
Fully Diluted Shares Outstanding For the Year	2,843,877	2,886,209	2,808,226

Sales and Earnings by Quarter

1999	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Year
Net Sales	$40,625	$40,108	$41,139	$46,270	$168,142
Gross Profit	9,220	9,275	7,316	10,270	36,081
Net Earnings (Loss)	588	(291)	(1,782)	467	(1,018)
Basic Earnings (Loss) Per Share	0.21	(0.10)	(0.63)	0.16	(0.36)
Diluted Earnings (Loss) Per Share	0.21	(0.10)	(0.63)	0.16	(0.36)
Dividends Per Share	0.21	0.21	0.21	0.175	0.805
Stock Price Range (High-Low)	37 3/4 - 23 3/8	24 1/4 - 20 1/4	22 3/16 - 19	20 3/16 - 18 9/16	37 3/4 - 18 9/16

1998	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Year
Net Sales	$47,880	$53,994	$49,029	$51,740	$202,643
Gross Profit	9,936	12,250	12,810	15,132	50,128
Net Earnings	1,356	2,116	2,384	3,507	9,363
Basic Earnings Per Share	0.48	0.75	0.84	1.23	3.30
Diluted Earnings Per Share	0.47	0.73	0.82	1.21	3.24
Dividends Per Share	0.19	0.19	0.19	0.19	0.76
Stock Price Range (High-Low)	30 5/8 - 28 1/8	34 1/8 - 29 3/8	33 3/8 - 29 15/16	33 1/8 - 32 7/16	34 1/8 - 28 1/8

Based on average shares outstanding for the period.
In thousands of dollars except per share and stock price range statistics.

To Our Shareholders

After six years of revenue and earnings growth, a number of factors–including the difficult economic environment of fiscal year 1999 and actions taken to strengthen our Company–combined to produce disappointing financial results.

Net sales declined 17 percent to $168 million from $203 million the previous year, while a loss of $1 million, or $.36 per share, for fiscal 1999 compared with near-record earnings of $9.4 million, or $3.24 per share, a year ago. Included in the latest year's results were non-recurring charges totaling $2.5 million, or $.86 per share, reflecting the downsizing and closure of various operations.

As we enter the new fiscal year, however, we believe the worst is now behind us. Externally, we see indications of economic improvement in the Pacific Basin and increased activity in the Gulf Coast region. Internally, our various cost-reduction, margin-improvement, and asset-management efforts have increased efficiencies and positioned the Company well to respond to future revenue increases.

OPERATIONS REVIEW

The combination of the Asian economic crisis and the decline in oil prices in fiscal 1999 had both a direct and indirect impact on our shipments.

The continuing softness of the last two years in our Pacific Basin commercial marine markets, resulting in decreased transmission orders, was compounded by the slowdown in exploration and production activity along the Gulf Coast. Following several years of brisk activity, last year's decline in oil prices to approximately $10 per barrel brought construction of support vessels for the offshore oil industry to an abrupt halt. The Asian crisis also had an adverse effect on our shipments to the large four-wheel-drive agricultural tractor market. Reduced demand from the Far East and other countries for American agricultural products drove prices to new lows, with the result that capital investment by farmers in new equipment slowed dramatically. Shipments to the North American logging industry were similarly affected as export demand softened in response to lagging activity abroad.

A final difficulty was lower demand for service parts, reflecting slower activity in the markets we serve as well as changed order patterns by our customers in response to improved on-time delivery from our facilities.

NON-RECURRING CHARGES

Actions designed to reduce costs, improve margins, and better manage our assets were taken in fiscal 1999 to enhance our performance going forward. Combined these initiatives accounted for substantially all of the special charges incurred during the year.

Approximately half of these one-time charges resulted from the adjustment of employee levels at our North American and Belgian operations to match lower production levels. These actions were required to respond to softening demand in most of our major worldwide markets.

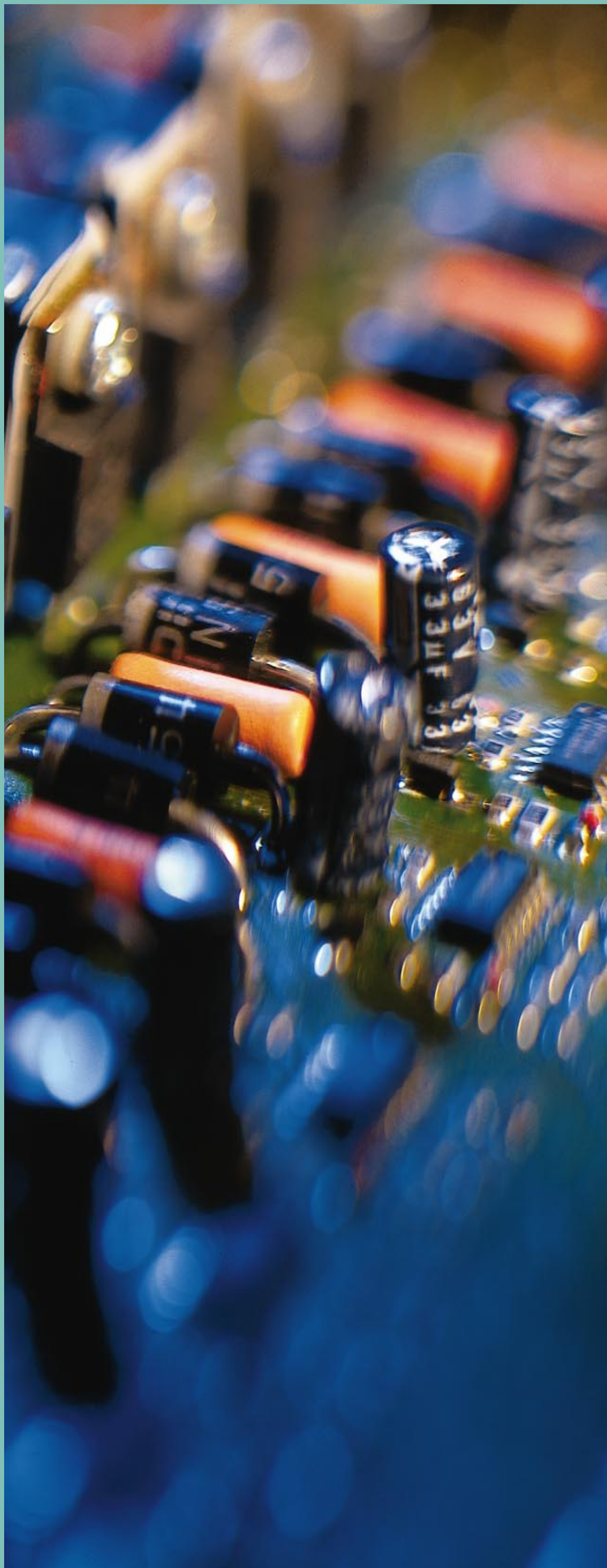
The balance of the charges was primarily a provision for the closure of our South African distribution subsidiary which was necessitated by the loss of a major customer to bankruptcy. Representation in the region will be transferred to local independent distribution.

CASH FLOW AND FINANCIAL CONDITION

Twin Disc invested $23 million in acquisitions and capital equipment during the fiscal year, which was financed by operating cash flow and $15 million of new borrowings. Total debt now stands at $40 million or 37 percent of total capitalization. Also, with higher debt levels and softer operating conditions, the dividend was reset at a quarterly rate of $0.175 per share.

In addition, a decision was made to adopt a new mortality table as well as to change other actuarial assumptions for the Company's domestic pension plans. The resulting non-cash charge, while not affecting net earnings, reduced equity by $11.1 million.

Although our financial leverage increased during the year, we still maintain a strong financial condition and expect operating cash flows to strengthen going forward.



Twin Disc TDEC-400 Series Universal Electronic Controls will usher in a new generation of ease and precision in vehicle propulsion control.

STRATEGIC INITIATIVES

GROWTH After several years of revenue growth, fiscal year 1999 was a temporary step backward. As previously mentioned, the direct and indirect effects of the Asian crisis, as well as lower oil prices, caused softness in our major markets. These factors notwithstanding, we remain committed to achieving our new Growth Challenge of $300 million in revenues by fiscal year 2003.

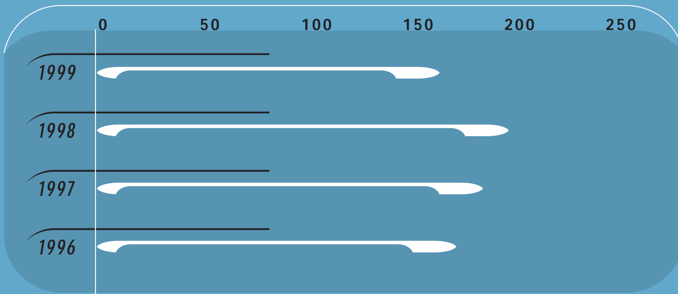
Our recent acquisitions of Technodrive and the Rockford Clutch power take-offs strengthen our positions in the marine and industrial markets and give us new products that enable penetration into geographic markets previously unserved. We are actively seeking additional acquisition opportunities that will give us even greater access to new products and markets.

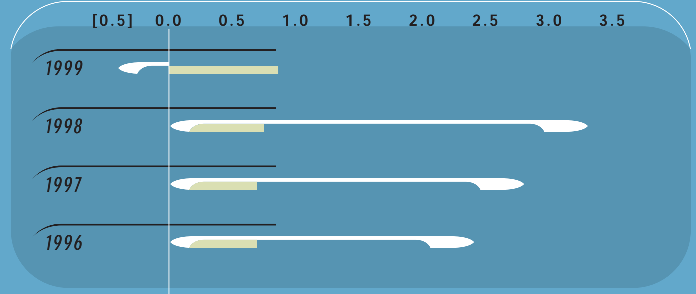
PEOPLE As we have indicated in past reports, Twin Disc is committed to providing opportunities and training to its employees. We believe that an increasingly competent and challenged work force is the only way to be successful in our competitive marketplace.

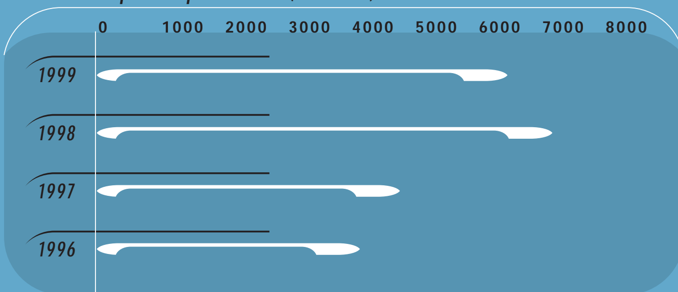
With this in mind, we already have implemented competency development and pay-for-skills programs that are designed to encourage our associates to expand their capabilities and be more productive. Our next phase–to be implemented over the next two years–concentrates on individual development programs. These will be designed to match employee and company objectives over specific time frames.

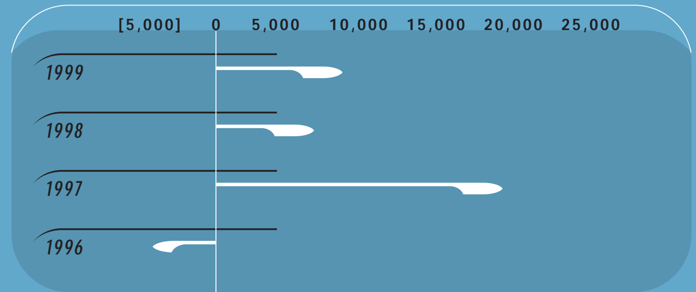
QUALITY Our commitment to total customer satisfaction is illustrated by our global reputation for innovative, durable designs and manufactured quality. In our ongoing quest for excellence, we continue to work on the internal development of new products for existing and new customers around the world. We were especially pleased that, amidst considerable competition, two new customers selected our transmissions for their Airport Rescue and Fire Fighting (ARFF) vehicles during the year, expanding our presence in this important market segment.

In recent years, another of our challenges has been to achieve predictable delivery. Through a focused effort, on-time shipment has improved significantly. And while we will continue to reduce lead-times, our attention is being directed to broader technical support and warranty administration programs to enhance customer satisfaction.


Net Sales ($ millions)
0
50
100
150
200
250
1999
1998
1997
1996


Basic Earnings [LOSS] ($ per share)
Dividends
[0.5]
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1999
1998
1997
1996


Capital Expenditures ($ thousands)
0
1000
2000
3000
4000
5000
6000
7000
8000
1999
1998
1997
1996


Net Cash Provided [used] by operating activities ($ thousands)
[5,000]
0
5,000
10,000
15,000
20,000
25,000
1999
1998
1997
1996

PERFORMANCE Our challenge is to maintain at least a 10-percent compound annual growth rate in earnings over a three-year period and to earn a return on net assets employed (RONAE) of at least 18 percent. Needless to say, the results of the past 12 months disrupted the positive earnings growth and RONAE trends experienced in the recent past.

Nevertheless, we remain committed and confident that we can re-establish that performance record going forward. In addition to our growth initiatives, we have implemented programs to reduce costs, enhance margins and utilize assets more efficiently.

OFFICERS AND ORGANIZATION

It is with great sadness that we report the loss of Philippe Pecriaux, Vice President, Europe, on May 27, 1999. An employee of 35 years, he joined Twin Disc, International S.A., in Nivelles, Belgium, as a design engineer and held a succession of engineering and marketing positions until his appointment as Managing Director in 1977. He was elected an officer of the Company in 1988. During his stewardship, our Belgian operations grew threefold. Philippe was an excellent engineer and manager. His associates and friends will miss his leadership and wise counsel.

Concluding 32 years of service, James McIndoe, Vice President, International Marketing, retired on February 28, 1999. Jim began his career in Belgium and transferred to Racine in 1980 to assume responsibility for international marketing outside of North America, Europe and the Middle East. A respected sales leader, he will be missed by his many friends around the world.

Over the past year, we have been evaluating alternative organizational structures that maximize customer focus and service while optimizing efficiency. As a result, we have assigned global responsibilities to our marketing groups and centralized management of our engineering and manufacturing groups. This new structure gives Twin Disc the marketing flexibility to respond to the unique needs of its customers while, at the same time, enhancing design and manufacturing effectiveness.

OUTLOOK

At fiscal year-end, the backlog of orders to be shipped in the next six months stood at $40 million. While this figure is lower than a year ago at this time, backlog is essentially unchanged from the end of the 1999 fiscal third quarter, and is expected to increase during the new fiscal year.

Our cost-reduction efforts are having a favorable impact, and, although we expect to incur a seasonal loss in the first quarter, we are encouraged by indications that some of the markets we serve are beginning to strengthen. Higher oil prices are leading to more exploration and production activity in the Gulf Coast region, which bodes well for increasing demand in our marine market, and we are beginning to see signs of recovery in the Pacific Basin. Additionally, we anticipate a pick-up in orders for our aftermarket parts.

While the lag between some of these signals and the related increase in sales is difficult to predict, we are nevertheless encouraged by the up-trends in evidence.

Moving into the new year, we are not sorry to bid farewell to fiscal 1999, a year in which we faced difficult market conditions and decisions. However, progress in our acquisition program and other growth initiatives is reassuring, and we enter fiscal 2000 well prepared to take advantage of the opportunities ahead and optimistic about our outlook.

Michael E. Batten
Chairman, Chief Executive Officer

Michael H. Joyce
President, Chief Operating Officer

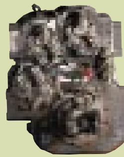
*Excludes the impact of the adoption of FASB Statements 106 and 109.

Total customer satisfaction has become a global standard.

1999

Availability and speed of information has shrunk the world to a remarkably accessible and competitive marketplace. Customers matter-of-factly search everywhere for the products and suppliers they need. Gone are territorial imperatives. A U.S. company will partner with a European manufacturer to build a product that will be sold into China.

In the transmission and industrial products arenas, Twin Disc customer bases are consolidating to a few but very important global OEMs. Volume sales will emanate from these chief players. To secure and sustain these often long-distance relationships, Twin Disc must provide total customer satisfaction, from design through product application. ◪ *With this complex marketing process often spanning the world, Twin Disc has centralized a global marketing team for each product line--vehicular transmissions, marine transmissions, stationary clutches and PTOs, and marine propulsion systems. Each team is headed by a senior global marketing manager. These managers have worldwide authority for the design, marketing and service support of their respective products. And we are centralizing our engineering and manufacturing in order to be more responsive and efficient in delivering the goods. All this allows greater coordination, consistency and quality of customer service, any place in the world.* ◪



Our ability to globally manage our marketing is further enhanced by our well-established worldwide distribution network. We have a physical presence wherever our products are used. The users of our products are never far from sales, service or parts support. Our participation throughout the marketing chain is especially relevant to our marine propulsion systems. Because of their unique and versatile applications, they require direct involvement with engine manufacturers, boat designers and boat builders. ◪ *Being a critical component in the powertrain of the vehicle, boat, or machine, we have a responsibility to that product and the user to be available to keep it in production. Our distributors are linked by both internet and intranet to each other and to our plants and subsidiaries around the world. We can bring all our inventory and expertise to bear wherever needed to get a machine back in production. That's welcome security for our customers.*

LAX

Managing for growth to drive shareholder value.

1999

We've achieved growth, reduced costs and improved margins for the previous consecutive seven years. This year was a setback. But the operational improvements we've implemented throughout the Company over the last several years have made the most of good times and mitigated the worst.

Nevertheless, these systems and procedures ultimately pay-off when they are driven by volume sales that allow us to be more efficient and more cost controlled, thus yielding greater revenues. And revenues afford continued corporate development. ◩ With sales volume so crucial, we are aggressively pursuing international prospects of our unique technologies and products. This activity is spearheaded by our global marketing managers. ◩ Their marketing challenges are twofold. Some of our products such as PTOs and clutches are purchased off the shelf. Twin Disc's unparalleled array of clutches and PTOs gives us distinct sizing and product availability advantages. Other products are heavily designed in or imbedded in an application. They require considerably more engineering and manufacturing, hence longer lead times. Defining opportunities to meet these differing criteria is a major focus of our newly formed global marketing group. In addition to obtaining new customers, the Company continues to review potential acquisitions that would enhance sales and market share.

Stealthy 50′ patrol boats built by FR. Lürssen Werft Gmbh. & Co. in Germany for Indonesian Customs are equipped with twin 600-horsepower engines driving Twin Disc ASD-10 B1L Arneson Surface Drives through MG-5114 Marine Transmissions.

The recent Rockford Clutch and Technodrive acquisitions reflect this philosophy. ◩ With increased sales and market shares, the manufacturing efficiencies we've already established will drive better earnings and require fewer assets to generate these earnings. We are engaged also in critical margin enhancement activities. Our margin task force has identified areas where the superior performance and reliability of Twin Disc products could command more value-appropriate pricing. We are increasing the speed of inventory turnover. And paying careful attention to receivables management. We will continue to tune our operations to reduce costs and improve margins. ◩ All the fundamentals are in place to capitalize on improving market opportunities. We are committed to emerging from this cyclical trough stronger and better prepared to pursue our sales goal of $300 million by 2003. The initiatives we've set, the systems we've installed and the spirit we've mustered will achieve that goal. But more than just striving to reach a sales goal, we are committed to enhancing shareholder value.

The power to control our destiny is in our hands.

1999

The quality of a company, its products, its service must be quantified. But, at the end of the day, it all comes down to the measure of the people responsible. Who's getting the job done. For the immediate customer. For the customer's customer. For the shareholder. For the Company itself.

Our stringent competency standards are working. The quality of our people is reflected in the effectiveness of our Total Quality Program, and that accrues to the bottom line in terms of total customer satisfaction. ◩ We have accelerated the time it takes to get new products to the marketplace by pursuing coincident rather sequential processes. This brings down both the cost of development and the cost of quality. And, in the process, we've making excellent strides towards defect-free design—no small accomplishment in products as complex as ours. ◩ Manufacturing floor activities, including forecasting, parts ordering and scheduling are managed by one shop. This consolidation of information and communication has made us far more efficient. Delivery times have been dramatically reduced, and we've shown a significantly improved ability to meet customers' increasingly demanding lead times. ◩ Our Global Business System computer network now fully links our European and domestic operations. Now all business systems in operations on both continents can be coordinated faster and more efficiently than ever before, further contributing to customer responsiveness. ◩ Aggressive marketing on a global scale strengthens our connections between customers all over the world. Imaginative design provides new opportunities to have our products "designed in" to new OEM vehicles and equipment and keep us "engineered in" to existing product lines. Efficient engineering expedites bringing new, customer-driven products to market. Quality manufacturing and faster and lower cost production maximize the return on our plant assets. Prompt delivery and responsive service support gets our products into the field faster and keeps them there longer. ◩ We intend to control our destiny. Our people will see to it that we do.

TWIN DISC

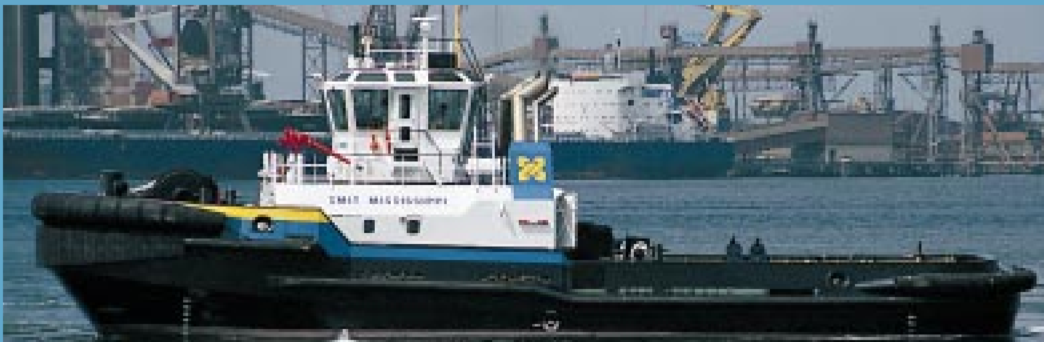
Peggy Jo, a 99′ fishing boat powered by a 12-cylinder Cummins engine generating 1100 horsepower through a Twin Disc MG-5301 Marine Transmission, fishes the Bering Sea and Gulf of Alaska.

Marine Market

M/V Bulldog out of Singapore goes to work with a Deutz 2025 kW engine working through a Twin Disc MG-5114A Marine Transmission plus two Twin Disc MCD 3000-5-LD Marine Control Drives to obtain optimum power splitting for propulsion, steering and equipment.

COMMERCIAL MARINE

World financial dynamics impacted the commercial marine market globally. The dollar's strength against European currencies made it difficult to attract offshore sales of domestic marine transmissions. However, our Belgian subsidiary's products remained consistent with last year. ◩ The Asian economy continues its slow recovery. In the process, long standing inventories there have finally been exhausted, so there was increased demand for Twin Disc marine transmissions. ◩ Australian sales remained repressed, a residual effect of the Asian financial crisis. ◩ South America contributed spotty demand, indicating slow but cautiously improving potential there. ◩ On the domestic front, the recovering oil industry has stimulated new demand for larger, faster crew/supply boats to service offshore rigs. These larger boats, often driven by up to six propulsion systems, have replaced midsize and smaller boats because of their increased payload and speed. They can make fewer and faster trips to the rigs, saving significant hourly charges to the oil companies. ◩ There was a resurgence of building activity for inland waterway pushboats. This has increased demand for Twin Disc MG-5600, MG-540 and MG-530 Marine Transmissions. In addition, this year we released four new commercial marine transmissions to meet increased horsepower requirements: the 1200-horsepower, deep-ratio MG-5301, the MG-5205, another deep-case high power transmission, and the MG-6650 and MG-5170 deep-ratio transmissions.

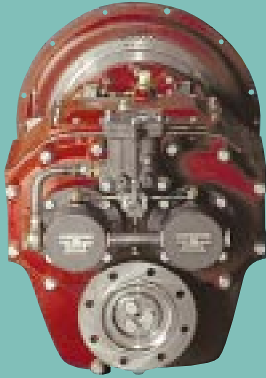


Smit International controls ship traffic in Rotterdam harbor with their fleet of 12 high-tech tugs equipped with Twin Disc MCD 3000 Marine Control Drives that permit precise maneuverability as well as engine power splitting between propulsion and fire fighting pumps.

China Merchants WuXi High Speed Ferry Co., Ltd. equipped its 50-passenger tourist boat with a Twin Disc MG-5114A Marine Transmission.

PLEASURE CRAFT

Sales to the pleasure craft market in the US were off slightly over last year because of slower sales in the mid-size diesel power boats. And although larger craft–$1-million and up–continue to sell, there is intense price competition in transmission products. In order to maintain product differential advantages and avoid commodity perception, Twin Disc is committed to continuous product development and extending its marine transmission line. ◩ *The Company acquired Technodrive, an Italian manufacturer of a complementary horsepower range of marine transmissions with a strong presence in Europe. This further expands Twin Disc's offerings both overseas and in the US into lower horsepower applications.* ◩ *Our Belgian subsidiary showed some improvement in marine transmission sales over last year as they made inroads to a major European engine manufacturer.* ◩ *Twin Disc Italia had a record year in transmission sales.* ◩ *In Australia, sales of high performance boats in general are returning to former positive levels, opening the door for improved transmission sales.* ◩ *It is our mission to offer our customers the best value in marine transmission products while containing developmental and manufacturing costs. With that in mind, Twin Disc is in the process of strategically mixing and matching the fundamental components and proven features of their transmissions across the board. That avoids the expense and market release delays of from-the-ground-up design. As the Company achieves greater commonality of parts throughout the marine transmission line, our products will become even more cost competitive.*



The recent acquisition of Technodrive, an Italian manufacturer of pump drives and marine transmissions, allows Twin Disc to significantly expand its marine transmission line into smaller boats.

The Genoa Boat Show proved to be an exciting venue for Twin Disc marine products.

This Twin Disc EC-200 Electronic Control-equipped, wave-piercing catamaran designed by Ocean Innovations and built by Griffin Motor Yachts, both of New South Wales, Australia, represents leading edge technology in hull design and propulsion control.

The 50′ Onuk MRTP15 Kaan Class Fast Interceptor, designed and built in Turkey, introduced a new breed of patrol craft flexibility with its amazing stability and the power of twin MTU-1150 horsepower engines driving Twin Disc ASD 12 Arneson Surface Drives to achieve a top speed of 54 knots.

MARINE PROPULSION PRODUCTS

Twin Disc marine propulsion products consist of electronic controls, waterjets and Arneson Surface Drives. While sold to both commercial and pleasurecraft markets–just as our transmissions, these products comprise performance characteristics requiring different specifying and installation knowledge than our transmission line. Therefore, we have elected to create a global marketing thrust specific to these performance products. Select marine distributors of our transmissions will now be trained in the specialized sales and service of these products. We are consulting with naval architects, boat builders, boat dealers and engine manufacturers around the world. These products bring a distinct value-added to the performance, enjoyment and productivity of a boat.

ARNESON SURFACE DRIVES

Italian boat builders find that Arneson Drives bring unparalleled speed and maneuverability to their craft, complementing their sense of style and performance. Twin Disc Italia enjoyed record sales of Arneson Drives last year. Some prestigious European boatbuilders have embraced the Arneson product as a propulsion option. ◩ *And a few major American boat manufacturers also offer Arnesons. Much Arneson activity around the world relates to military or policing-type craft*

Mackay Whale Watching Ltd. in Port McNeill on the east coast of Vancouver Island uses their 54′ rigid hull inflatable *Naiad Explorer* to quickly, smoothly and quietly transport 48 passengers to wildlife watching excursions via twin 570-horsepower Caterpillar 3196 engines driving Twin Disc Arneson ASD 12 Surface Drives.

Twin Disc EC-200 Electronic Controls give Maoshen 280-passenger ferry cruiser precise control whether underway or pulling into dock.

such as patrol boats for coastal surveillance, defense or drug interdiction. Those applications prize fast acceleration, high top end speed, and turn-on-a-dime maneuverability. This past year also resulted in a number of unique, custom craft outfitted with Arneson Drives.

ELECTRONIC CONTROLS

Drive-by-wire is being embraced by the marine industry, and Twin Disc Electronic Controls lead the industry in quality, style and performance. With literally one finger on one lever, the operator can control a boat's direction and speed. Multiple drivetrains can easily be accommodated with multiple control heads. And multiple electronic control stations can be placed around the boat. There's even a portable handset that allows the operator to stand near or on the dock to maneuver in tight quarters. ◪ *Twin Disc EC-200 Electronic Controls are offered by major boat builders around the world. They've found acceptance on pleasure and commercial craft. With its new emphasis on propulsion products, Twin Disc is committed to achieving significant growth in electronic control sales.*

WATERJETS

Waterjets have yet to become a volume sales contributor to the Company's marine products revenues. But specialized applications exploiting the jet's speed, maneuverability, shallow draft and "no-propeller" safety advantage should lead to greater general boating awareness that will stimulate sales in more conventional applications. Twin Disc offers a complete line of 12 waterjet models ranging from 200 to 3000 horsepower.

◄ The U.S. Army Corps of Engineers does hydrographic surveys with this unique SeaArk 30′ aluminum hulled boat equipped with twin Yanmar 350-horsepower diesel engines driving Twin Disc TDJ105 Jets through MG-5061 Marine Transmissions. This 50′ specialized high-speed patrol craft, in demand by protection authorities across the world, is powered by Twin Disc Arneson Surface Drives driven by MTU diesel engines working through Twin Disc Marine Transmissions. ►

In their newly designed series of Aircraft Rescue and Fire Fighting (ARFF) vehicles, the Panther FL 4x4 and 6x6, Freightliner and Rosenbauer have utilized the latest heavy truck propulsion technologies such as modern 4-cycle, turbocharged diesel engines generating up to 600 horsepower driving through Twin Disc TD-61-1180 Six-Speed Automatic Transmission and Power Divider Systems.

All-Wheel Drive Vehicle Transmissions

AIRCRAFT RESCUE AND FIRE FIGHTING VEHICLES

While volume sales for large, fully automatic transmission systems for Aircraft Rescue and Fire Fighting (ARFF) vehicles were down this year, a number of new applications were established that should enhance future requirements for Twin Disc All-Wheel Drive Transmissions.

These large all-wheel drive vehicles are utilizing new, high horsepower, high torque engines that meet required federal emission standards. Twin Disc's new 1180 transmission family matches the requirements of these vehicles and engines. During the last year, we have developed several prototype applications at key vehicle manufacturers.

MILITARY COMBAT AND TACTICAL VEHICLES

Twin Disc All Wheel Drive Transmissions are experiencing increased use in tactical vehicles in the 500-800 horsepower range. These are special, high mobility vehicles that meet stringent off-highway performance requirements. We are currently working with key manufacturers of these vehicles on new projects that will develop volume sales during the next one to five years.

LAX International Airport has high-capacity, fast-response Aircraft Rescue and Fire Fighting (ARFF) capability with its Emergency One 8x8 Titan HPR™ equipped with a 1000-horsepower Detroit Diesel engine and Twin Disc TD-61-2619 Automatic Transmission System.

This 115-ton (gvw) Liebherr MPC (Multi-Purpose Carrier) 12x12 is equipped with an MTU 905-horsepower engine and a Twin Disc TD-101-3600 10-Speed Automatic Transmission with FLW-1854-1 Torque Converter and an ETA28N Electronic Control. It is currently undergoing desert testing in the United Arab Emirates and production models ultimately will be available for military, construction and oilfield applications worldwide.

Also, in 1999, Twin Disc began production on transmissions for the M-88 A2 Hercules tank recovery vehicle that is required for the United States M1A2 main battle tank. The Company also received multiple orders for new and improved torque converters for the United States Marine Corps' Amphibious Assault Vehicle.

FOUR-WHEEL DRIVE TRANSMISSIONS

Agricultural demand for large four-wheel drive tractors suffered in 1999 as a result of the continuing decline in domestic farm income and resultant decrease in farm equipment purchases. This was partially offset by increases in demand for these same tractors for land reclamation and landfill projects.

Alvis Unipower provides the British Ministry of Defense with an array of ARFF vehicles such as this 4x4 Rapid Intervention Vehicle (RIV) with a 475-horsepower Detroit Diesel engine and Twin Disc TD-61-1175 Automatic Transmission and the 6x6 Major Foam Vehicle (MFV) powered by a Detroit Diesel 585-horsepower engine with a Twin Disc TD-61-1172 Automatic Transmission.

A Twin Disc SP214OP1 Power Take-Off actuates emergency water pump for Shanghai BaoShan Steel Factory.

Industrial Products

Industrial products include our power take-offs, mechanical clutches, gas turbine starting drives and universal control drives.

Power take-off and clutch sales were initially soft in 1999 as a result of declining demand from the agricultural and oilfield markets. However, construction, irrigation and recycling equipment markets grew during the year.

In January 1999, Twin Disc added substantial volume to its power take-off product line by acquiring the Rockford Clutch power take-off product line from Rockford Powertrain. This acquisition allows Twin Disc to consolidate a market and better serve our customers while adding volume to our power take-off plant.

Gas turbine starting drive product sales were consistent with previous years while new applications were made for the universal control drive in East European countries and Russia.

A&B Grinding, Halsey, Nebraska, grinds hay for feedlot consumption using a Jones "Mighty Grinder" powered by a 525-horsepower Caterpillar 3408 engine and actuated by a Twin Disc Hydraulic Power Take-Off Model 366.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Results of Operations

Net Sales, New Orders and Backlog

Revenues declined in fiscal 1999, after six consecutive years of increases. The decline was most severe at our domestic manufacturing operation, due primarily to cyclical downturns in certain markets. Order rates for our traditional products began to moderate in mid-fiscal 1998 and that, combined with the completion of a truck transmission contract in mid-year, caused the backlog of orders scheduled for shipment during the next six months to decline 29 percent to $54 million. At the end of fiscal 1999, the six-month backlog had dropped to $40 million, or 26 percent below the year earlier.

Net sales increased seven percent in fiscal 1998 to $203 million compared with fiscal 1997, but declined 17 percent to $168 million in fiscal 1999.

Fiscal 1998 benefited from the final six months of the truck transmission contract as well as growth in other product markets. Principal growth markets were the pleasure craft marine market, supplied primarily from our Belgian operation, and a variety of applications for power take-offs and clutches such as irrigation, recycling, and oilfield. The 1999 sales decline resulted from weak demand in some markets, customer inventory reductions adversely impacting replacement part sales, and the absence of the truck transmission contract completed in the previous year. Most significantly, lower demand from the commercial marine market led to a 34-percent drop in domestic manufacturing sales. Other important factors in the sales decline were low oil prices; prices for commodities such as lumber and food, which were adversely affected by the Asian economic crisis; and reduced capital spending in the agricultural and construction equipment markets. Sales of lower horsepower marine transmissions for pleasure craft also were down, causing a modest decline in sales from our Belgian plant. On the positive side, the acquisition of an Italian manufacturing company and purchase of a domestic product line, completed early in the second half of the fiscal year, provided a sales boost and slight incremental earnings in the last five months of the fiscal year. Both acquisitions provided products that strengthen our global market position in industrial products. Technodrive S.p.A adds to the lower-horsepower end of our marine transmission line and provides several complementary industrial products. We also broadened our industrial product offerings with the mechanical power take-off product line acquired from Rockford Powertrain, Inc.

Sales at our wholly owned distribution companies varied by global region. Domestically, solid improvement in 1998 gave way to modest declines in 1999 as sales to customers serving the marine and logging markets fell off sharply. In Europe, there was improvement in both years, but less so in 1999, while sales in the Pacific Basin were down in both years due primarily to the weak Asian economies and the strong U.S. dollar. Having lost a significant customer to bankruptcy, our South African distribution subsidiary has reported lower sales in each of the last two fiscal years. As a result of that and the generally weak local economy, a plan to terminate operations at that subsidiary was approved, and resulted in a $1.1-million loss provision in the fourth quarter.

The U.S. dollar strengthened in each of the last two fiscal years, but the aggregate effect in 1999 was negligible. The currencies of the countries in which Twin Disc operates were off approximately 10 percent in fiscal 1998, which equated to a negative impact of about four percent on consolidated net revenues. Price increases, implemented selectively in each year, raised revenues by approximately the rate of inflation.

At the beginning of fiscal 1998, the backlog of orders scheduled for shipment during the next six months was $76 million, about 10 percent of which was attributable to the truck transmission contract that extended through the first half of that year. With the contract completed at mid-year and order rates for traditional products declining during the second half of the year, particularly for the

higher-horsepower marine transmissions, backlog at the end of fiscal 1998 dropped to $54 million. In fiscal 1999, order rates continued to decline with market demand and as a result of shortened delivery lead times. By March 1999, the six-month backlog fell another 26 percent and remained at the same $40-million level through the fourth quarter. The largest components of the decline were marine transmissions and automatic transmissions and torque converters for agricultural and construction applications.

Margins, Costs and Expenses

Although manufacturing operations have continued to achieve incremental improvements in manufacturing processes and machine utilization, lower sales rates, beginning domestically in mid-1998, lowered gross margins in 1998 and 1999.

In fiscal 1998, improved productivity at our domestic plant, coupled with greater volume in the first half of the year, provided for higher domestic margins. Production volume at our Belgian subsidiary rose during the second quarter, with the increased demand for marine transmissions favorably impacting productivity and margins. Additionally, with a portion of its sales denominated in the strong U.S. dollar, the margin at our Belgian operation showed a significant increase for the year.

The gross margin for fiscal 1999 was more than three percentage points below that of fiscal 1998, primarily because of the reduced domestic sales volume, lower productivity, and one-time separation costs in the second and third quarters. During the second fiscal quarter, there was a domestic salaried staff reduction, and in the following period, a similar program was implemented overseas along with a voluntary separation program for domestic hourly associates. The total pre-tax impact of approximately $850,000, will be recovered within one year. In Belgium the workweek was shortened utilizing a government-supported layoff program. In addition to the one-time expenses, an adverse productivity impact, primarily in the third quarter, was associated with these actions.

Marketing, engineering, and administrative (MEA) expense in terms of dollars increased by nine percent in fiscal 1998 but rose only slightly as a percentage of sales. The principal components of the increase were a write-off resulting from the bankruptcy of a customer in South Africa, marketing and domestic engineering personnel additions, and the expenses associated with a mid-year acquisition.

In fiscal 1999, MEA expense declined four percent but increased sharply as a percent of the reduced sales volume. Included in the expenses for the year were severance costs associated with the second- and third-quarter reductions in domestic and Belgian salaried staff. The total pre-tax impact of approximately $350,000 will be recovered within one year.

In March 1999, we sold a portion of the investment in our Japanese affiliate, Niigata Converter Company (NICO), which resulted in a pre-tax gain of $1.4 million (discussed further in Footnote D to the consolidated financial statements), and reduced our ownership interest in NICO from 25 percent to 19.5 percent. Our share of NICO losses for fiscal 1999 versus modest earnings in fiscal 1998 was the cause of the year-to-year decline in the earnings of affiliates. Net other income and expense declined $1.1 million due to increased foreign exchange losses in fiscal 1999 versus a gain on the sale of land in fiscal 1998.

Interest, Taxes and Net Earnings

Short-term borrowings remained very low in fiscal 1998 and, as a result, interest expense declined about 15 percent from the prior year. In fiscal 1999, additional debt was incurred to finance acquisitions, and interest expense increased by almost 40 percent.

The effective income tax rates were relatively consistent through 1997 and 1998, with a slight increase in 1998 caused by a different proportion of foreign earnings, gener-

ally taxed at a higher rate, and an additional accrual for prior years. The substantial tax provision on almost breakeven pre-tax earnings in fiscal 1999 was caused by lower tax rates on losses domestically, offset by higher rates on income overseas; and by the lack of a recordable tax benefit on the provision for loss on the closure of our South African distribution subsidiary.

Liquidity and Capital Resources

The net cash provided by operating activities in fiscal 1998 was $7 million. The positive cash flows from earnings, depreciation, and a further reduction in accounts receivable days sales outstanding (DSO) were partially offset by the higher inventory needed to satisfy demand at our Belgian subsidiary and by the prepayment of the domestic pension contribution. In fiscal 1999, with the lower sales volume we were able to generate reductions in both inventory and accounts receivable, and cash flows from operations totaled $9 million. Despite the reductions, receivable DSO increased slightly and inventory turnover declined.

For several years prior to fiscal 1998, fixed asset purchases were less than depreciation as manufacturing cells were established and existing machinery was rearranged. Expenditures for capital equipment exceeded depreciation by about $2 million in fiscal 1998 as experience helped identify the equipment needed to further improve cell performance. Due to the downturn and a desire to conserve cash, fiscal 1999 capital expenditures were reduced from plan and were about equal to depreciation and amortization. As conditions improve, we expect the level of capital spending will rise and allow further refinement of individual manufacturing cells.

After modest declines in working capital and current ratio in fiscal 1998, those two measures of liquidity and financial strength dropped significantly in fiscal 1999 due to the large increase in short-term borrowing. The increase was due to financing the acquisitions of Technodrive and Rockford with borrowings under our short-term lines of credit. At year-end, negotiations were underway to replace a portion of the short-term debt with a term revolver. The current ratio of 1.8 at June 30, 1999 (2.8 after adjusting for the higher line of credit debt level), was down from the 3.2 reported at the previous year-end.

The book value of the Company, and thus its reported capital structure, was reduced by a non-cash charge to equity of $11.1 million at June 30, 1999. The charge was caused primarily by using a more conservative mortality table to estimate pension liabilities and generally reflects the amount by which those liabilities exceed plan assets. In accordance with applicable accounting standards, the after-tax effect of the increased net liability was charged directly to equity and shown in comprehensive income but did not impact reported primary earnings. We do not believe the effect of the revised liability valuation will have an impact on the underlying financial strength of Twin Disc.

The Company believes the capital resources available in the form of existing cash, lines of credit (see Footnote F to the consolidated financial statements) and funds provided by operations will be adequate to meet anticipated capital expenditures and other foreseeable business requirements in the future.

Other Matters

Year 2000 Readiness

The Company has assessed the potential impact of the Year 2000 (Y2K) date change on its business systems and operations. New information systems, which are prepared to handle the century date change, have been installed at all operations. Substantial testing of these systems has occurred and will continue prior to December 31, 1999. Network systems and other building, service, and manufacturing equipment throughout the Company and its subsidiaries have been inventoried, assessed, modified as necessary or replaced, and are capable of handling the date change. In addition, suppliers and service providers have been contacted to ensure they are actively involved in

programs to address the Year 2000 issue and provide uninterrupted service to Twin Disc. Although the Company cannot assure Y2K compliance by its key suppliers and distributors, no major part or critical operation of the Company relies on a single source for raw materials, supplies, or services, and the Company has multiple distribution channels for its products. Should the Company discover that a supplier or distributor will not be Y2K compliant, the Company believes it will be able to find cost-competitive alternate sources and continue its production and distribution.

It is estimated that approximately $5.5 million has been spent on hardware, software, consulting services and staff time during the past four years to become Y2K compliant. Substantially all of the costs have been incurred at this time. The work has been completed in the normal course of operations and has not delayed other projects critical to the financial strength or operating results of the Company.

The Company believes the Y2K issue will not pose significant operational problems. However, if all Y2K issues are not properly identified, or assessment, remediation, and testing are not completed for Y2K problems that are identified, there can be no assurance that the Y2K issue will not have a material adverse effect on the Company's relationships with its customers, suppliers, distributors and others. In addition, there can be no assurance that the Y2K issues of other entities will not have a material adverse impact on the Company's systems or results of operations.

Environmental Matters

The Company is involved in various stages of investigation relative to hazardous waste sites on the United States EPA National Priorities List. It is not possible at this time to determine the ultimate outcome of those matters; but, as discussed further in Footnote N to the consolidated financial statements, they are not expected to affect materially the Company's operations, financial position or cash flows.

Note on Forward-Looking Statements

Statements in this report and in other Company communications that are not historical facts are forward-looking statements, which are based on management's current expectations. These statements involve risks and uncertainties that could cause actual results to differ materially from what appears here.

Forward-looking statements include the Company's description of plans and objectives for future operations and assumptions behind those plans. The words "anticipates," "believes," "intends," "estimates," and "expects" or similar expressions, usually identify forward-looking statements. In addition, goals established by Twin Disc, Incorporated, should not be viewed as guarantees or promises of future performance. There can be no assurance the Company will be successful in achieving its goals.

In addition to the assumptions and information referred to specifically in the forward-looking statements, other factors could cause actual results to be materially different from what is presented here.

CONSOLIDATED BALANCE SHEETS

JUNE 30, 1999 and 1998

(Dollars in thousands)	1999	1998
ASSETS		
Current assets:		
Cash and cash equivalents	$ 4,136	$ 5,087
Trade accounts receivable, net	27,201	28,320
Inventories	54,500	53,280
Deferred income taxes	6,004	1,987
Other	5,906	4,906
Total current assets	97,747	93,580
Property, plant and equipment, net	38,935	35,728
Investments in affiliates	6,663	8,727
Goodwill, net	15,235	1,435
Deferred income taxes	4,349	1,241
Intangible pension asset	3,385	4,082
Other assets	10,586	16,161
	$176,900	$160,954
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Notes payable	$ 20,158	$ 276
Current maturities on long-term debt	2,857	–
Accounts payable	10,724	9,917
Accrued liabilities	21,022	19,360
Total current liabilities	54,761	29,553
Long-term debt	17,112	19,949
Accrued retirement benefits	37,567	29,457
	109,440	78,959
Shareholders' equity:		
Common shares authorized: 15,000,000; issued: 3,643,630; no par value	11,653	11,653
Retained earnings	81,430	84,738
Accumulated other comprehensive (loss) income	(8,516)	2,757
	84,567	99,148
Less treasury stock, at cost	17,107	17,153
Total shareholders' equity	67,460	81,995
	$176,900	$160,954

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

Consolidated Statements of Operations

FOR THE YEARS ENDED JUNE 30, 1999, 1998 AND 1997

(In thousands, except per share data)	1999	1998	1997
Net sales	$168,142	$202,643	$189,942
Cost of goods sold	132,061	152,515	146,123
Gross profit	36,081	50,128	43,819
Marketing, engineering and administrative expenses	32,755	34,092	31,219
Earnings from operations	3,326	16,036	12,600
Other income (expense):			
Interest income	237	550	1,335
Interest expense	(2,070)	(1,505)	(1,781)
Equity in net (loss) earnings of affiliates	(945)	651	307
Gain on partial sale of affiliate	1,355	–	–
Loss on closure of subsidiary	(1,140)	–	–
Other, net	(749)	313	219
	(3,312)	9	80
Earnings before income taxes	14	16,045	12,680
Income taxes	1,032	6,682	4,951
Net (loss) earnings	$ (1,018)	$ 9,363	$ 7,729
(Loss) earnings per share data:			
Basic (loss) earnings per share	$ (.36)	$ 3.30	$ 2.78
Diluted (loss) earnings per share	(.36)	3.24	2.75
Shares outstanding data:			
Average shares outstanding	2,835	2,834	2,781
Dilutive stock options	9	52	27
Diluted shares outstanding	2,844	2,886	2,808

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

CONSOLIDATED STATEMENTS OF CASH FLOWS

FOR THE YEARS ENDED JUNE 30, 1999, 1998 AND 1997

(In thousands)	1999	1998	1997
Cash flows from operating activities:			
Net (loss) earnings	$ (1,018)	$ 9,363	$ 7,729
Adjustments to reconcile to net cash provided by operating activities:			
Depreciation and amortization	6,454	5,607	5,489
(Loss) gain on sale of plant assets	38	(402)	(127)
Gain on partial sale of affiliate	(1,355)	–	–
Loss on closure of subsidiary	1,140	–	–
Equity in net loss (earnings) of affiliates	945	(651)	(307)
Provision for deferred income taxes	–	2,873	1,481
Dividends received from affiliate	625	495	300
Changes in operating assets and liabilities:			
Trade accounts receivable, net	3,898	3,361	1,267
Inventories	3,468	(5,673)	2,882
Other assets	6,274	(7,842)	(954)
Accounts payable	(1,360)	(2,695)	3,463
Accrued liabilities	(759)	2,777	(391)
Accrued retirement benefits	(9,392)	(244)	(345)
Net cash provided by operating activities	8,958	6,969	20,487
Cash flows from investing activities:			
Proceeds from sale of plant assets	24	574	501
Acquisitions of plant assets	(6,439)	(7,154)	(4,734)
Acquisitions of businesses	(16,785)	(1,021)	–
Payment for license agreement	–	(1,515)	–
Net cash used by investing activities	(23,200)	(9,116)	(4,233)
Cash flows from financing activities:			
Increases (decreases) in notes payable, net	15,000	112	(7,182)
Proceeds from long-term debt	–	–	4
Acquisition of treasury stock	–	(1,314)	–
Proceeds from exercise of stock options	38	1,904	188
Dividends paid	(2,282)	(2,160)	(1,947)
Net cash provided (used) by financing activities	12,756	(1,458)	(8,937)
Effect of exchange rate changes on cash	535	(291)	(377)
Net change in cash and cash equivalents	(951)	(3,896)	6,940
Cash and cash equivalents:			
Beginning of year	5,087	8,983	2,043
End of year	$ 4,136	$ 5,087	$ 8,983
Supplemental cash flow information:			
Cash paid during the year for:			
Interest	$ 2,037	$ 1,505	$ 1,822
Income taxes	127	4,698	3,318

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

Consolidated Statements of Changes in Shareholders' Equity and Comprehensive Income

FOR THE YEARS ENDED JUNE 30, 1999, 1998 AND 1997

(In thousands)	1999	1998	1997
Common stock			
Balance, June 30	$ 11,653	$ 11,653	$ 11,653
Retained earnings			
Balance, July 1	84,738	77,424	71,658
Net (loss) earnings	(1,018)	9,363	7,729
Cash dividends	(2,282)	(2,160)	(1,947)
Stock options exercised	(8)	111	(16)
Balance, June 30	81,430	84,738	77,424
Accumulated other comprehensive (loss) income			
Balance, July 1	2,757	2,352	9,706
Foreign currency translation adjustment			
Balance, July 1	3,418	6,060	10,326
Current adjustment	(130)	(2,642)	(4,266)
Balance, June 30	3,288	3,418	6,060
Minimum pension liability adjustment, net			
Balance, July 1	(661)	(3,708)	(620)
Current adjustment, net of related income taxes ($7,125 in 1999, $(1,948) in 1998 and $1,975 in 1997)	(11,143)	3,047	(3,088)
Balance, June 30	(11,804)	(661)	(3,708)
Accumulated other comprehensive (loss) income			
Balance, June 30	(8,516)	2,757	2,352
Treasury stock, at cost			
Balance, July 1	(17,153)	(17,632)	(17,836)
Shares acquired	–	(1,314)	–
Stock options exercised	46	1,793	204
Balance, June 30	(17,107)	(17,153)	(17,632)
Shareholders' equity balance, June 30	$ 67,460	$ 81,995	$ 73,797
Comprehensive (loss) income			
Net (loss) earnings	$ (1,018)	$ 9,363	$ 7,729
Other comprehensive (loss) income			
Foreign currency translation adjustment	(130)	(2,642)	(4,266)
Minimum pension liability adjustment	(11,143)	3,047	(3,088)
Other comprehensive (loss) income	(11,273)	405	(7,354)
Comprehensive (loss) income	$(12,291)	$ 9,768	$ 375

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

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

A. SIGNIFICANT ACCOUNTING POLICIES

The following is a summary of the significant accounting policies followed in the preparation of these financial statements:

CONSOLIDATION PRINCIPLES – The consolidated financial statements include the accounts of Twin Disc, Incorporated and its subsidiaries, all of which are wholly owned. Certain foreign subsidiaries are included based on fiscal years ending May 31, to facilitate prompt reporting of consolidated accounts. All significant intercompany transactions have been eliminated.

TRANSLATION OF FOREIGN CURRENCIES – Substantially all foreign currency balance sheet accounts are translated into United States dollars at the rates of exchange prevailing at year-end. Revenues and expenses are translated at average rates of exchange in effect during the year. Foreign currency translation adjustments are recorded as a component of shareholders' equity. Gains and losses from foreign currency transactions are included in earnings.

CASH EQUIVALENTS –The Company considers all highly liquid marketable securities purchased with a maturity date of three months or less to be cash equivalents.

RECEIVABLES –Trade accounts receivable are stated net of an allowance for doubtful accounts of $534,000 and $647,000 at June 30, 1999 and 1998, respectively.

FAIR VALUE OF FINANCIAL INSTRUMENTS – The carrying amount reported in the consolidated balance sheets for cash and cash equivalents, accounts receivable, accounts payable and short-term debt approximates fair value because of the immediate short-term maturity of these financial instruments. The carrying amounts reported for notes receivable and long-term debt approximate fair value because the underlying instruments bear interest at, or near, a current market rate.

DERIVATIVE FINANCIAL INSTRUMENTS – Derivative financial instruments (primarily forward foreign exchange contracts) may be utilized by the Company to hedge foreign exchange rate risk. The Company has established policies and procedures for risk assessment and the approval, reporting and monitoring of derivative financial instrument activities. The Company does not enter into financial instruments for trading or speculative purposes. For financial reporting purposes, forward foreign exchange contracts used to hedge the currency fluctuations on transactions denominated in foreign currencies are marked-to-market and the resulting gains and losses, together with the offsetting losses and gains on hedged transactions, are recorded in the "Other income (expense)" caption in the statement of operations. At June 30, 1999 and 1998, the Company had outstanding forward foreign exchange contracts to purchase $2,000,000 and $5,000,000, respectively, of Belgian francs with a weighted average maturity of 33 days and 56 days, respectively.

INVENTORIES – Inventories are valued at the lower of cost or market. Cost has been determined by the last-in, first-out (LIFO) method for parent company inventories, and by the first-in, first-out (FIFO) method for other inventories.

PROPERTY, PLANT AND EQUIPMENT AND DEPRECIATION – Assets are stated at cost. Expenditures for maintenance, repairs and minor renewals are charged against earnings as incurred. Expenditures for major renewals and betterments are capitalized and amortized by depreciation charges. Depreciation is provided on the straight-line method over the estimated useful lives of the assets for financial reporting and on accelerated methods for income tax purposes. The lives assigned to buildings and related improvements range from 10 to 40 years, and the lives assigned to machinery and equipment range from 5 to 15 years. Upon disposal of property, plant and equipment, the cost of the asset and the related accumulated depreciation are removed from the accounts and the resulting gain or loss is reflected in earnings. Fully depreciated assets are not removed from the accounts until physically disposed.

INVESTMENTS IN AFFILIATES – The majority of the Company's investments in 20% to 50%-owned affiliates are accounted for using the equity method. Investments in less than 20%-owned affiliates are accounted for using the cost method.

REVENUE RECOGNITION – Revenues are recognized when products are shipped.

GOODWILL – Goodwill consists of costs in excess of net assets of businesses acquired. Goodwill is amortized using the straight-line method over its estimated beneficial lives, not to exceed 40 years. Subsequent to an acquisition, the Company continually evaluates whether later events and circumstances have occurred that indicate the goodwill should be evaluated for possible impairment. Goodwill at June 30, 1999 and 1998, of $15,235,000 and $1,435,000, respectively, are net of accumulated amortization of $839,000 and $518,000, respectively.

INCOME TAXES – The Company recognizes deferred tax liabilities and assets for the expected future income tax consequences of events that have been recognized in the Company's financial statements. Under this method, deferred tax liabilities and assets are determined based on the temporary differences between the financial statement carrying amounts and the tax bases of assets and liabilities using enacted tax rates in effect in the years in which the temporary differences are expected to reverse.

The Company does not provide for taxes which would be payable if undistributed earnings of its foreign subsidiaries or its foreign affiliate were remitted because the Company either considers these earnings to be invested for an indefinite period or anticipates that if such earnings were distributed, the U.S. income taxes payable would be substantially offset by foreign tax credits.

MANAGEMENT ESTIMATES – The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent liabilities at the dates of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual amounts could differ from those estimates.

RECENTLY ISSUED ACCOUNTING STANDARDS – During the first quarter of 1999, the Company adopted Statement of Financial Accounting Standards (FAS) 130 "Comprehensive Income," which establishes standards for the reporting and display of comprehensive income, as defined, and its components within the financial statements.

The Company adopted FAS 131 "Disclosures about Segments of an Enterprise and Related Information" in 1999. FAS 131 establishes new standards for the way that public companies report information about operating segments in annual financial statements (Note I).

The Company adopted FAS 132 "Employers' Disclosure about Pensions and Other Postretirement Benefits" in 1999. FAS 132 revises disclosures about pensions and other postretirement benefits (Note L).

During 1998, the Financial Accounting Standards Board (FASB) issued FAS 133 "Accounting for Derivative Instruments and Hedging Activities" which establishes standards for accounting for derivatives and hedging activities. In July 1999, the FASB issued FAS 137, "Deferral of the Effective Date of FAS 133," which delays the effective date of FAS 133 one year. As a result, FAS 133 will be effective for the Company's 2001 fiscal year. The adoption of FAS 133 is not anticipated to have a significant impact on the Company's earnings or financial position.

RECLASSIFICATION – Certain reclassifications have been made to the financial statements of prior years to conform to the presentation for 1999 primarily as a result of the adoption of FAS 130, FAS 131 and FAS 132.

B. INVENTORIES

The major classes of inventories at June 30 were as follows (in thousands):

	1999	1998
Finished parts	$42,405	$43,848
Work-in-process	6,385	5,524
Raw materials	5,710	3,908
	$54,500	$53,280

Inventories stated on a LIFO basis represent approximately 35% and 33% of total inventories at June 30, 1999 and 1998, respectively. The approximate current cost of the LIFO inventories exceeded the LIFO cost by $17,936,000 and $18,252,000 at June 30, 1999 and 1998, respectively.

C. Property, Plant and Equipment

Property, plant and equipment at June 30 were as follows (in thousands):

	1999	1998
Land	$ 1,409	$ 1,295
Buildings	22,698	19,065
Machinery and equipment	95,579	92,309
	119,686	112,669
Less accumulated depreciation	80,751	76,941
	$ 38,935	$ 35,728

D. Investments in Affiliates

The Company's investments in affiliates consists of a 25% interest in a domestic distributor of Twin Disc products and an investment in Niigata Converter Company, LTD., Japan ("Niigata"), a manufacturer of power transmission equipment. In March of 1999, the Company sold a portion of its investment in Niigata in exchange for a $1.7 million note receivable due in various annual amounts commencing December 31, 2002, through December 31, 2008. The sale was a non-cash transaction for purposes of the consolidated statement of cash flows. As a result, a pre-tax gain of $1,355,000 was recognized in 1999.

Prior to the sale the Company accounted for its 25% interest in Niigata using the equity method. The Company recognized its share of Niigata's loss from April 1, 1998, through the date of sale of $1.5 million. After the sale, the Company accounted for its 19.5% interest using the cost method.

Undistributed earnings of the affiliates included in consolidated retained earnings approximated $1,713,000 and $3,283,000 at June 30, 1999 and 1998, respectively.

Combined condensed financial data for investments in affiliates accounted for under the equity method of accounting are summarized below (in thousands). The balance sheet information for 1999 includes the domestic distributor balances only and the 1998 information includes both the domestic distributor and Niigata balances. The statement of operations information for 1999 includes the domestic distributor results from June 1, 1998, through May 31, 1999, and Niigata results from April 1, 1998, through the date of sale; the 1998 information includes the domestic distributor results from June 1, 1997, through May 31, 1998, and Niigata results from April 1, 1997, through March 31, 1998.

	1999	1998
Current assets	$ 8,734	$ 78,214
Other assets	5,463	40,171
	$ 14,197	$118,385
Current liabilities	$ 6,530	$ 83,066
Other liabilities	210	412
Shareholders' equity	7,457	34,907
	$ 14,197	$118,385

	1999	1998	1997
Net sales	$116,115	$152,558	$166,171
Gross profit	13,008	20,897	19,911
Net (loss) earnings	(3,780)	2,606	1,228

E. ACCRUED LIABILITIES

Accrued liabilities at June 30 were as follows (in thousands):

	1999	1998
Salaries and wages	$ 4,522	$ 6,871
Retirement benefits	3,362	2,930
Other	13,138	9,559
	$ 21,022	$ 19,360

F. DEBT

Notes payable consist of amounts borrowed under unsecured line of credit agreements. Unused lines of credit total $14,804,000 at June 30, 1999. These lines of credit are available predominantly at the LIBOR interest rate plus 1.25% and may be withdrawn at the option of the banks. The weighted average interest rate of the lines outstanding at June 30, 1999 and 1998, was 5.88% and 6.8%, respectively.

Included in long-term debt is $20 million of 7.37% ten-year unsecured notes, net of $60,000 unamortized debt issuance costs at June 30, 1999. These notes contain certain covenants, including the maintenance of a current ratio of not less than 1.5. Principal payments of $2,857,000 are due in the years 2000 through 2005, with the remaining balance due on June 1, 2006. Also included in long-term debt is $29,000 of debt related to a foreign subsidiary.

G. LEASE COMMITMENTS

Approximate future minimum rental commitments under noncancellable operating leases are as follows (in thousands):

Fiscal Year	
2000	$2,755
2001	2,204
2002	1,404
2003	1,146
2004	605
Thereafter	613
	$8,727

Total rent expense for operating leases approximated $2,941,000, $2,571,000 and $2,254,000 in 1999, 1998 and 1997, respectively.

H. Shareholders' Equity

At June 30, 1999 and 1998, treasury stock consisted of 808,446 and 810,646 shares of common stock, respectively. The Company issued 2,200 and 86,850 shares of treasury stock in 1999 and 1998, respectively, to fulfill its obligations under the stock option plans. The difference between the cost of treasury shares issued and the option price is recorded in retained earnings. The Company did not acquire any shares of treasury stock in 1999.

Cash dividends per share were $.805 in 1999, $.76 in 1998 and $.70 in 1997.

In 1998, the Company's Board of Directors established a Shareholder Rights Plan and distributed to shareholders one preferred stock purchase right for each outstanding share of common stock. Under certain circumstances, a right may be exercised to purchase one one-hundredth of a share of Series A Junior Preferred Stock at an exercise price of $160, subject to certain anti-dilution adjustments. The rights become exercisable ten (10) days after a public announcement that a party or group has either acquired at least 15% (or at least 25% in the case of existing holders who currently own 15% or more of the common stock), or commenced a tender offer for at least 25% of the Company's common stock. Generally, after the rights become exercisable, if the Company is a party to certain merger or business combination transactions, or transfers 50% or more of its assets or earnings power, or certain other events occur, each right will entitle its holders, other than the acquiring person, to buy a number of shares of common stock of the Company, or of the other party to the transaction, having a value of twice the exercise price of the right. The rights expire June 30, 2008, and may be redeemed by the Company for $.05 per right at any time until ten (10) days following the stock acquisition date. The Company is authorized to issue 200,000 shares of preferred stock, none of which have been issued. The Company has designated 50,000 shares of the preferred stock for the purpose of the Shareholder Rights Plan.

I. Business Segments and Foreign Operations

The Company and its subsidiaries are engaged in the manufacture and sale of power transmission equipment. Principal products include industrial clutches, hydraulic torque converters, fluid couplings, power-shift transmissions, marine transmissions, universal joints, power take-offs and reduction gears. The Company sells to both domestic and foreign customers in a variety of market areas, principally construction, industrial, energy and natural resources, marine and agricultural.

The Company has two reportable segments: manufacturing and distribution. These segments are managed separately because each provides different services and requires different technology and marketing strategies. The accounting practices of the segments are the same as those described in the summary of significant accounting policies. Transfers among segments are at established inter-company selling prices.

Information about the Company's segments is summarized as follows (in thousands):

	Manufacturing	Distribution	Total
1999			
Net sales	$156,661	$41,426	$198,087
Intra-segment sales	7,235	439	7,674
Inter-segment sales	21,545	726	22,271
Interest income	350	92	442
Interest expense	2,134	228	2,362
Income taxes	519	1,036	1,555
Depreciation and amortization	6,062	291	6,353
Segment earnings	1,147	170	1,317
Segment assets	152,251	25,448	177,699
Expenditures for segment assets	6,017	422	6,439

	Manufacturing	Distribution	Total
1998			
Net sales	$206,812	$46,981	$253,793
Intra-segment sales	24,358	502	24,860
Inter-segment sales	25,959	331	26,290
Interest income	626	129	755
Interest expense	1,481	229	1,710
Income taxes	6,246	1,649	7,895
Depreciation and amortization	5,244	274	5,518
Segment earnings	9,196	2,051	11,247
Segment assets	134,870	27,705	162,575
Expenditures for segment assets	6,626	528	7,154
1997			
Net sales	$189,375	$46,096	$235,471
Intra-segment sales	18,732	661	19,393
Inter-segment sales	26,002	134	26,136
Interest income	307	84	391
Interest expense	1,736	222	1,958
Income taxes	4,377	1,537	5,914
Depreciation and amortization	5,152	248	5,400
Segment earnings	6,707	2,576	9,283
Expenditures for segment assets	4,545	189	4,734

The following is a reconciliation of reportable segment net sales, earnings (loss) and assets, to the Company's consolidated totals (in thousands):

	1999	1998	1997
Net sales			
Total net sales from reportable segments	$198,087	$253,793	$235,471
Elimination of inter-company sales	(29,945)	(51,150)	(45,529)
Total consolidated net sales	$168,142	$202,643	$189,942
Earnings (loss)			
Total earnings (loss) from reportable segments	$ 1,317	$ 11,247	$ 9,283
Other corporate expenses	(2,335)	(1,884)	(1,554)
Total consolidated net earnings (loss)	$ (1,018)	$ 9,363	$ 7,729
Assets			
Total assets for reportable segments	$177,699	$162,575	
Elimination of inter-company assets	(15,871)	(13,570)	
Corporate assets	15,072	11,949	
Total consolidated assets	$176,900	$160,954	

Other significant items:

	Segment Totals	Adjustments	Consolidated Totals
1999			
Interest income	$ 442	$ (205)	$ 237
Interest expense	2,362	(292)	2,070
Income taxes	1,555	(523)	1,032
Depreciation and amortization	6,353	101	6,454
Expenditures for segment assets	6,439	–	6,439
1998			
Interest income	$ 755	$ (205)	$ 550
Interest expense	1,710	(205)	1,505
Income taxes	7,895	(1,213)	6,682
Depreciation and amortization	5,518	89	5,607
Expenditures for segment assets	7,154	–	7,154
1997			
Interest income	$ 391	$ 944	$ 1,335
Interest expense	1,958	(177)	1,781
Income taxes	5,914	(963)	4,951
Depreciation and amortization	5,400	89	5,489
Expenditures for segment assets	4,734	–	4,734

All adjustments represent inter-company eliminations and corporate amounts.

Geographic information about the Company is summarized as follows (in thousands):

	1999	1998	1997
Net sales			
United States	$106,051	$ 133,193	$ 117,965
Other countries	62,091	69,450	71,977
Total	$168,142	$202,643	$189,942
Long-lived assets			
United States	$ 65,540	$ 58,124	
Belgium	10,362	9,578	
Other countries	6,086	285	
Elimination of inter-company assets	(7,184)	(1,854)	
Total	$ 74,804	$ 66,133	

Included in earnings are foreign currency transaction gains (losses) of $(682,000), $(343,000) and $334,000 in 1999, 1998 and 1997, respectively.

Two customers each accounted for approximately 8%, 11% and 11% of consolidated net sales in 1999, 1998 and 1997, respectively.

J. Stock Option Plans

During fiscal 1999, the Company adopted the Twin Disc, Incorporated 1998 Stock Option Plan for Non-Employee Directors, a non-qualified plan, for non-employee directors to purchase up to 35,000 shares of common stock, and the Twin Disc, Incorporated 1998 Incentive Compensation Plan, a plan, where options are determined to be non-qualified or incentive at the date of grant, for officers and key employees to purchase up to 165,000 shares of common stock. The plans are administered by the Executive Selection and Compensation Committee of the Board of Directors which has the authority to determine which officers and key employees will be granted options. The grant of options to non-employee directors is fixed at options to purchase 1,000 shares of common stock per year or 600 at time of appointment. Except as described in the following sentence, all options allow for exercise prices not less than the grant date fair market value, immediately vest and expire ten years after the date of grant. For options under the Incentive Compensation Plan, if the optionee owns more than 10% of the total combined voting power of all classes of the Company's stock, the price will be not less than 110% of the grant date fair market value and the options expire five years after the grant date. In addition, the Company has 128,900 incentive stock option plan options and 76,450 non-qualified stock option plan options outstanding at June 30, 1999, under the Twin Disc, Incorporated 1988 Incentive Stock Option Plan and the Twin Disc, Incorporated 1988 Non-Qualified Stock Option Plan for Officers, Key Employees and Directors, respectively. The plans terminated during the year.

Shares available for future options as of June 30 were as follows:

	1999	1998
1998 Stock Option Plan for Non-Employee Directors	29,000	–
1998 Incentive Compensation Plan	159,500	–
1988 Non-Qualified Stock Option Plan for Officers, Key Employees and Directors	–	10,850
1988 Incentive Stock Option Plan	–	30,550

Stock option transactions under the plans during 1999, 1998 and 1997 were as follows:

	1999	Weighted Average Price	1998	Weighted Average Price	1997	Weighted Average Price
Non-qualified stock options:						
Options outstanding at beginning of year	80,500	$22.50	94,150	$21.71	95,350	$21.69
Granted	19,000	24.69	13,100	28.75	15,100	21.88
Cancelled	(14,700)	25.08	–	–	(10,400)	23.32
Exercised	(200)	26.00	(26,750)	22.81	(5,900)	19.03
Options outstanding at June 30	84,600	$22.55	80,500	$22.50	94,150	$21.71

Options price range		
($14.00 - $20.00)		
Number of shares	31,300	
Weighted average price	$ 19.10	
Weighted average remaining life	4.90	years
Options price range		
($20.875 - $28.75)		
Number of shares	53,300	
Weighted average price	$ 24.58	
Weighted average remaining life	7.02	years

	1999	Weighted Average Price	1998	Weighted Average Price	1997	Weighted Average Price
Incentive stock options:						
Options outstanding at beginning of year	124,300	$23.57	161,550	$21.60	151,450	$21.52
Granted	33,900	25.80	29,900	29.18	24,250	22.05
Cancelled	(23,950)	26.58	(7,050)	20.15	(10,150)	22.57
Exercised	(2,000)	16.63	(60,100)	21.53	(4,000)	18.81
Options outstanding at June 30	132,250	$23.70	124,300	$23.57	161,550	$21.60

Options price range		
($14.00 - $20.00)		
Number of shares	34,100	
Weighted average price	$ 18.87	
Weighted average remaining life	4.82	years
Options price range		
($20.875 - $28.75)		
Number of shares	92,650	
Weighted average price	$ 24.99	
Weighted average remaining life	7.48	years
Options price range		
($31.625 - $32.25)		
Number of shares	5,500	
Weighted average price	$ 31.74	
Weighted average remaining life	9.00	years

The Company accounts for its stock option plans under the guidelines of Accounting Principles Board Opinion No. 25. Accordingly, no compensation cost has been recognized in the statement of operations. Had the Company recognized compensation expense based on the fair value at the grant date for awards under the plans, consistent with the method prescribed by FAS 123, the net earnings and earnings per share would have been as follows (in thousands, except per share amounts):

	1999	1998	1997
Net earnings (loss)			
As reported	$(1,018)	$9,363	$7,729
Pro forma	(1,277)	9,125	7,554
Basic earnings (loss) per share			
As reported	$ (.36)	$ 3.30	$ 2.78
Pro forma	(.45)	3.22	2.72
Diluted earnings (loss) per share			
As reported	$ (.36)	$ 3.24	$ 2.75
Pro forma	(.45)	3.16	2.69

The above pro forma net earnings and earnings per share were computed using the fair value of options at the date of grant (for options granted after June 1995) as calculated by the Black-Scholes option-pricing method and the following assumptions: 19% volatility, 2.5% annual dividend yield, interest rates based on expected terms and grant dates, a 5-year term and an exercise price equal to the fair market value on the date of grant except for incentive options granted to greater than 10% shareholders which are calculated using a 3-year term and an exercise price equal to 110% of the fair market value on the date of grant. For those options granted during 1999, 1998 and 1997 with exercise prices equal to the grant date fair market value, the exercise prices and weighted average fair values of the options were $25.26 and $5.02 in 1999, $28.75 and $5.81 in 1998 and $21.88 and $4.61 in 1997, respectively. For those options granted with exercise prices greater than the grant date fair market value, the exercise prices and weighted average fair values of the options were $28.08 and $2.71 in 1999, $31.63 and $3.26 in 1998, $24.06 and $2.69 in 1997, respectively.

K. Engineering and Development Costs

Engineering and development costs include research and development expenses for new products, development and major improvements to existing products, and other charges for ongoing efforts to refine existing products. Research and development costs charged to operations totaled $2,505,000, $3,104,000 and $3,050,000 in 1999, 1998 and 1997, respectively. Total engineering and development costs were $7,829,000, $8,833,000 and $8,288,000 in 1999, 1998 and 1997, respectively.

L. Retirement Plans

The Company has noncontributory, qualified defined benefit pension plans covering substantially all domestic employees and certain foreign employees. Domestic plan benefits are based on years of service, and, for salaried employees, on average compensation for benefits earned prior to January 1, 1997, and on a cash balance plan for benefits earned after January 1, 1997. The Company's funding policy for the plans covering domestic employees is to contribute an actuarially determined amount which falls between the minimum and maximum amount that can be contributed for federal income tax purposes. Domestic plan assets consist principally of listed equity and fixed income securities.

In addition, the Company has unfunded, non-qualified retirement plans for certain management employees and directors. Benefits are based on final average compensation and vest upon retirement from the Company.

In addition to providing pension benefits, the Company provides health care and life insurance benefits for certain domestic retirees. All employees retiring after December 31, 1992, and electing to continue coverage through the Company's group plan, are required to pay 100% of the premium cost.

The following table sets forth the Company's defined benefit pension plans' and other postretirement benefit plans' funded status and the amounts recognized in the Company's balance sheets and income statements as of June 30 (in thousands):

	Pension Benefits		Other Postretirement Benefits	
	1999	1998	1999	1998
Change in benefit obligation:				
Benefit obligation, beginning of year	$104,156	$ 94,479	$ 28,619	$ 27,321
Service cost	1,517	1,328	23	21
Interest cost	7,254	7,235	1,978	2,152
Actuarial loss	11,384	8,835	4,548	1,558
Benefits paid	(8,446)	(7,721)	(2,419)	(2,433)
Benefit obligation, end of year	$115,865	$104,156	$ 32,749	$ 28,619
Change in plan assets:				
Fair value of assets, beginning of year	$100,265	$ 76,661	$ –	$ –
Actual return on plan assets	4,279	20,525	–	–
Employer contribution	2,185	10,800	2,419	2,433
Benefits paid	(8,446)	(7,721)	(2,419)	(2,433)
Fair value of assets, end of year	$ 98,283	$100,265	$ –	$ –
Funded status	$ (17,582)	$ (3,891)	$(32,749)	$ (28,619)
Unrecognized net transition obligation	836	1,043	–	–
Unrecognized actuarial loss	19,972	4,147	8,755	4,397
Unrecognized prior service cost	3,167	3,839	–	–
Net amount recognized	$ 6,393	$ 5,138	$(23,994)	$(24,222)
Amounts recognized in the balance sheet consist of:				
Prepaid benefit cost	$ –	$ 8,031	$ –	$ –
Accrued benefit liability	(16,343)	(8,058)	(23,994)	(24,222)
Intangible asset	3,385	4,082	–	–
Deferred tax asset	7,547	422	–	–
Minimum pension liability adjustment	11,804	661	–	–
Net amount recognized	$ 6,393	$ 5,138	$(23,994)	$(24,222)
Weighted average assumptions as of June 30:				
Discount rate	7.25%	7.25%	7.25%	7.25%
Expected return on plan assets	9.00%	9.00%		
Rate of compensation increase	5.00%	4.50%		

	Pension Benefits		
	1999	1998	1997
Service cost	$ 1,517	$ 1,328	$ 1,751
Interest cost	7,254	7,235	7,217
Expected return on plan assets	(8,617)	(6,750)	(5,312)
Amortization of prior service cost	672	672	995
Amortization of transition obligation	183	185	187
Recognized net actuarial loss (gain)	102	92	(1,329)
Net periodic benefit cost	$ 1,111	$ 2,762	$ 3,509

	Postretirement Benefits		
	1999	1998	1997
Service cost	$ 23	$ 21	$ 27
Interest cost	1,978	2,153	2,128
Expected return on plan assets	–	–	–
Amortization of prior service cost	–	–	–
Amortization of transition obligation	–	–	–
Recognized net actuarial loss	399	205	138
Net periodic benefit cost	$ 2,400	$ 2,379	$ 2,293

Effective January 1, 1998, the Company changed certain of its actuarial assumptions including the mortality table used and the assumed retirement age for the defined benefit plans and the postretirement plan. The changes resulted in an increase to the benefit obligation and unrecognized actuarial loss of approximately $10 million.

Effective as of January 1, 1997, the Twin Disc, Incorporated Retirement Plan for Salaried Employees was amended to freeze the benefit formula in effect prior to January 1, 1997, and to change the formula for benefit accruals to a cash balance pension plan. The effect of this change was to decrease the unrecognized prior service cost by $4.2 million.

The pension plans held 62,402 and 62,402 shares of Company stock with a fair market value of $1,252,000 and $1,888,000 at June 30, 1999 and 1998, respectively.

The assumed weighted average health care cost trend rate was 6% in fiscal year 1999 and remains constant thereafter. A 1% increase in the assumed health care cost trend would increase the accumulated postretirement benefit obligation by approximately $2.3 million and the interest cost by approximately $140,000. A 1% decrease in the assumed health care cost trend would decrease the accumulated postretirement benefit obligation by approximately $2.1 million and the interest cost by approximately $130,000.

The Company sponsors defined contribution plans covering substantially all domestic employees and certain foreign employees. These plans provide for employer contributions based primarily on employee participation. The total expense under the plans was $1,572,000, $1,582,000 and $1,487,000 in 1999, 1998 and 1997, respectively.

M. Income Taxes

United States and foreign earnings (loss) before income taxes were as follows (in thousands):

	1999	1998	1997
United States	$(3,555)	$ 7,944	$ 6,009
Foreign	3,569	8,101	6,671
	$ 14	$16,045	$12,680

The provision (credit) for income taxes is comprised of the following (in thousands):

	1999	1998	1997
Currently payable:			
Federal	$(1,376)	$ 154	$ 913
State	49	114	100
Foreign	2,359	3,541	2,457
	1,032	3,809	3,470
Deferred:			
Federal	402	2,582	1,559
State	(292)	183	(51)
Foreign	(110)	108	(27)
	–	2,873	1,481
	$ 1,032	$ 6,682	$ 4,951

The components of the net deferred tax asset as of June 30, were as follows (in thousands):

	1999	1998
Deferred tax assets:		
Retirement plans and employee benefits	$12,826	$ 8,074
Alternative minimum tax credit carryforwards	599	143
Foreign tax credit carryforwards	1,968	250
State net operating loss and other state credit carryforwards	1,075	–
Research credit carryforwards	135	–
Other	2,581	3,039
	19,184	11,506
Deferred tax liabilities:		
Property, plant and equipment	6,182	5,488
Other	2,649	2,790
	8,831	8,278
Total net deferred tax assets	$10,353	$ 3,228

Following is a reconciliation of the applicable U.S. federal income taxes to the actual income taxes reflected in the statements of operations:

	1999	1998	1997
U.S. federal income tax at 34%	$ 5	$5,455	$4,311
Increases (reductions) in tax resulting from:			
Foreign tax items	463	173	30
Accrual for prior years	74	705	470
Other, net	490	349	140
	$1,032	$6,682	$4,951

N. CONTINGENCIES

The Company is involved in various stages of investigation relative to hazardous waste sites, two of which are on the United States EPA National Priorities List (Superfund sites). The Company's assigned responsibility at each of the Superfund sites is less than 2%. The Company has also been requested to provide administrative information related to two other potential Superfund sites but has not yet been identified as a potentially responsible party. Additionally, the Company is subject to certain product liability matters in the normal course of business.

At June 30, 1999, the Company has accrued approximately $1,050,000, which represents management's best estimate available for possible losses related to these contingencies. This amount has been provided over the past several years. Based on the information available, the Company does not expect that any unrecorded liability related to these matters would materially affect the consolidated financial position, results of operations or cash flows.

O. ACQUISITIONS

In January 1999, the Company purchased the mechanical power take-off product business from Rockford Powertrain, Inc. for approximately $13.5 million. This transaction was accounted for using the purchase method of accounting and resulted in goodwill of approximately $11 million which is being amortized over 30 years. In February 1999, the Company purchased Technodrive S.p.A of Decima, Italy for approximately $3.9 million, net of cash acquired of $700,000. This transaction was accounted for using the purchase method of accounting and resulted in goodwill of approximately $2.9 million which is being amortized over 25 years. Technodrive manufactures industrial power take-offs, clutches, hydraulic pump mount drives and marine transmissions. The pro forma effects of the acquisitions are not significant to the net sales, net (loss) earnings, and earnings per share amounts reported in the financial statements.

P. CLOSURE OF SUBSIDIARY

In June 1999, the Company approved a plan to terminate operations at its South African subsidiary, Twin Disc (South Africa) Pty. Ltd, early in fiscal 2000. The Company has recorded a loss of $1,140,000 related to the termination of operations, which consists primarily of the recognition of cumulative translation losses of $829,000 with the remaining amounts related to disposals of inventories and fixed assets, and severance benefits. The results of the subsidiary's operations through June 30, 1999, are included in the consolidated financial statements.

REPORT OF INDEPENDENT ACCOUNTANTS

To the Shareholders
Twin Disc, Incorporated
Racine, Wisconsin

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, changes in shareholders' equity and comprehensive income and cash flows present fairly, in all material respects, the financial position of Twin Disc, Incorporated and Subsidiaries at June 30, 1999 and 1998, and the results of their operations and their cash flows for each of the three years in the period ended June 30, 1999, in conformity with generally accepted accounting principles. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with generally accepted auditing standards which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for the opinion expressed above.

PricewaterhouseCoopers LLP
Milwaukee, Wisconsin
July 23, 1999

Ten Year Financial Summary

(In thousands of dollars, except where noted)	1999	1998	1997
Statement of Operations			
Net sales	$168,142	$202,643	$189,942
Costs and expenses, including marketing, engineering and administrative	164,816	186,607	177,342
Earnings (loss) from operations	3,326	16,036	12,600
Other income (expense)	(3,312)	9	80
Earnings (loss) before income taxes	14	16,045	12,680
Income taxes (credits)	1,032	6,682	4,951
Net earnings (loss)	(1,018)	9,363	7,729
Balance Sheet			
Assets			
Cash and cash equivalents	4,136	5,087	8,983
Receivables, net	27,201	28,320	32,428
Inventories	54,500	53,280	47,844
Other current assets	11,910	6,893	8,707
Total current assets	97,747	93,580	97,962
Investments and other assets	40,218	31,646	26,544
Fixed assets less accumulated depreciation	38,935	35,728	34,249
Total assets	176,900	160,954	158,755
Liabilities and Shareholders' Equity			
Current liabilities	54,761	29,553	29,621
Long-term debt	17,112	19,949	19,944
Deferred liabilities	37,567	29,457	35,393
Shareholders' equity	67,460	81,995	73,797
Total liabilities and shareholders' equity	176,900	160,954	158,755
Comparative Financial Information			
Per share statistics:			
Basic earnings (loss)	(.36)	3.30	2.78
Diluted earnings (loss)	(.36)	3.24	2.75
Dividends	.805	.76	.70
Shareholders' equity	23.79	28.94	26.48
Return on equity	(1.5)%	11.4 %	10.5 %
Return on assets	(.6)%	5.8 %	4.9 %
Return on sales	(.6)%	4.6 %	4.1 %
Average shares outstanding	2,834,909	2,833,663	2,781,174
Diluted shares outstanding	2,843,877	2,886,209	2,808,226
Number of shareholder accounts	1,138	774	845
Number of employees	1,029	1,078	1,081
Additions to plant and equipment	6,439	7,154	4,734
Depreciation	5,648	5,205	5,141
Net working capital	42,986	64,027	68,341

1993 Net Earnings data and Return percentages reflect operating earnings before the effect of adopting Financial Accounting Standards 106 and 109. The cumulative effect of their adoption was a net loss of $14.44 million or $5.16 per share.

1996	1995	1994	1993	1992	1991	1990
$176,657	$164,232	$141,193	$139,403	$136,255	$152,990	$163,021
164,486	154,347	136,244	135,284	134,242	155,395	159,178
12,171	9,885	4,949	4,119	2,013	(2,405)	3,843
(1,264)	(1,301)	18	(95)	(162)	(721)	511
10,907	8,584	4,967	4,024	1,851	(3,126)	4,354
4,348	2,912	578	1,362	810	(711)	1,679
6,559	5,672	4,389	2,662	1,041	(2,415)	2,675
2,043	3,741	4,166	2,903	2,987	2,288	4,159
34,917	29,247	25,682	25,106	26,026	24,567	27,107
51,083	47,157	41,569	42,562	36,686	40,913	38,268
8,597	10,345	8,993	6,961	4,521	5,886	3,662
96,640	90,490	80,410	77,532	70,220	73,654	73,196
30,344	30,463	26,830	21,813	10,554	9,648	10,142
35,715	37,348	36,676	37,560	38,724	42,877	40,119
162,699	158,301	143,916	136,905	119,498	126,179	123,457
34,002	36,852	32,710	31,252	35,694	38,785	28,188
19,938	14,000	11,500	13,000	–	4,309	5,251
33,578	32,827	34,309	31,244	7,365	8,463	10,137
75,181	74,622	65,397	61,409	76,439	74,622	79,881
162,699	158,301	143,916	136,905	119,498	126,179	123,457
2.36	2.03	1.57	.95	.37	(.85)	.93
2.34	2.02	1.56	.95	.37	(.85)	.93
.70	.70	.70	.70	.70	.85	.90
27.07	26.75	23.36	21.93	27.10	26.42	27.89
8.7 %	7.6 %	6.7 %	4.3 %	1.4 %	(3.2) %	3.3%
4.0 %	3.6 %	3.0 %	1.9 %	.9 %	(1.9) %	2.2%
3.7 %	3.5 %	3.1 %	1.9 %	.8 %	(1.6) %	1.6%
2,776,805	2,790,111	2,799,390	2,799,603	2,820,513	2,824,815	2,864,526
2,805,123	2,812,703	2,809,390	2,806,603	2,823,885	2,826,123	2,864,526
913	996	1,058	1,139	1,214	1,271	1,349
1,080	1,097	1,099	1,114	1,221	1,483	1,676
4,140	4,290	4,216	4,684	4,390	8,218	7,084
5,071	4,792	4,670	4,958	5,452	5,568	5,207
62,638	53,638	47,700	46,280	34,526	34,869	45,008

Directors

Michael E. Batten
Chairman, Chief Executive Officer

Michael H. Joyce
President, Chief Operating Officer

James O. Parrish
Vice President-Finance & Treasurer

John A. Mellowes
Chairman and Chief Executive Officer
Charter Manufacturing Co.
(A privately held producer of bar, rod wire and wire parts)
Mequon, Wisconsin

Paul J. Powers
Chairman, President-Chief Executive Officer
Commercial Intertech Corp.
(Manufacturer of Hydraulic Components, Fluid Purification Products, Pre-Engineered Buildings and Stamped Metal Products)
Youngstown, Ohio

Richard T. Savage
Chairman and Retired President-Chief Executive Officer
Modine Manufacturing Company
(Manufacturer of Heat Exchange Equipment)
Racine, Wisconsin

David L. Swift
Retired Chairman, President-Chief Executive Officer
Acme-Cleveland Corporation
(Manufacturer of Diversified Industrial Products)
Pepper Pike, Ohio

George E. Wardeberg
Chairman-Chief Executive Officer
WICOR, Inc.
(Parent Company of Wisconsin Gas Company, Sta-Rite Industries, Incorporated and Wexco of Delaware, Incorporated)
Milwaukee, Wisconsin

David R. Zimmer
Former Executive Vice President
United Dominion Industries
(Manufacturer of Proprietary Engineered Products)
Charlotte, North Carolina

Officers

Michael E. Batten
Chairman, Chief Executive Officer

Michael H. Joyce
President, Chief Operating Officer

James O. Parrish
Vice President–Finance & Treasurer

Henri-Claude Fabry
Vice President–Marine and Distribution

Lance J. Melik
Vice President–Corporate Development
Vice President–Transmission and Industrial Marketing

Fred H. Timm
Corporate Controller & Secretary

Paul A. Pelligrino
Vice President–Engineering

Arthur A. Zintek
Vice President–Human Resources

Corporate Data

Annual Meeting
Twin Disc Corporate Offices
Racine, Wisconsin
2:00 P.M.
October 15, 1999

Shares Traded
New York Stock Exchange: Symbol TDI

Annual Report on Securities and Exchange Commission Form 10-K
Single copies of the Company's 1999 Annual Report on Securities and Exchange Commission Form 10-K will be provided without charge to shareholders after September 30, 1999, upon written request directed to the Secretary, Twin Disc, Incorporated, 1328 Racine Street, Racine, Wisconsin 53403.

Transfer Agent & Registrar
Firstar Trust Company
Milwaukee, Wisconsin

Independent Accountants
PricewaterhouseCoopers LLP
Milwaukee, Wisconsin

General Counsel
von Briesen, Purtell, & Roper, s.c.
Milwaukee, Wisconsin

Corporate Offices
Twin Disc, Incorporated
Racine, Wisconsin 53403
Telephone: (262) 638-4000

Wholly-Owned Subsidiaries
Twin Disc International S.A.
Nivelles, Belgium
Twin Disc Spain, S.A.
Madrid, Spain
Twin Disc Italia S.R.L.
Viareggio, Italy
Technodrive S.p.A.
Decima, Italy
Twin Disc (Pacific) Pty. Ltd.
Brisbane, Queensland, Australia
Twin Disc (Far East) Ltd.
Singapore
Twin Disc (South Africa) Pty. Ltd.
Johannesburg, South Africa
Mill-Log Equipment Co., Inc.
Coburg, Oregon
Southern Diesel Systems Inc.
Miami, Florida
TD Electronics, Inc.
Loves Park, Illinois

Partially Owned Affiliate Companies
Niigata Converter Company, Ltd.
Kamo, Omiya and Tokyo, Japan
Palmer Johnson Distributors, LLC
Sturgeon Bay, Wisconsin

Manufacturing Facilities
Racine, Wisconsin
Nivelles, Belgium
Kamo and Omiya, Japan
Decima, Italy

Sales Offices
Domestic
Racine, Wisconsin
Coburg, Oregon
Seattle, Washington
Miami, Florida
Jacksonville, Florida
Overseas
Nivelles, Belgium
Brisbane and Perth, Australia
Singapore
Johannesburg, South Africa
Madrid, Spain
Viareggio, Italy
Decima, Italy
Chambery, France
Affiliate Company
Tokyo, Japan
Sturgeon Bay, Wisconsin

Manufacturing Licenses
Niigata Converter Company, Ltd.
Tokyo, Japan
Transfluid S.R.L.
Milan, Italy
Nakamura Jico Co. Ltd.
Tokyo, Japan
Hindustan Motors, Ltd.
Madras, India

WWW.TWINDISC.COM

Twin Disc, Incorporated

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