

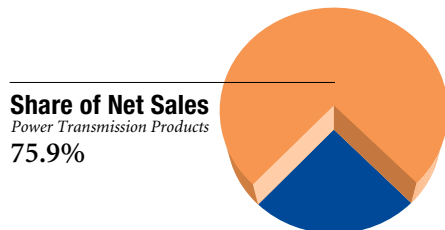
# Power Transmission Products

**S**ales of power transmission products in the year ended March 31, 2000, rose 2.3%, to ¥80.7 billion (US\$761.5 million), accounting for 75.9% of consolidated net sales. Overseas sales decreased 4.5%, to ¥27.2 billion (US\$256.3 million), representing 33.7% of sales of power transmission products. The division's consolidated operating income was up 15.1%, to ¥6.2 billion (US\$58.1 million).

The Japanese economy was sluggish during the past year, with no recovery in consumer spending and continued weakness in private-sector capital investment. In this setting, Tsubakimoto Chain succeeded in increasing sales and profits by instituting projects

designed to strengthen relationships with existing customers and attract new customers.

Overseas, our subsidiaries in Asia recorded strong recoveries, with sales rising by large margins. Although the appreciation of the yen against the euro led to an unfavorable market environment in Europe, European subsidiary Tsubakimoto Europe B.V. was able to earn a profit despite a decline in sales. In the important North American market, we recorded higher sales of timing chains to automakers, but sales of chains to general industrial customers declined, and overall sales decreased from the previous year.



## Sales Breakdown

	Millions of Yen			% Change 2000/1999
	2000	1999	1998	
Domestic Sales	¥53,557 (66.3)	¥50,429 (63.9)	¥60,250 (67.7)	+6.2
Overseas Sales	27,163 (33.7)	28,446 (36.1)	28,804 (32.3)	-4.5
<b>Total Sales</b>	<b>¥80,720 (100.0)</b>	<b>¥78,875 (100.0)</b>	<b>¥89,054 (100.0)</b>	<b>+2.3</b>
Operating Income	¥6,161	¥5,353	¥8,532	+15.1

During the fiscal year, Tsubakimoto Chain made further progress in reorganizing its domestic operations. In November 1999, we combined six consolidated subsidiaries and affiliates into Tsubakimoto Machinery Co. We also closed eight domestic sales offices and consolidated their operations into a branch office and a marketing office. As a result, we succeeded in raising the efficiency of our sales activities and strengthening our corporate constitution.

### Chains

As one of the world's leading chain makers, Tsubakimoto Chain supplies a broad range of industries with advanced, high-performance chain products. The quality of our products and our technical development capabilities are highly regarded by customers.

Our sales of chains in Japan for

the full fiscal year were unchanged from the previous year. In contrast to the sluggish demand in the first half of the year, conditions in the second half turned toward recovery. In the second half of the year, orders increased 7% from the first half and sales rose 10%. This improvement was due primarily to higher sales of such products as small conveyor chains and plastic Cableveyors to the information technology, machine tool, and food processing industries. In particular, sales of plastic Cableveyors (sup-

#### Clip top chains



port and protection products for cables and hoses, made with engineering plastic) for use in ATMs and other information processing equipment were strong. Sales of these products in the year under review increased 20% from the previous year, and in the second half of the year under review they rose at an even faster pace, 32% year on year. Sales of small conveyor chains rose 10% from the previous year, supported by strong demand from the food processing, light electrical, and semiconductor industries. Sales of Auto Tool Changer (ATC) chains for machine tools recovered, up 39% year on year in the second half.

Sales of medium- and large-size conveyor chains declined. Demand was favorable in some applications, such as incinerators, where investment has been spurred by the dioxin issue, and automobile production lines. Nonetheless,



*Plastic chains for conveying PET bottles*

conditions remained sluggish in key industries, such as steel and cement, and market prices came under growing pressure from imports.

In North America, demand for chains for general industrial applications was weak. In South America, however, we secured large orders for conveyor chains from the steel and cement industries. In Asia, economic recovery led to growth in sales of smaller products.

### **Power Transmission Units and Components**

In addition to chains, Tsubakimoto Chain provides a wide range of other highly regarded power transmission products, including reducers, such as gear motors and gear boxes; motion control units, such as Power Cylinders; couplings; and Cam Clutches.

There were several bright spots during the past year. Sales of motion control units, for example, increased 9% from the previous year, and sales of variable-speed drives were up 8%. In addition, we took steps to strengthen Tsubakimoto Sprocket Mfg., Ltd. In April 1999, a sales division was established at the company, which had previously operated as a Tsubakimoto Chain's production subsidiary. Tsubakimoto Sprocket subsequently began to market its products directly to customers as a specialized sprocket manufacturer, and as a result orders and sales in the second half of the year increased significantly.

In motion control units, we secured large orders for electro-mechanical actuators, such as Power Cylinders and Lini Power

Jacks, for use in event halls and other public facilities in Japan and elsewhere in Asia. These products were highly evaluated for their low environmental impact, which results from the use of electro-mechanical technology, and for their contribution to reducing energy consumption in facilities with low utilization rates. In addition, reflecting the growing investment in information technology, we recorded increased orders for products used in LCD and semiconductor manufacturing equipment as well as higher exports.

In variable-speed drives, sales of shaft-mounted Hypoid Motors rose 31% from the previous year. This increase was due primarily to their ease of installation and to the manner in which they facilitate layout selection. With monthly sales in excess of ¥50 million, shaft-mounted Hypoid Motors have become one of our key products. Sales of these products for use in distribution and food processing equipment were strong, and their use in stairway ascent/descent equipment and chip conveyors increased. In addition, the range of applications for these products is expanding to include such areas as waste processing equipment made by large electrical equipment manufacturers.

In the five years since we entered the market for health care products, our units for converting hand-operated adjustable beds to electric operation have become a key product, with cumulative sales surpassing 16,000 during the past year. In April 2000, we began sales of a low electric bed that is better suited for use in Japanese-style

*Lini Power Jacks*



rooms. We also launched a product that makes it easier for those with physical disabilities to take off and put on their shoes when entering or leaving the house and an adjustable-height sink designed for use by people in wheelchairs and small children. In Japan, a home care insurance system has been established, and in the years ahead we will work to further expand our

*Electrically operated reclining bed for senior citizens*



health care operations by making full use of our power transmission and materials handling technologies.

### **Automotive Parts**

Tsubakimoto Chain is one of the leading manufacturers of timing drive systems for automotive engines, and the Company provides products to leading automakers in Japan and overseas. For timing chains, we have a market share of more than 90% in Japan and of 10% in the United States. In recent years, automakers have made increasing use of steel chains, an area in which we have particular strengths. As a result, we are recording strong sales of timing chains and other camshaft drive systems in Japan and the United States, and we expect these products to play a key role in our growth over the medium to long term. We provide a more detailed operational overview and outlook for our timing drive systems and timing chains



Ultra PX Belts

in the special section of this annual report.

Timing belts for general industrial applications are one of our key products in this division, and during the year under review we recorded double digit increases in both orders and sales of these products. In June 1999, we began sales of high-strength Ultra PX Belts, which meet customer needs for the electro-

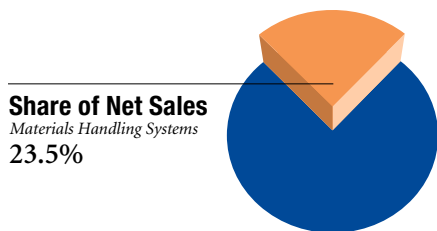
mechanical operation of injection molding machines. This product, which boasts superior noise emission characteristics, has already been selected for use by six large customers. In addition, office automation equipment is a key source of demand for timing belts, and sales for these applications increased during the past year. Favorable demand from manufacturers of semiconduc-

tor production robots and financial equipment, such as ATMs, also made a contribution to the improved performance.

# Materials Handling Systems

**S**ales of materials handling systems declined 20.3% during the year under review, to ¥25.0 billion (US\$236.0 million), accounting for 23.5% of consolidated net sales. Overseas sales were down 48.4%, to ¥5.6 billion (US\$53.0 million), representing 22.5% of our sales of materials handling systems. The division's operating loss increased from ¥292 million in the previous year to ¥823 million (US\$7.8 million) in the year under review.

Domestic sales were significantly affected by continued weakness in private-sector capital investment. In overseas markets, orders were down during the year under review following the receipt of several large-scale orders from Japanese companies in the previous fiscal year. These factors were the principal reasons for the decline in the division's performance during the past year.



Sales Breakdown	Millions of Yen			% Change 2000/1999
	2000	1999	1998	
Domestic Sales	¥19,395 (77.5)	¥20,502 (65.3)	¥29,349 (75.9)	-5.4
Overseas Sales	5,623 (22.5)	10,901 (34.7)	9,321 (24.1)	-48.4
<b>Total Sales</b>	<b>¥25,018 (100.0)</b>	<b>¥31,403 (100.0)</b>	<b>¥38,670 (100.0)</b>	<b>-20.3</b>
Operating (Loss) Income	¥(823)	¥(292)	¥1,068	-

The Materials Handling Systems Division has registered declining revenues in recent years, and to return the division to profitability we are moving forward with operational rationalization measures. In April 1999, the Company merged with two consolidated subsidiaries, Tsubakimoto Tech, Inc., and Tsubakimoto Koki Industry Co., Ltd. In addition, at the end of 1999, we reduced fixed costs further through the consolidation of production bases by transferring the operations of our Hyogo Plant to our Saitama

Plant. As a result, we have reduced the number of domestic production bases from four at the beginning of the previous fiscal year to one, the Saitama Plant, at the end of the year under review. We have also made progress with workforce reductions, and by the end of March 2000 the number of employees in the division was down by nearly 40% from its peak of 800, to 500.

*New Traverser System, an automotive body paint shop conveyor system*



## Factory Automation and Physical Distribution Systems

Tsubakimoto Chain provides advanced factory automation systems to a wide range of industries, such as automobiles, electrical and electronic equipment, paper manufacturing, newspaper, and steel, and the technical strength of the Company's products is highly regarded. The Company also offers a complete lineup of advanced physical distribution systems to logistics centers in a



wide range of industries, including publishing, shipping, apparel, sundries, and retail. Through these products, the Company is making a significant contribution to rationalization in the distribution industry.

Paint shop conveyor systems are among our most important factory automation systems for the automotive industry. In response to environmental problems in the painting process, automakers have begun to step up capital investment. The key trend in paint shop conveyor systems, however, is toward simpler, lower-priced models. In this setting, we developed new light dolly and friction models and secured orders by making detailed responses to customer needs. Nonetheless, we were unable to avoid a decline in orders. In the United States, demand for large systems slackened, and our consolidated subsidiary's sales declined significantly. We were able to earn a profit, however, due to concerted efforts to reduce the costs incurred in fulfilling each order and to increased sales of component products.

In factory automation systems for the newspaper industry, our principal products are the AGV and ADS automatic roll paper feeding systems. With these products, we have a competitive edge in both function and price, but market conditions were difficult in the past year due to low replacement demand in the newspaper industry. In the future, we expect an increase in capital investment as customers take steps to introduce color capabilities and to boost capacity in advance of the 2002 World Cup. We believe

**AGV automatic roll paper feeding system**



that demand bottomed out in the year under review and should begin to improve hereafter.



**Roll paper storage system for the newspaper industry**

During the year, we secured orders for large systems for use in the mechatronics field. These included LCD stockers, demand for which increased as information technology companies bolstered their facilities, and large CRT conveyance equipment, which benefited from the growth of digital television. In conjunction with the introduction of the HACCP (hazard analysis critical control point) food safety system, companies in the meat processing industry stepped up investment in new facilities, and demand for overhead conveyors increased.

In distribution systems, our operating environment was marked



**Linisort**

by declining investment in distribution in all industries and by continued intense price competition. As a result, orders and sales declined from the previous year.

**Maintenance**

As materials handling systems become more advanced and



**CoKanDo inspection tool for determining the lifespan of photoelectric sensors**

computerized, a higher level of maintenance is required. In the previous fiscal year, Tsubakimoto Chain took the lead in the industry with the establishment of a maintenance services business.

In the year under review, our long-term maintenance contracts proved popular, especially in the newspaper industry. Due to higher orders from the mechatronics industry, we were able to increase sales from the previous year. In the first half of 2000, we began sales over the Internet of two new maintenance tools. TASCAL is nonscatter maintenance oil, and CoKanDo is an inspection tool for determining the lifespan of photoelectric sensors.

**Subsidiaries**

Sales at Tsubakimoto Bulk Systems Corporation were down during the year under review due to sluggish conditions in the cement industry, an important source of demand. However, the company earned a profit by reducing fixed expenses and thoroughly controlling costs for each order. Tsubakimoto Mayfran Inc., which is newly consolidated for the year under review, supplies chip conveyors, principally for the machine tool industry, and recorded an increase in orders in the second half of the fiscal year. Korea Conveyor Ind. Co., Ltd., which is also newly consolidated from the year under review, strengthened its marketing in an environment marked by ongoing management rationalization programs at Korea's automakers, and as a result sales increased slightly. Due to lower profitability on orders, however, the company did not earn a profit.