THK ANNUAL REPORT '99

## PROFILE

In April 1971, Hiroshi Teramachi (currently THK's Senior Advisor) founded Toho Seiko Co., Ltd. in Meguro Ward, Tokyo. The following year, the Company successfully developed a method for linear motion (LM) with rolling contact, and began producing and marketing LM guides, splines and other products utilizing this new technology. In 1977, Toho Seiko began the manufacture and sale of ball screws from its newly acquired Kofu Plant.

The following years saw rapid growth in domestic sales and corresponding expansion overseas, as marketing capabilities were established in the United States and West Germany in 1981 and 1982, respectively. Reemerging in 1984 as THK Co., Ltd., the Company moved to expand production and marketing capabilities and create a leading position in LM guides through a string of activities, including construction of a plant in Yamaguchi, acquisition of plants, investments in related companies and establishment of a network of marketing bases.

THK shares began trading on the over-the-counter market in November 1989. Building on this momentum, management launched its next-generation Global 10 21 strategy aimed at remaking THK as a global corporation for the 21st century through steady expansion of its international production and marketing network. Results have included a new plant in Yamagata, acquisition of a ball screw production company in the United Kingdom, establishment of a joint venture for ball screw production in China, and in 1997, launch of a full-scale LM guide manufacturing company in the United States.

In new products, THK succeeded in development of a nextgeneration LM guide with Caged Ball Technology™ in 1996.

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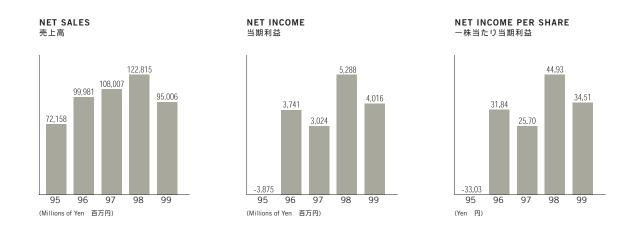
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1971年4月に東京都目黒区において現最高顧問である寺町博が東邦精工株式会 社を設立し、翌年直線運動軸受のころがり案内化に成功しLMガイド、スプラ イン等の生産・販売を開始する。1977年甲府工場買収を経てボールねじ製造販 売開始、その後国内売上の急成長と共に海外売上も拡大し、1981年米国、1982 年西独に海外販売体制を確立する。1984年商号をTHK株式会社に変更し、以 降山口工場新設、工場買収、資本参加および販売拠点の設立により国内生産・ 販売体制の確立を推進し、直動システムの主導的地位を築く。1989年11月株式 店頭公開を果たし、これを機にTHKの次期戦略として「グローバル10 21」を 掲げ、21世紀には世界的企業を実現するための国際的生産・販売体制構築に着 手し山形工場新設、英国ボールねじ生産現法買収、中国合弁ボールねじ生産現 法の設立を経て、1997年米国にLMガイドの本格的生産現法を設立した。また、 製品面では1996年次世代型リテーナ入りLMガイドの開発に成功し、現在に至る。

## **CONSOLIDATED FINANCIAL HIGHLIGHTS**

		Millions of Yen		Thousands of U.S. Dollars
	1997	1998	1999	1999
NET SALES 売上高	¥108,007	¥122,815	¥ 95,006	\$ 788,105
OPERATING INCOME 営業利益	18,267	22,896	11,385	94,442
NET INCOME 当期利益	3,024	5,288	4,016	33,314
TOTAL ASSETS 総資産	221,481	222,258	194,385	1,612,484
TOTAL SHAREHOLDERS' EQUITY 純資産	73,962	79,367	78,242	649,042
		Yen		U.S. Dollars
NET INCOME PER SHARE 一株当たり当期利益	¥ 25.70	¥ 44.93	¥ 34.51	\$ 0.286

Note : For convenience only, U.S. dollar amounts in this report have been converted from yen at the rate of ¥120.55=US\$1, the approximate rate of exchange prevailing on March 31, 1999.



## MESSAGE FROM THE CEO

#### FUNDAMENTAL POLICY FOR THE CURRENT TERM

I believe that we lose our competitiveness when we stop changing—pretending that we can continue the conventional way or believing that the way of the past is the only way.

With this in mind, we established the following three points as the basis of our fundamental policy for reform:

- 1) Reform means disregarding past successes
- 2) Reform begins with action
- 3) Reform requires everyone's involvement

#### TO BECOME A TRUE GLOBAL PLAYER

THK's management slogan is Global 10 21 (or Ten *Nijuichi* as it is pronounced at THK). This means achieving growth in the 21st century by becoming one of the world's top ten manufacturers of essential machinery components, and then working to solidify our position. However, it also means that for THK to become a true global player, reform and greater management efforts are essential. Disregarding previous successes, coolly and accurately analyzing the operating environment and implementing

今年度の基本方針

変化に対し「昔から続いている」とか「昔からあたりまえ」と、変化の波を避けた時、私達は競争から落伍してしまいます。 この状況を踏まえ、今年度の基本方針として「変革」をテーマに三つの心得を設定しました。

1)変革は過去の成功を捨てることである。

2) 変革は行動することから全てが始まる。

3) 変革は一人一人がやらなければならない。

真のグローバル企業になるために

THKは経営スローガンとして「グローバル10 21(グローバル テン にじゅういち)」を掲げています。このスローガンは、 "21世紀には機械要素部品メーカーとして世界のトップ10に数えられる企業に成長し、その地位を固めよう"という私達の決 意を表したものです。しかし、もう一方で、THKが真のグローバル企業になるためには、今まで以上の経営努力と変革が 必要であるとの意味合いも含まれています。つまりは、過去の成功体験を捨て、THKの置かれている現状を冷静かつ正確 に認識し、将来の発展のための変革が必要不可欠なのです。THKは常に変革し続ける企業でありたいと考えています。 reforms for future business growth are crucial. We see THK as a company of continuous innovation.

#### STRATEGY FOR INCREASING CORPORATE VALUE

THK is a company focused on creation and development, providing customers with new mechanisms based on original ideas and technology. The core of THK is this policy sustained by continuous efforts in research and development. We will concentrate on increasing corporate value by maintaining this fundamental stance while promoting such dynamic areas as globalization and consumer market development.

#### 企業価値の増大を目指して

THKは独創的な発想と独自の技術により世にない新しい メカニズムを提案してゆく創造開発型企業であり、たゆまぬ 研究開発に支えられたこの姿勢こそTHKの事業基盤である と言えます。私は、これからもこの基本姿勢を貫いていくと ともに、グローバル展開や民生分野への進出などの積極経営 を推し進め、企業価値の増大を目指していきます。

Akihino Tenamach

AKIHIRO TERAMACHI, President and CEO

音竹南巷

代表取締役社長 寺町 彰博

## **GLOBAL 10 21**

#### GLOBAL 10 21

Global 10 21 (or Ten *Nijuichi* as it is pronounced at THK) is about growing into one of the world's top ten manufacturers of essential machinery components during the first 15 years of the 21st century, and then working to solidify this position.

The origin of this long-term target dates back to 1989, when shares of THK first began trading on the over-the-counter market. At that time, we developed a concrete vision of what we needed to do become a global corporation in the ten years before the 21st century. As such, this long-term target embodies our renewed efforts for reform.

The combined English-Japanese pronunciation of Global 10 21 reflects management's conviction that amid advancing globalization, in addition to clarifying the identity of Japan, mutual collaboration with countries overseas is essential. Subsequently, English and Japanese pronunciations are used together in companies throughout the THK Group, including overseas subsidiaries.

#### EXPANDING GLOBAL BUSINESS

Although overseas sales currently account for 30% of THK Group net sales, penetration of THK products in overseas markets is unsatisfactory. With overseas markets far larger in scale than the Japanese market, THK has set a target of up to 70% overseas sales as a percentage of Group net sales.

In addition to strengthening our overseas marketing network, we are simultaneously building a network of overseas production bases. THK Manufacturing of America, Inc. was established in 1997 in Ohio, U.S.A., and has rapidly built up its production capabilities. THK is examining the possibility of further production bases in Europe.

#### 『グローバル10 21(テン にじゅういち)』とは

21世紀初頭(2015年頃)には機械要素部品メーカーの中で世界の十指に数えられる企業に成長し、その地 位を固めようという当社のスローガンです。

この言葉は、THKが1989年に店頭市場に公開した際に掲げたものであり、21世紀までの10年で世界企業 となるために何をしなければならないか、ということが非常に重要であるとの認識に立ち、変革に取り組む 姿勢を新たにしたという意味も含めています。

「10 21」を"テン にじゅういち"と発音するのは、グローバル化を進めていく中で、日本という国をしっかりと位置づけ、日本と海外の有機的な融合を図っていかなければならないとの思いを込め、THKグル ープ全体、海外現地法人に至るまで、あえて英語と日本語で発音することにしたのです。

#### グローバルなビジネス展開

現在、グループ全体の海外売上比率は30%に過ぎず、海外市場における普及があまり進んでいないのが現 状です。日本国内に比べてはるかに大きい海外市場において積極的、かつ速やかにビジネス領域を拡大して いくことが大命題であり、将来的に海外売上比率を70%にまで引き上げることを目標としています。

海外での販売体制の拡充を進める一方、現地生産拠点の整備についても並行して進めています。1997年設 立の米国オハイオ州のTHK Manufacturing of America, Inc.は、急ピッチで生産体制を整えつつあり、また欧 州における生産拠点の検討も着々と進めています。

#### CULTIVATING NEW MARKETS

THK's products are used in such industries as machine tools, industrial robots and semiconductor manufacturing equipment. However, we believe that achieving Global 10 21 is impossible if we restrict our sales to capital investment-related industries alone. As such, we have concentrated on cultivating new markets. Convinced that potential demand in such consumer products fields as kitchen systems and automatic home furniture systems accounts for trillions of yen, we carried out aggressive PR activities in Japan and overseas—in fact all around the world—targeting main industries and industries with special characteristics in each country. The result has been a steady expansion of our business base.

#### PROGRESS WITH REFORM

A large variety of reform programs are under way as part of companywide efforts to reach management goals.

TAP (THK Advantage Program)

TAP 1 (begun April 1998)

Establish a strong management system for Sales Division; improve the capabilities of each member of the sales staff

TAP 2 (begun 1997, reinforced and relaunched August 1998)

Establish production system that can respond to change

TAP 3 (Scheduled to begin 1999)

Create administrative functions to support Sales and Production Divisions

In addition, we are promoting a wide variety of reforms with such programs as CRP(Cost Reduction Program), for improving cost control and enhancing cost-awareness; Q(Quality)-project for ensuring quality; and the financial strategy project. These projects are all showing results. One of the goals of these reforms is embodied in the concept "THK—a Group of self-driven employees." Through this program, we aim to make each of our employees a lively and self-sustaining force at THK.

#### 新市場開拓

THK製品は、主に工作機械、産業用ロボット、半導体製造装置等に使われていますが、THKでは、早くから設備産業主体の販売にとどまっていたのでは『グローバル10 21』の達成はあり得ないと考え、新分野の開拓に目を向けてまいりました。 民生品を含む新市場の潜在需要を数兆円規模と考えており、日本国内・海外を問わず全世界において、その国で特徴的で、 かつ強い産業へのピーアールを積極的に展開し、着実にすそ野を拡げてきました。

#### 変革の推進

このような目標を実現するために全社で取り組んでいるものに、各種変革活動があります。

TAP (THK Advantage Program)活動の推進

TAP1(98年4月スタート)

- 営業部門のマネジメントシステムの定着と営業マン個々人の能力の向上

TAP2(97年スタート、98年8月より一層の強化、推進)

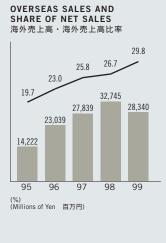
- 変化に対応できる生産の仕組みの確立

TAP3(99年スタート予定)

- 販売、生産部門に対する管理部門の支援態勢の構築

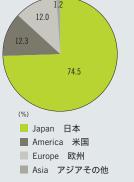
その他にも原価管理体制の確立と原価意識の高揚を目的としたCRP(Cost Reduction Program)や、品質の作り込みのためのQ(Quality)プロジェクトや財務戦略プロジェクト等、多方面において変革活動を推進しており、それぞれ着実に成果をあげています。これらの変革活動の目的の一つには、"自活した社員の集団 THK"があり、THKに関わる社員一人一人が、 自活し、活き活きとしたものとなれるようプログラムされています。

### **REVIEW OF OPERATIONS**









# Consolidated net sales for the fiscal year ended March 31, 1999, decreased 22.6% to \$95,006 million (US\$788.1 million). Demand for THK products contracted as private investment in Japan declined amid a general feeling of excess capacity, and major customers in capital investment-related industries cut back on production after a rapid strengthening of the yen in the second half of the term.

Overseas, although sales in Europe grew robustly on the back of strong economic fundamentals, demand for THK products fell in Asia, chiefly due to a prolonged recession caused by the regional currency crises and financial turmoil, and sluggish export activity in the U.S. manufacturing industry resulting from this recession.

Demand for the Company's mainstay LM guides and ball screws was stagnant due to controls on capital investment and adjustments to production output in the semiconductor manufacturing device and machine tool industries. In addition, readjusted production output in the robotics, automotive and transport equipment-related industries led to a drop in demand for conventional bearings.

Although sales declined substantially from the previous term, the Company's efforts to promote TAP (THK Advantage Program) resulted in reduced costs in production, sales and distribution. Consequently, the increase in cost of sales as a percentage of net sales was held to 1.7 percentage points, from 66.1% to 67.8%. We believe this represents a move towards comparatively smaller increases in cost

#### 営業概況

1999年3月31日に終了した当会計年度の連結売上高は前期に比較して22.6%減の950億6百万 円となりました。国内においては設備過剰感の高まりから民間設備投資が大幅に減少した ことや下期より急激に円高に転じた為替の影響により主力ユーザーが減産を強化したため、 当社製品の需要も大幅に落ち込みました。海外におきましては、欧州においては総じて底 堅い経済情勢に支えられ順調に売上を伸ばしたものの、通貨・金融危機に端を発した経済 不況が依然続く東南アジア諸国や、その影響を受けて輸出の低迷する米国の製造業におけ る当社製品の需要は減少を余儀なくされました。

主力製品であるLMガイドおよび送りねじ類につきましては半導体製造装置業界、工作 機械業界等の生産調整ならびに設備投資の抑制により、また、特殊軸受についてもロボッ ト業界、自動車およびその他輸送機器関連の生産調整に伴い総じて需要が低迷しました。

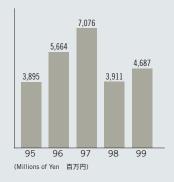
一方、損益の状況につきましては、売上高が前期に比較して大幅に落ち込んだものの、 TAP(THK Advantage Program)活動の推進により、生産コスト、販売・物流コストの 削減に努め、売上原価率は前期の66.1%から当期は67.8%と、比較的少ない上昇率に抑える ことが出来たものと考えます。しかしながら売上高減少の影響は大きく、営業利益は前期 of sales. However, the substantial impact of slumping sales resulted in a 50.3% decline in operating income to ¥11,385 million (US\$94.4 million) and a 43.1% decrease in income before income taxes to ¥7,698 million (US\$63.8 million). Net income fell 24.1% to ¥4,016 million (US\$33.3 million).

On a non-consolidated basis, the Company posted a net loss of \$10,411 million (US\$86.3 million) for the fiscal year ended March 31, 1999, as a result of a \$13,603 million (US\$112.8 million) extraordinary loss due to a write-down in shares of an affiliated company. However, on a consolidated basis, the shares of this affiliate had already been valued in accordance with equity per share. Consequently, the non-consolidated write-down had no effect on consolidated results.

#### VIEW FOR THE FUTURE

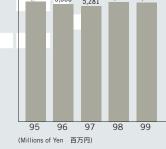
Amid the waves of change currently roiling industry, management cannot afford even a slight delay in building a strong revenue base and financial structure. To face these circumstances, the Company is planning aggressive development of new products that meet environmental standards, while reorganizing its structure to rapidly establish competitiveness in world marketing. With an accurate grasp of user needs, THK is committed to providing products that satisfy customers, and creating and expanding new demand.

#### CAPITAL EXPENDITURES 設備投資額

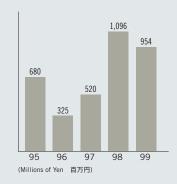


減価償却費 5,488 5,385 5,281 <sup>5,480</sup> 5,450

DEPRECIATION AND AMORTISATION



R&D EXPENSES 研究開発費

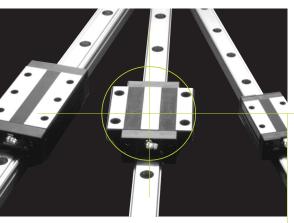


比50.3%減の113億8千5百万円、経常利益は前期比43.1%減の76億9千8百万円、当期純利益は前期比24.1%減の40億1千6百万円となりました。

なお、単独決算における当期純損益は、特別損失に関係会社株式評価損として136億3百万 円を計上したことなどにより104億1千1百万円の当期純損失となっておりますが、評価損を 計上することとなった関係会社株式につきまして、過年度連結決算において既に1株あたり の純資産額にて評価を行っており、当年度の連結決算には影響はございません。

#### 今後の展望

様々な変革の波に晒されている現代において、より強固な事業基盤の構築を推進してい くには一刻の猶予もありません。このような状況に対して、当社といたしましては、世界 市場を視野に入れた競争力を早期に確立するために、機構改革・構築を計ると共に、環境 対策に配慮した新製品の開発と、ユーザーニーズを的確に捉えた顧客満足の得られる製品 提供で、新しい需要の創造拡大に努めて参ります。



LM GUIDES

LM guides, the Company's mainstay product, have led the world with original technology enabling linear motion through rolling contact. Compared with previous systems utilizing a sliding mechanism, THK's LM guides possess numerous merits, including:

- 1) Compact size coupled with the ability to support large loads
- 2) Ability to realize systems with high positioning accuracy
- 3) Ease of assembly that reduces total cost

Since the development of LM Guides, these essential machinery components have become the core of the mechatronics industry and are widely used in such areas as machine tools, industrial robots and manufacturing equipment for semiconductors and liquid crystals. In line with the increased demand for consumer products, LM guides have also found other diverse uses, from Japan Railway limited-express carriages, amusement facility machines and medical equipment like CT scanners, to earthquakeproofing systems in plants, condominiums and residential housing projects.

At an early stage, we began efforts to develop next-generation systems that comply with essential environmental policies, culminating in release of LM guides with Caged Ball Technology<sup>TM</sup> in 1996, which dramatically enhanced LM guide functions. To a degree previously impossible, ball cages eliminate friction between balls and realize quiet operations. As they can run without lubrication devices, which were previously essential, the new LM guides with Caged Ball Technology<sup>TM</sup> can also run for long periods with only initial greasing and without the need for frequent maintenance.

As an essential product for user and environmentally friendly devices, LM guides with Caged Ball Technology<sup>TM</sup> have elicited a strong response from a variety of areas. We continue to upgrade this product with new series released annually.

THKが独創技術により世界に先駆けて直線運動のころがり化を実現したLMガイドは、従来のすべりによる直線案内機構に比べて

コンパクトなサイズで、大きな荷重を受ける事が出来る。

位置決め精度が高い装置を実現することが出来る。

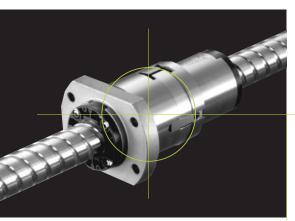
組立が容易で、トータルコストを削減することが出来る。

など多くのメリットがあり、開発以来メカトロニクス産業の中核を担う機械要素部品として、N C工作機械、産業用ロボット、半導体・液晶製造装置等に幅広く使用されています。

近年民生品分野の需要も増え、JR各社の特急車両やアミューズメント機器、CTスキャナ等の医療機器から、工場・マンションおよび戸建住宅用の免震装置など多方面で幅広く使用されて います。

また次世代装置に不可欠な環境対策にも早くから取り組み、「LMガイド」の性能を飛躍的に 向上させた「ボールリテーナ入りLMガイド」を1996年に開発し発表しました。この製品は、ボ ールリテーナを組み込むことによりボール同士の摩擦を解消し、今までにない、音が静かで、か つ従来必要だった潤滑油供給装置を使用しなくても長期メンテナンスフリーを実現しました。

ボ-ルリテ-ナ入りLMガイドは、地球と人に優しい装置に不可欠な製品として、各方面から 大きな反響を呼び、シリーズを毎年充実させています。



## **BALL SCREWS** ボールねじ

The ball screw is a driving force transmission device that provides extremely smooth rolling motion through balls that, positioned between the screw shaft and the nut, allow movement with rolling contact thus maintaining friction resistance to a minimum. With high transmission efficiency, ball screws are not only able to convert rotary motion into linear motion, but can also convert linear motion into rotary motion without difficulty. Like LM guides, this product is also used widely in mechatronics engineering systems, and has become an indispensable essential machine component for precision positioning devices. Ball screws are used in a wide range of industries and contribute to enhanced capabilities for numerically controlled (NC) machine tools, industrial robots, manufacturing devices for semiconductors and liquid crystals and a variety of automatic assembly machines and conveyance systems.

With an increasing number of companies obtaining ISO 14000 certification, we believe that demand for efficient, energy-saving ball screws will also increase, due to growing concern for the environment in 21st century and the emerging environmental awareness of society.

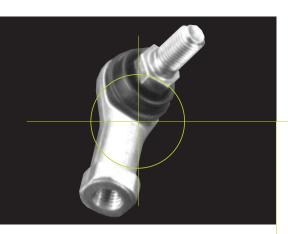
Ball screws are divided into two broad categories based on differences in the level of precision and manufacturing methods: precision (ground) ball screws and rolled ball screws.

ボールねじは、ねじ軸とナットの間でボールがころがり運動するため、摩擦抵抗の少ない、極 めて滑らかな回転運動が得られる駆動力伝達機器です。伝達効率の良いボールねじは、回転運動 を直線運動に変えるばかりでなく、直線運動を回転運動に変えることも容易に行えるため、先端 メカトロニクス装置に多数採用されており、LMガイド同様、精密位置決め装置には不可欠な機 械要素部品となっています。

ボールねじも各種産業に幅広く採用されており、NC工作機械、産業用ロボット、各種組立自 動機、搬送装置、半導体・液晶製造装置等の性能向上に貢献しています。

ISO14000認証取得企業が増えている現在、地球環境調和型社会を構築し、21世紀環境宣言をするために、効率がよく省エネルギーに貢献するボールねじの需要が増えています。

精度と製法の違いにより「精密(研削)ボールねじ」と「転造ボールねじ」に大別されます。



## SPHERICAL JOINTS

各種球面ジョイント

Spherical joints are used for connecting components in a variety of link structures, including construction machinery, automobiles, agricultural machinery, packing equipment and food machinery, and a variety of rolling-support, parallel motion structures. These products come in a variety of materials and formats depending on their application.

Lightweight, highly durable, anticorrosive and resistant to abrasion, the Link Ball utilizes an original manufacturing process whereby the holder is formed by die casting around a high-precision steel ball as the core. As a result, the spherical shape of the ball replicates the holder, and full contact is achieved on the entire surface areas of both components. Due to the absence of a gap between these components, the motion is extremely smooth. Furthermore, because it permits lightweight structural components, there has been a surge in demand for Link Balls from both domestic and overseas automotive manufacturers, which use the component in the hubs of automotive wheels.

In line with this increase in demand, we established a production base in the U.S. state of Ohio, THK Manufacturing of America, to ensure supply of this product to overseas automobile manufacturers and overseas subsidiaries of Japanese automobile manufacturers. The facility has already begun deliveries.

In addition, to spark businesses targeting users of automobiles and other vehicles, we created a special division, the Future Automotive Industry (FAI) Business Group. The FAI Business Group not only carries out marketing activities but also provides integrated coverage of the industry, from manufacturing and technology to production and quality control.

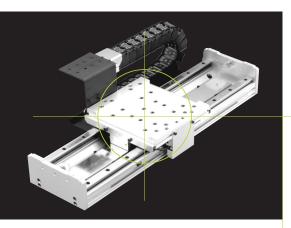
The Link Ball is being positioned as an effective marketing tool for expanding sales to the automotive industry.

建設機械、自動車、農業機械、包装機械、食品機械等の各種リンク機構や、回転支点、平行運 動機構等の接続部に使用され、その用途により様々な材質や形状の製品があります。

軽量、高強度、耐食性、耐摩耗性に優れたリンクボ - ルは、高精度軸受鋼球をそのまま中子に 用いてダイカスト鋳造でホルダを成形するという独特の製法により、鋼球の鏡面がホルダの球面 部に転写されて互いに全面接触し、なめらかな動きを実現しています。また構成部品の軽量化が 図れるため、自動車の足回り部品として国内外の自動車メーカーからの需要が急増しています。

それにともないまして、海外自動車メーカー、および日本の海外進出メーカーへの供給をまか なえるよう、米国オハイオ州コロンバスにTMA(THK Manufacturing of America, Inc.)を現地生 産拠点として設立し、既に納入を開始しています。また自動車等の車両関係ユーザーへのビジネ スを軌道に乗せるべく、専門のFAI(Future Automotive Industry)事業部を組織し、営業活 動はもとより、製造、技術、生産、ならびに品質管理に至るまで一貫してカバーする態勢を整え ました。

リンクボールは、車両関係への販売拡大を促進させる有効なセールスツールとしての位置づけ を担っています。



## ACTUATORS

Actuators are mechatronics products that combine LM systems and motor regulating devices into a single compact format. As a manufacturer of essential machinery components, THK has worked to develop and commercialize LM guides and ball screws, the main components of actuators. As such, the Company has used its extensive experience to create a variety of actuators ranging from the compact to the large-scale, including a few designed specifically for customer needs.

These products cut down on labor for machine design and are easily assembled, earning them a strong reputation among users. Although originally used in conveyance systems and assembly devices, with the development of compact, energysaving motors and multifunction regulating devices, and new combinations of ultarigid LM systems, actuators have recently been adopted for use in areas where precision and sanitary operating conditions are required, such as manufacturing devices for semiconductors and liquid crystals, inspection equipment and electronic component mounting devices.

In addition, from the standpoint of energy-saving and environmental friendliness, we continue to lead the mechatronics engineering field with development of new, original products. These include a new actuator that uses THK's original LM guide with Caged Ball Technology<sup>™</sup>; the Super FA series, a low-cost model for a diverse range of user needs; and the Linear Motor Actuator, which employs a linear motor and is attracting attention as a next-generation motor.

アクチュエータは直動システムとモータ制御機器等をコンパクトに一体化したメカトロニクス 製品です。THKは機械要素部品メーカーとして、アクチュエータを構成するLMガイドとボー ルねじを開発し製品化しているため、豊富な実績と経験からお客様に最適なアクチュエータを提 供することが可能であり、「機械設計の手間が省ける」、「組み立てが簡素化出来る」とお客様よ リ好評を頂いています。従来は主に搬送装置や組立装置で使用されてきましたが、近年の小型省 エネルギーモータや多機能制御機器と剛性の高い直動システムとの組合せ等により、高精度でク リーンな作業を必要とする半導体・液晶製造装置や、検査装置、電子部品実装機等にも使用され るようになりました。

省エネルギー、環境保護の観点から、新製品「ボールリテーナ入りLMガイド」を採用した製品や、ユーザーニーズの多様化に合わせて、ローコストな「スーパーFAシリーズ」、次世代モ ータとして注目されているリニアモータを採用した「リニアモータアクチュエータ」等独自の新 製品も開発し、メカトロニクス業界をリードしています。

## GLOBAL ACTIVITIES

## 



THK EUROPE B.V. / THK G.m.b.H Toshihiro Teramachi, President 代表取締役社長 寺町 俊博

THK G.m.b.H has been engaged in expanding sales of linear motion (LM) guides in Europe since its establishment in 1982. By 1993, LM guides had become well known in the entire European market, and sales continue to expand today. In these circumstances, the company also has achieved steady growth in Europe. To meet the expanding market, the company established a branch office last year in the suburbs of Stockholm, Sweden-the seventh sales office in Europe-and

subsequently opened an eighth branch in Linz, Austria, in May 1999. In addition, our new LM guides with Caged Ball Technology<sup>™</sup> are gaining strong recognition from European users for their exceptional capabilities. THK Europe will concentrate on developing more for the future.

THK G.m.b.Hは1982年の設立以来欧州においてLMガイドの普及活動に努めて参りました。本格的な普及が始まったのは1993年頃からで、現 在も欧州市場は成長を続けております。業容の拡大に伴い、欧州では7ヶ国目の拠点となるスウェーデン支店を98年末にストックホルム郊外に 開設し、99年の5月にはリンツ市にオーストリア支店を開設しております。新製品のボールリテーナ入りLMガイドは、その卓越した性能を欧 州ユーザーに認知されてきております。私は今後も欧州におけるLMガイド市場の拡大と、THK Gm.b.Hの更なる発展に努力いたします。



PGM BALLSCREWS LTD. / PGM BALLSCREWS IRELAND LTD. Kunitaka Suzuki, President

代表取締役社長 鈴木 国隆 Since joining the THK Group in 1992, PGM has worked to establish a position as a world-class manufacturer of precision and rolled ball screws.

In response to increasingly advanced information technology, spreading globalization and further integration of production technology, PGM works with the parent company in Japan to strengthen its expertise in cost-saving, cutting-edge technologies. In addition, all of our staff members are improving their minds, the

organization and its technology to provide customers with better quality, lower cost and faster delivery.

1992年にTHKグループ入りしたPGM社は、精密及び転造ボールねじにおいて世界レベルの専門メーカーの地位を確立すべく、欧州で頑張って おります。

高度情報化、グローバル化、製品技術インテグレート化の時流の中で先進生産技術ノウハウの蓄積を強化し、お客様に「より良い品を、より 安く、より早く」お届け出来るよう、社員一同「意識と組織と技術の変革」に邁進中です。

## 



THK TAIWAN CO., LTD. Nobutaka Fujino, President

理事兼総経理 藤野 延孝 Established in 1989 in Taipei, Taiwan, THK Taiwan markets LM systems through its Taipei and Taichung Offices. The company supplies customers with THK LM guides for manufacturing advanced machine tools. Contributing to the business development of these customers provides our primary job satisfaction.

In addition, THK LM guides contribute to Taiwan's economic growth by supporting the backbone of its technology-driven economy, including such high growth areas in the information equipment industry as semiconductor manufacturing equipment and computers.

THK台湾は1989年に台北市に設立され、現在は台北事務所ならびに台中事務所においてLMシステムの販売を行っております。LMガイド を採用されたお客様が最高水準の精密工作機械を製造し、その会社が発展される事が私達の喜びです。

今後、急成長が期待されている半導体製造装置およびコンピューターを中心とした情報機器産業に代表される技術立国台湾を裏で支え、更な る台湾経済の発展に貢献できるよう努力して参ります。



DALIAN THK CO. LTD. Tetsuya Hayashida, President 大連蒂業技凱瓦軸工業有限公司 董事兼総経理 林田 哲也 Amid the breathtaking pace of economic development in China, the governmentled promotion of hi-tech industry has been especially striking. Founded in 1997, Dalian THK produces precision ball screws that meet international quality standards—a highly valued feature in China. In the current growth market, these products are expected to become increasingly competitive. Located in a region with strong potential as both a new market and a production base, Dalian THK

takes full advantage of THK's advanced technologies and unique properties.

巷間で語られている以上に中国の先進化の速度は凄まじく、殊にハイテク製品の分野は中央政府の奨励もあってその様が顕著であります。この様な状況の中1997年設立された当社が現在手掛けている精密ボールねじは、中国国産品としては稀少な国際標準品質を備えたものであり、これを採用することで中国製品の競争力が今後益々高まるであろう、との期待から熱い注目を集めております。市場として、また生産拠点として共に大きな可能性を有するこの地で、THKの先進技術と独創性は存分に発揮されつつあります。

## AMERICA



THK AMERICA, INC. Takao Yamada, President

代表取締役社長 山田 孝雄

THK America, Inc., established in 1981, has positioned itself as a leader in the promotion and application of LM systems. THK America's innovative products, strategies and efforts have resulted in rapid growth and expansion into wide and diversified markets in North America.

THK's products have contributed to advances in the industrial technology industry and, since its beginning, to the industry's economic growth. The company

will continue to aggressively promote and market its advanced technologies, and continue to be a driving force in automobiles, machine tools, industrial robotics, semiconductor manufacturing equipment, medical equipment and electronically controlled devices in a variety of other fields.

1981年に設立した当社は、アメリカ合衆国においてLMガイドの普及に努め主導的地位を確立しております。LMガイドの販売を通じてアメ リカの産業技術の向上に貢献してきたことは我々の誇りであり、今後も自動車設備、工作機械、産業用ロボット、半導体製造装置、医療機器な どの分野で貢献できることを確信しております。



THK HOLDINGS OF AMERICA, L.L.C. / THK MANUFACTURING OF AMERICA, INC. Mikio Matsui, President 代表取締役社長 松井 幹夫 Established in 1997 in Ohio (U.S.A.) based on THK's global strategy, TMA is the first LM guide manufacturing company to be located outside Japan. Currently producing mainly LM guides and ball joints, the company plans to expand its product lineup and build a new facility in two years. Japanese and American staff work hard with a spirit of cooperation and a belief in business success.

TMA takes its role as a vanguard for global corporate success very seriously as the Group's production network expands steadily. The company will continue providing products and services that satisfy customers the world over, and will make strong efforts to contribute to global development through its products.

TMAは、1997年にTHKがグローバル展開の中で初めてアメリカ(オハイオ州)に作った生産工場です。現在生産しているLMガイドとボールジョイントを柱に、日米社員が協力しあい、夢を持って生産活動に励んでおりますが、今後は品種拡大と、2年後の工場の拡張を計画しております。THKグループが海外生産拠点の拡充を目指す中で、当社がグローバル企業として成功する為の先陣の役割であることを肝に銘じ、今後も世界のお客様に満足して頂ける製品とサービスを提供し続け、THKの製品が世界の発展へ寄与出来る様頑張って参ります。

## **RESEARCH & DEVELOPMENT**





Endless Ecological Maintenance Recycling Cubic E Minimum Cost Economical

THK Cubic E Concept 1. Ecological Heartful technology for humankind and the earth 2. Economical Exceptional cost performance 3. Endless High endurance Long-life

THK Cubic E 開発理念
1. エコロジカル 環境保全
2. エコノミカル 高付加価値
3. エンドレス 高寿命

Since its inception, THK has envisioned growth in mechatronics engineering and worked aggressively in research and development of highly original, new technologies, chiefly in linear motion (LM) systems. We have the pioneer spirit, and we have leveraged this spirit to gain numerous patents in Japan and overseas, building a strong reputation as a world-leading company driven by creative development. A tireless seeker, THK does not believe that product R&D is ever complete.

THK development follows the slogan "Stick to the principles, but apply them in a bold and creative manner." With an uncompromising design stance in product development, we plan to extend our product applications into a variety of fields, surpass the limits of established thinking and consistently take the lead in the precision machinery industry.

Recently, we adopted the development concept, "Cubic E (Ecological, Economical, Endless)," which has led to the development and launch of such products as LM guides with Caged Ball Technology<sup>TM</sup> and the QZ lubrication system.

R&D is also working to shorten the time it takes for development. We are improving systems and processes to enhance speed with the ultimate goal of reducing by 50% the time that it takes us to develop new products—from one year to six months.

The Engineering Department plans to continue promoting globalization and to eventually realize concurrent engineering with corresponding departments overseas. THK is committed to building a system for developing better products and bringing those products to market faster.

## NUMBER OF PATENTS AND UTILITY MODELS GRANTED OR PENDING

Patents granted: 247Patents pending: 314Utility models granted: 39Utility models pending: 4•OVERSEASPatents granted: 420Patents granted: 420Patents pending: 167

(As of March 31, 1999)

THKは、創業以来メカトロニクス分野の発展を予見し、「直動システム」を中心と する独創性の高い新技術の研究開発に積極的に取り組んでいます。そのパイオニアスピ リッツは国内及び海外において多数獲得した特許権に結実し、世界でも類を見ない創造 開発型企業として揺るぎない評価を得ています。

当社の開発理念は「基本原理に忠実に、応用は大胆かつ斬新に」であり、あくなき探 求心に終わりはありません。妥協のない設計思想で開発されたTHK製品は、既成概念を 超越することで、その応用分野を拡大しつつ、常に精密機械業界をリードしていきます。

近年は、『Cubic E (Ecological, Economical, Endless)』の開発コンセプトに基づき、 リテーナ入りLMガイド,QZ潤滑装置などの製品を開発し市場に供給しています。

従来は1年だった開発期間を6カ月に半減することを目標に、仕組みや手法を改善し スピード化をはかります。

また、技術部門でのグローバル化についても推進し、海外技術部門とのコンカレント エンジニアリングを実現してまいります。

特許・実用新案許可および申請中の件数 国内 / 特許許可 = 247件 申請中 = 314件

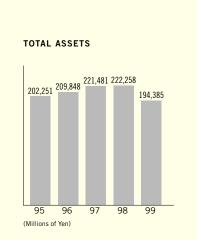
実用新案許可=39件	申請中=4件
海外 / 特許許可 = 420件	申請中=167件

(1999年3月31日現在)

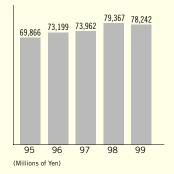
## FINANCIAL SECTION

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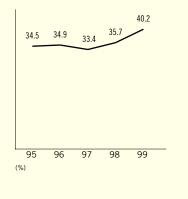
THK ANNUAL REPORT '99 15



TOTAL SHAREHOLDERS' EQUITY







#### **OPERATING RESULTS**

Net sales for the fiscal year ended March 31, 1999, declined 22.6% to ¥95,006 million (US\$788.1 million). The primary cause of this decline was lower production in the capital investment-related industries, the Company's main source of demand, as capital investment plunged amid a slumping Japanese economy. Sales in Japan (excluding export sales) were down 26.0% to ¥66,666 million (US\$553.0 million). Overseas sales (including exports plus sales by overseas consolidated subsidiaries) contracted 13.5% to ¥28,340 million (US\$235.1 million) as economic turmoil in Asia resulted in a decrease in sales in that region, and a resulting downturn in the United States manufacturing industry lowered sales in the United States. However, amid continued promotion of the Company's Global 10 21 strategy for growth as a global corporation, overseas sales as a percentage of net sales increased 3.2 percentage points to 29.8%.

Gross profit fell 26.5% to \$30,563 million (US\$253.5 million), reflecting lower net sales and a 1.7 percentage-point increase in the ratio of cost of sales to net sales to 67.8%. Selling, general and administrative expenses rose 2.5% to \$19,178million (US\$159.1 million). As a result, operating income contracted 50.3% to \$11,385 million (US\$94.4 million).

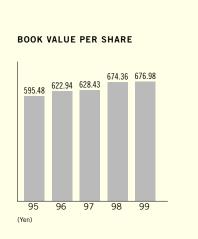
Net non-operating losses declined 60.6% to \$3,687 million (US\$30.6 million). Specifically, loss on sales of property and equipment, write-down of long-term investment securities and interest expenses were substantially reduced, and bad debts loss was eliminated. Retirement and severance payment to directors totaled \$1,323 million (US\$11.0 million).

Income before income taxes fell 43.1% to \\$7,698 million (US\\$63.9 million). Net income declined 24.1% to \\$4,016 million (US\\$33.3 million) and net income per share-fully diluted was \\$33.20.

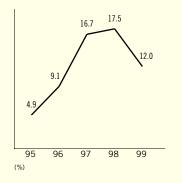
#### LIQUIDITY AND FINANCIAL RESOURCES

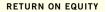
To ensure smooth execution of its reform strategies, THK worked at improving its financial position in the fiscal year ended March 31, 1999.

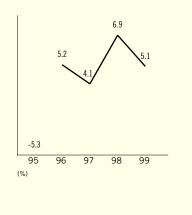
Cash provided by operating activities surged from  $\frac{20,903}{1000}$  million to  $\frac{22,256}{1000}$  million (US\$184.6 million). In addition to net income, main sources of cash included a  $\frac{15,392}{1000}$  million (US\$127.7 million) decrease in receivables, a  $\frac{15,792}{1000}$  million (US\$48.0 million) increase in other current assets, and a decrease in inventories of  $\frac{15,839}{1000}$  million (US\$48.4 million). Depreciation and amortisation contributed  $\frac{16,930}{1000}$  million (US\$57.5 million) to the Company's cash base. These sources were offset to some degree by a  $\frac{10,595}{1000}$  million (US\$87.9 million)



#### RATIO OF OPERATING INCOME/NET SALES







decrease in payables and a ¥4,156 million (US\$34.5 million) decrease in income taxes payable.

Cash used for investing activities climbed to \$10,371 million (US\$86.0 million), due mainly to a \$10,565 million (US\$87.6 million) increase in securities loan and \$4,830 million (US\$40.0 million) for acquisition of property, plant and equipment.

Cash used for financing activities rose to \$16,768 million (US\$139.1 million). Although the Company raised \$13,000 million (US\$107.8 million) with proceeds from issue of bonds and notes, and \$7,715 million (US\$64.0 million) in borrowings of long-term debt, repayment of long-term debt required \$30,312million (US\$251.4 million). In addition, \$3,359 million (US\$27.9 million) was used for retirement of treasury stocks and \$1,752 million (US\$14.5 million) went toward payment of cash dividends.

As a result, cash and cash equivalents at end of year totaled ¥39,665 million (US\$329.0 million), an 11.0% decline from previous fiscal-year end.

Total current assets decreased 18.6% to \$133,329 million (US\$1,106.0 million). Primary factors in this decrease were a 35.6% reduction of accounts and notes receivable to \$27,876 million (US\$231.2 million), a 12.8% decrease in inventories to \$39,771 million (US\$329.9 million) and a 44.1% decline in short-term loans to \$11,873 million (US\$98.5 million).

Investments and other remained relatively unchanged at \$16,271 million (US\$135.0 million). Property, plant and equipment edged down slightly to \$38,397 million (US\$318.5 million).

Total assets decreased 12.5% to ¥194,385 million (US\$1,612.5 million).

Total current liabilities decreased 43.8% to  $\pm 52,916$  million (US\$439.0 million). Primary factors driving this decrease were an 81.7% decline in current maturities of long-term debt to  $\pm 5,419$  million (US\$45.0 million) and a 38.3% reduction in accounts and notes payable to  $\pm 16,987$  million (US\$140.9 million). As a result of these reductions, working capital increased 15.4% to  $\pm 80,413$  million (US\$667.1 million) and the current ratio improved from 1.74 to 2.52.

Long-term debt increased to ¥61,994 million (US\$514.3 million), mainly due to an issuance of bonds and notes worth ¥13,000 million (US\$107.8 million).

Total shareholders' equity decreased 1.4% to 78,242 million (US\$649.0 million), primarily as a result of cash dividends paid and a retirement of treasury stock.

The Company's equity ratio improved 4.5 percentage points to 40.3%. Return on assets was 1.9% and return on equity totaled 5.1%.

#### THK CO., LTD. AND SUBSIDIARIES

#### CONSOLIDATED BALANCE SHEETS

31st March, 1998 and 1999

		illions) March,	\$ (thousands) (Note 4) 31st March,
	1998	1999	1999
ASSETS			
Current Assets:			
Cash	¥ 18,175	¥ 10,953	\$ 90,858
Time deposits	14,297	23,943	198,615
Short-term investment securities	12,076	4,769	39,560
Securities loaned	_	10,565	87,640
Accounts and notes receivable:			
Trade	38,435	27,061	224,479
Unconsolidated subsidiaries and affiliates	1,602	60	498
Other	3,231	755	6,263
	43,268	27,876	231,240
Less: allowance for bad debts	(666)	(424)	(3,517)
	42,602	27,452	227,723
Inventories	45,610	39,771	329,913
Short-term loans			
Unconsolidated subsidiaries and affiliates	3,688	_	
Other	17,539	11,873	98,491
Deferred tax assets	3,351	2,287	18,971
Other current assets	6,444	1,716	14,235
Total current assets	163,782	133,329	1,106,006
Investments and Other:			
Long-term investment securities	8,589	7,136	59,195
Investments in and advances to unconsolidated subsidiaries and affiliates	5,319	4,039	33,505
Other investments	2,316	5,096	42,273
	16,224	16,271	134,973
Property, Plant and Equipment:	10,221	10,271	201,770
Buildings and structures	19,105	19,998	165,890
Machinery and equipment	63,886	65,146	540,406
machinery and equipment	82,991	85,144	706,296
Less: accumulated depreciation	(53,411)	(56,624)	(469,714
	29,580	28,520	236,582
Land	9,448	9,534	230,382 79,088
Construction in progress	635	343	
Construction in progress	39,663		2,845
Deferred Charges and Intangibles		38,397	318,515
	2,589	-	45,350
Adjustments on Foreign Currency Statement Translation		921 ¥194,385	7,640

The accompanying notes are an integral part of the statements.

		illions) March,	\$ (thousands) (Note 4) 31st March,
	1998	1999	1999
LIABILITIES AND SHAREHOLDERS' EQUITY			
Current Liabilities:			
Short-term bank loans	¥ 23,220	¥ 21,160	\$ 175,529
Current maturities of long-term debt	29,583	5,419	44,952
Accounts and notes payable:			
Trade	20,614	14,313	118,73
Unconsolidated subsidiaries and affiliates	3,674	249	2,06
Other	3,256	2,425	20,11
	27,544	16,987	140,91
Income taxes payable	5,364	1,208	10,02
Accrued expenses	4,068	1,311	10,87
Other current liabilities	4,303	6,831	56,66
Total current liabilities	94,082	52,916	438,95
Long-Term Debt	47,481	61,994	514,26
Accrued Employees' Retirement Benefits	893	1,092	9,05
Contingent Liabilities (Note 5)			
Adjustment on Foreign Currency Statement Translation	364	_	-
Minority Interests	71	141	1,16
Shareholders' Equity:			
Common stock, par value ¥50 per share:			
Authorised: 467,981,000 shares and 467,642,100 shares at 31st March,			
1998 and 1999			
Issued: 117,676,843 shares and 115,573,543 shares at 31st March,			
1998 and 1999, respectively	19,394	19,394	160,87
Additional paid-in capital	29,228	26,306	218,21
Legal reserve	1,330	_	_
Retained earnings	29,415	32,542	269,94
Total shareholders' equity	79,367	78,242	649,042
· · · · · · · · · · · · · · · · · · ·	¥222,258	¥194,385	\$1,612,48

The accompanying notes are an integral part of the statements.

#### CONSOLIDATED STATEMENTS OF INCOME

For the years ended 31st March, 1997, 1998 and 1999

		¥ (millions)		\$ (thousands) (Note 4) For the year
		For the years ended 31st March,		ended 31st March,
	1997	1998	1999	1999
Net Sales	¥108,007	¥122,815	¥95,006	\$788,105
Cost of Sales	73,584	81,208	64,443	534,575
Gross profit	34,423	41,607	30,563	253,530
Selling, General and Administrative Expenses	16,156	18,711	19,178	159,088
Operating income	18,267	22,896	11,385	94,442
Non-Operating Income (Losses):				
Interest and dividend income	1,178	1,281	1,008	8,362
Interest expenses	(4,033)	(3,656)	(2,756)	(22,862
Gain (loss) on sales of short-term investment securities	(3,253)	466	(139)	(1,153
Gain (loss) on sales of long-term investment securities	919	(230)	(112)	(929
Write-down of short-term investment securities	(1,283)	(415)	(352)	(2,920
Write-down of long-term investment securities	(5,623)	(3,661)	(648)	(5,375
Loss on early redemption of bond	(879)		_	
Gain (loss) on sales of property and equipment	18	(1,261)	(168)	(1,394
Bad debts loss	_	(1,098)	_	
Foreign exchange gain (loss)	(1,093)	(769)	1,295	10,742
Minority interest in income (loss) of consolidated subsidiaries	(9)	3	(71)	(589
Settlement of litigation	1,590		_	_
Loss on liquidation of non-consolidated subsidiaries	_		(241)	(1,999
Retirement and severance payments to directors	_		(1,323)	(10,975
Other, net	(830)	(20)	(180)	(1,493
	(13,289)	(9,360)	(3,687)	(30,585
Income before income taxes	4,969	13,536	7,698	63,857
Income Taxes, Net	2,068	8,296	3,376	28,005
	2,901	5,240	4,322	35,852
Equity in Gain (Loss) of Unconsolidated Subsidiaries and Affiliates	123	48	(306)	(2,538
Net income	¥ 3,024	¥ 5,288	¥ 4,016	\$ 33,314
		Yen		U.S. dollars (Note 4)
Per Share Data:				
Net income—basic	¥25.70	¥44.93	¥34.51	\$0.286
Net income—diluted	¥25.21	¥43.06	¥33.20	\$0.275
Weighted average number of shares of common stock (in thousands)	117,693	117,685	116,625	

## THE CO., LTD. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

For the years ended 31st March, 1997, 1998 and 1999

			¥ (mil	llions)	
	Number of shares of common stock	Common stock	Additional paid-in capital	Legal reserve	Retained earnings
Balance at 31st March, 1996	117,692,504	¥ 19,390	¥ 29,224	¥ 990	¥ 23,59
Net income for the year ended 31st March, 1997	_	_	_		3,02
Cash dividends	_	_	_		(1,58
Transfer to legal reserve	_	_	_	163	(16
Bonus of the Company officers and auditors	_	_	_		(5
Decrease due to change in scope of consolidation	_	—	—		(62
Balance at 31st March, 1997	117,692,504	19,390	29,224	1,153	24,19
Net income for the year ended 31st March, 1998	_	—	—	—	5,28
Cash dividends	_	—	—	—	(1,76
Transfer to legal reserve	_	—	—	177	(17
Exercise of warrants	3,339	4	4		-
Retirement of shares of common stock	(19,000)		_		(2
Increase due to change accounting policy					
(adoption of deferred tax method)	_		_		1,9
Balance at 31st March, 1998	117,676,843	19,394	29,228	1,330	29,4
Net income for the year ended 31st March, 1999	_	—	—	—	4,0
Cash dividends	_	—	—	—	(1,75
Transfer from legal reserve	_	—	—	(1,330)	1,3
Bonus of the Company officers and auditors	_	—	—	—	(3
Retirement of shares of common stock	(2,103,300)	—	(2,922)	—	(43
Balance at 31st March, 1999	115,573,543	¥ 19,394	¥ 26,306	¥ —	¥ 32,54
			\$ (thousand	ls) (Note 4)	
	Number of		Additional		
	shares of common stock	Common stock	paid-in capital	Legal reserve	Retaine earning
Balance at 31st March, 1998	117,676,843	\$160,879	\$242,455	\$11,033	\$244,0
Net income for the year ended 31st March, 1999	_		_		33,3
Cash dividends	_	_	_	_	(14,53
Transfer from legal reserve	_	_	_	(11,033)	11,0
Bonus of the Company officers and auditors	_	_	_		(24
Retirement of shares of common stock	(2,103,300)	_	(24,238)	_	(3,62
Balance at 31st March, 1999	115,573,543	\$160,879	\$218,217	s —	\$269,9

(Note) Balance of legal reserve was combined to retained earnings at 31st March, 1999.

The accompanying notes are an integral part of the statements.

#### THK CO., LTD. AND SUBSIDIARIES

#### CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended 31st March, 1997, 1998 and 1999

		¥ (millions)		\$ (thousands) (Note 4)	
		For the years ended 31st March,		For the year ended 31st March,	
	1997	1998	1999	1999	
Cash Flows from Operating Activities:					
Net income	¥ 3,024	¥ 5,288	¥ 4,016	\$ 33,314	
Adjustments to reconcile net income to net cash					
provided by operating activities:					
Depreciation and amortisation	6,236	6,682	6,930	57,487	
Provision for reserve for retirement benefits	138	138	152	1,261	
(Gain)/loss on sale/disposal of property and equipment	(18)	1,261	168	1,394	
Write-down of long-term investment securities	5,623	3,661	648	5,375	
Equity in net (income)/loss of affiliates	(123)	(47)	306	2,538	
Changes in assets and liabilities:					
(Increase)/decrease in receivables	(2,365)	(1,637)	15,392	127,681	
Decrease in inventories	54	2,339	5,839	48,436	
Increase in other current assets	(2,597)	(6,005)	5,792	48,047	
Increase/(decrease) in payables	(2,300)	2,217	(10,595)	(87,889	
Increase/(decrease) in income taxes payable	(1,550)	4,108	(4,156)	(34,475	
Increase/(decrease) in accrued expenses and other	142	(5)	(2,757)	(22,870)	
Other, net	(219)	2,903	521	4,322	
Cash provided by operating activities	6,045	20,903	22,256	184,621	
Cash Flows from Investing Activities:					
Increase in securities loan	_	—	(10,565)	(87,640)	
Acquisition of property, plant and equipment	(8,370)	(5,700)	(4,830)	(40,066	
Proceeds from sales of property and equipment	346	17	728	6,039	
Increase in deferred charges and intangibles	(2,232)	(177)	(3,945)	(32,725)	
(Increase)/decrease in short-term loans	(994)	(7,776)	9,354	77,594	
(Increase)/decrease in investments in securities	13,414	3,522	693	5,748	
(Increase)/decrease in investments and advances to subsidiaries					
and affiliates	(10)	714	974	8,080	
(Increase)/decrease in other investments	190	1,782	(2,780)	(23,061	
Cash provided by/(used for) investing activities	2,344	(7,618)	(10,371)	(86,031	
Cash Flows from Financing Activities:					
Proceeds from issue of bonds and notes	25,503		13,000	107,839	
Borrowings of long-term debt	2,131	3,630	7,715	63,998	
Repayment of long-term debt	(8,358)	(17,951)	(30,312)	(251,448	
Increase/(decrease) in short-term borrowings	(5,693)	3,572	(2,060)	(17,088	
Retirement of treasury stocks	_	—	(3,359)	(27,864	
Cash dividends	(1,589)	(1,765)	(1,752)	(14,533)	
Cash provided by/(used for) financing activities	11,994	(12,514)	(16,768)	(139,096	
Changes in Cash and Cash Equivalents	20,383	771	(4,883)	(40,506	
Cash and Cash Equivalents at Beginning of Year	23,394	43,777	44,548	369,540	
Cash and Cash Equivalents at End of Year	¥ 43,777	¥ 44,548	¥39,665	\$ 329,034	

#### THE CO., LTD. AND SUBSIDIARIES NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

#### - 1 - BASIS OF PRESENTING THE CONSOLIDATED FINANCIAL STATEMENTS

The accompanying consolidated financial statements have been prepared from the accounts maintained by THK CO., LTD. (the "Company") and its consolidated subsidiaries in accordance with accounting principles and practices generally accepted in respective countries, which are different in certain respects as to application and disclosure requirements of International Accounting Standards.

The accompanying consolidated financial statements of the Company and its subsidiaries are essentially the translation of those included in the Securities Annual Report filed with the Ministry of Finance and the Stock Exchanges as required by the provisions of the Securities and Exchange Law and related regulations in Japan.

Accordingly, the information disclosed in the accompanying consolidated financial statements is derived from the original text and the scope and nature of the information is limited to those disclosed therein. However, certain reclassification or summarisation of accounts have been made to present the consolidated financial statements in a form which is more familiar to foreign readers.

The consolidated financial statements are not intended to present the consolidated financial position, results of operations and cash flows in accordance with accounting principles and practices generally accepted in countries and jurisdictions other than Japan.

#### - 2 - PRINCIPLES OF CONSOLIDATION

#### (1) Scope of Consolidation

The Company had 19 subsidiaries (majority-owned companies) as at 31st March, 1999 (20 as at 31st March, 1998). The consolidated financial statements include the accounts of the Company and its 12 (11 for 1998) subsidiaries. The 12 major subsidiaries which have been consolidated with the Company are listed below (the Company and these consolidated subsidiaries are together, referred to as the "Companies"):

	Percentage
	owned by
	the Company
	(directly or
Name of subsidiary	indirectly)
THK Holdings of America, L.L.C. (USA)	100%
THK America, Inc. (USA)	100
THK Manufacturing of America, Inc. (USA)	100
THK G.m.b.H. (Germany)	100
THK International Finance (Amsterdam) B.V. (Netherland)	100
THK Europe B.V. (Netherland)	100
PGM Ballscrews Ltd. (UK)	100
PGM Ballscrews Ireland Ltd. (Ireland)	98.97
THK International Finance (UK) Ltd. (UK)	100
THK TAIWAN Co., Ltd.	94.99
THK Yasuda Co., Ltd. (Japan)	70
Talk System Co., Ltd. (Japan)	98.33
Beldex Corporation (Japan)	94.73

The accounts of the remaining 7 (9 for 1998) unconsolidated subsidiaries are insignificant, meaning that these accounts have not been consolidated with the Company since combined assets, net sales, net income and retained earnings of these companies, in the aggregate, are not significant in relation to those of the Company.

#### (2) Elimination and Combination

For the purposes of preparing the consolidated financial statements of the Companies, all significant inter-company transactions, account balances and unrealised profits among the Companies have been entirely eliminated.

In elimination, any difference between the cost of an investment in a subsidiary and the amount of underlying equity in net assets of the subsidiary is treated as an asset or a liability, as the case may be, and amortised over a period of five years on a straight-line

basis. However, those differences have been charged to income in their entirety in the year they arose because such differences were deemed immaterial.

For the year ended 31st March 1998, legal reserve of consolidated subsidiaries provided subsequent to the acquisition of such subsidiaries by the Company is included in retained earnings and is not shown separately in the consolidated financial statements. Due to the regulation change, the entire legal reserve has been transferred to retained earnings for the year ended 31st March 1999.

#### (3) Accounting for Investments in Unconsolidated Subsidiaries and Affiliates

The Company had 5 (5 for 1998) affiliates (meaning companies which are approximately 20% to 50% owned) at 31st March, 1999. The equity method is applied only to the investments in Daito Seiki Co., Ltd., since the investments in the unconsolidated subsidiaries and remaining affiliates would not have material effect on consolidated net income and retained earnings in the consolidated financial statements, had they been accounted for by the equity method.

Thus the investments in the unconsolidated subsidiaries and affiliates are carried at cost or less.

#### (4) Translation of Foreign Currency Financial Statements (Accounts of Overseas Subsidiaries)

The translations of foreign currency financial statements of overseas subsidiaries into yen for consolidation purposes are made by applying the current exchange rate method. Under this method, all assets, liabilities, revenues, costs and expenses are translated into yen at the exchange rate prevailing at the end of each fiscal year, and that the common stock and additional paid-in capital accounts are translated at the historical rates.

In this connection, certain adjusting accounts must be set up in the balance sheets, to enable balancing of debit and credit totals as well as the reconciliation of the beginning balance with the ending balance of retained earnings. Such adjusting balances are shown as "Adjustments on Foreign Currency Statement Translation" in the appropriate parts of the accompanying consolidated financial statements.

#### - 3 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### (1) Inventory Valuation

Inventories held by the Company, THK Yasuda Co., Ltd. and Talk System Co., Ltd. are valued by the annual average cost method. Inventories held by THK America, Inc., PGM Ballscrews Ltd. and PGM Ballscrews Ireland Ltd. are valued at the lower of cost or market, cost being determined by the first-in first-out method. Inventories held by THK Europe B.V., THK G.m.b.H. and THK TAIWAN Co., Ltd. are valued at the lower of cost or market, cost being determined by the noving-average method. Inventories held by Belbex Corporation are valued by identified cost method.

#### (2) Valuation of Securities

Short-term investment securities (current portfolio) and long-term investment securities (non-current portfolio) listed on stock exchanges are valued at the lower of cost or market, cost being determined by the moving average method.

Until the year ended 31st March 1997, securities in current and non-current portfolio without market quotations on stock exchanges had been valued at the moving average cost.

During the year ended 31st March 1998, the Company changed the basis of securities valuation for securities with market quotations on over-the-counter market and for investment trust with standard price from a "moving average cost method" into an "at the lower of moving average cost or market value method". The change was made to state the carrying value of securities with market quotation held by the Company on a more conservative basis reflecting the decline in market value of such securities from their acquisition cost. As a result of the change, income before income taxes was decreased by  $\frac{2}{2}$ ,790 million as compared with the amount which would have been reported if the previous method had been applied consistently.

Appropriate write-downs are recorded for unlisted securities the value of which declined substantially and such impairments of the value are considered not to be temporary.

#### (3) Property, Plant and Equipment

Depreciation is computed by the declining-balance method at rates based on the estimated useful lives of assets which are prescribed by the Japanese income tax laws. The range of useful lives is principally from 3 to 50 years for buildings and structures and from 2 to 20 years for machinery and equipment. However, buildings acquired after 1st April 1998 are depreciated by straight-line method, and the Company also changed the estimated useful lives of buildings (except for ancillary facilities) in compliance with certain amendments to the Corporation Tax Law made in 1998.

Normal repairs and maintenance, including minor renewals and improvements, are charged to income as incurred. (4) Amortisation

Amortisation of intangible assets (included in "Deferred Charges and Intangibles" account), is computed on the straight-line method, over 5 to 15 years.

Research and development costs and debt security issue expenses are charged to income as incurred. Unamortized premium on debt securities is amortized over the period of bond outstanding.

#### (5) Foreign Currency Translation

Revenue and expense items arising from the Company's transactions denominated in foreign currencies are translated into Japanese yen at approximate exchange rates prevailing when such transactions occur.

Receivables and payables denominated in foreign currencies are translated into Japanese yen at the current exchange rates prevailing at the respective balance sheet dates. Resulting translation gains or losses are included in the determination of net income for the year.

In connection with the bonds with warrants denominated in foreign currencies, the difference between the amount translated at the forward exchange contract rate and the amount translated at the historical exchange rate has been deferred and amortized over the period from the date when the forward exchange contract was made to the settlement date. During the years ended 31st March 1998 and 1999, ¥164 million and ¥164 million (\$1,360 thousand) were amortized and netted against "Interest expenses" of "Non-Operating Income (Losses)" in the accompanying non-consolidated statements of income, and the unamortized balance of deferred gains of ¥371 million and ¥207 millions (\$1,717 thousand) are presented as "Other current liabilities" or "Other non-current liabilities" in the accompanying non-consolidated balance sheets at 31st March 1998 and 1999, respectively.

#### (6) Income Taxes

Until the year ended 31st March 1997, income taxes had been provided based on the amounts required by the tax returns for the year and no tax effect had been recorded for temporary differences in the recognition of certain revenue and expenses between tax and financial reporting except for these of a certain consolidated overseas subsidiaries.

With effect from the year ended 31st March 1998, the Company and its consolidated subsidiaries have employed the interperiod income tax method to specific timing difference items which have arisen due to elimination of inter-company transactions/account balances and unrealised inter-company profits.

The change was made in order to achieve the better matching of periodic cost against revenue, because that the materiality of inter-company transactions has increased and has been expected to increase.

As a result of the change, net income for the year ended 31st March 1998 and retained earnings as at 31st March 1998 were increased by \$1,025 million and \$2,926 million, respectively, as compared with the previous method. Also, the effect of the change to the segment information has been described in Note 6 of the Notes to the Consolidated Financial Statements.

Income taxes applicable to a certain consolidated overseas subsidiaries are accounted for by the interperiod income tax allocation method which is a common practice in the respective countries.

#### (7) Recognition of Certain Accrued Expenses

In general, the Company follows the accrual basis of accounting for all income and expense items. However, the Japanese tax laws provide for a limit deductible for tax purposes with respect to certain accrued expenses which are essentially an estimate of amounts to be determined in future years. The accrued expenses of the Company to which such limits applied under the laws are: accrued employees' retirement benefits, accrued employees' bonuses and allowance for bad debts. The Company generally records such accrued expenses on a basis of financial reporting which is different from the basis of the tax laws. Allowance for bad debts is provided at the estimated amount of uncollectible receivables on an individual basis at the balance sheet date as well as the amount using the statutory percentage of outstanding receivables on the Japanese corporation tax law. The Company provided for accrued employees' retirement benefits based on tax regulations. The balance of the liability at 31st March 1998 and 1999 was the amount which would be required to be paid if all employees voluntarily terminated their employment at these dates.

#### (8) Net Income per Share

Net income per share is based upon the weighted average number of shares of common stock outstanding during each year, and adjusted for dilution (assuming conversion of convertible notes of the Company outstanding with related reduction in interest expenses).

#### (9) Accounting for the Consumption Tax

Consumption tax is levied at the flat rate of 5% on all domestic consumption of goods and services (with certain exemptions). The consumption tax withheld upon sale is not included in the amount of "net sales" in the accompanying non-consolidated statements of income but is recorded as a liability. The consumption tax paid by the Company on the purchases of goods and services is not included either in the amounts of costs or expenses in the non-consolidated statements of income, but is recorded as an asset and the net balances of liability less asset is included in "other current liabilities" in the non-consolidated balance sheets.

#### (10) Accounting for Lease

Finance lease other than those which are deemed to transfer the ownership of the leased assets to lessees are accounted for by the method similar to that applicable to ordinary operating leases.

#### (11) Reclassifications

Certain reclassifications have been made to previously reported 1997 and 1998 amounts to conform to the 1999 presentation. These reclassifications had no effect on previously reported net income or total shareholders' equity.

#### - 4 - UNITED STATES DOLLAR AMOUNTS

The Companies maintain their accounting records in yen. The dollar amounts included in the consolidated financial statements and notes thereto represent the arithmetical results of translating yen to dollars on the basis of \$120.55=U.S.\$1, the rate of exchange on 31st March, 1999. The inclusion of such dollar amounts is solely for convenience and is not intended to imply that yen amounts have been or could be readily converted, realised or settled in dollars at \$120.55=U.S.\$1 or at any other rate.

#### - 5 - CONTINGENT LIABILITIES

The Companies were contingently liable for notes receivable discounted by banks in the ordinary course of business in an aggregate amount of ¥6,380 million and ¥6,757 million (\$56,051 thousand), outstanding as at 31st March, 1998 and 1999, respectively.

The Companies were also contingently liable for guarantees of loans and other debt made by its subsidiaries and affiliates at 31st March, 1998 and 1999, as follows:

	¥ (n	iillions)	\$ (thousands) (Note 4)	
	1998	1999	1999	
Debt of:				
Daito Seiki Co., Ltd.	¥—	¥ 990	\$8,212	
Nihon Slide Kogyo Co., Ltd.	_	158	1,311	
Other	_	33	274	
	¥—	¥1,181	\$9,797	

#### - 6 - SEGMENT INFORMATION

#### (1) Industry Segment Information

The sales, operating income and assets of the machinery parts segment are over 90% of total sales, total operating income and total assets of the Company and consolidated subsidiaries, industry segment information is not need to disclose. The Company and consolidated subsidiaries operate in one industry segment, production and sales of linear motion systems.

#### (2) Geographical Segment Information

Net sales of the Companies for the years ended 31st March, 1997, 1998 and 1999, classified by geographic segments (inside and outside Japan) are summarised as follows:

			Year	ended 31st March	ı, 1997		
[				¥ (millions)			
					Elimin tions a		
			Outside		corpora		Consoli-
	Domest	ic	Japan	Total	assets	;	dated
I. Net Sales and Operating Income (Loss)							
Net Sales:							
Customers	¥ 85,6	97 ¥	22,310	¥108,007	¥	— ¥1	08,007
Intersegment	11,9	22	—	11,922	(11,9	922)	—
Total	97,6	19	22,310	119,929	(11,9	922) 1	08,007
Operating Expenses	82,2	28	19,323	101,551	(11,8	811)	89,740
Operating Income	¥ 15,3	91 ¥	2,987	¥ 18,378	¥ (1	111) ¥	18,267
II. Assets							
Assets	¥168,3	19 ¥	21,136	¥189,455	¥32,0	026 ¥2	21,481
1			Year	ended 31st March ¥ (millions)	i, 1998		
				- ()		Elimina-	
				Asia and		tions and	Consoli-
	Japan	America	Europe	other	Total	corporate assets	dated
I. Net Sales and Operating Income (Loss)							
Net Sales:							
Customers	¥ 95,189	¥15,811	¥10,448	¥1,367	¥122,815	¥ —	¥122,815
Intersegment	16,913	7	31	_	16,951	(16,951)	
Total	112,102	15,818	10,479	1,367	139,766	(16,951)	122,815
Operating Expenses	92,656	13,292	8,883	1,221	116,052	(16,133)	99,919
Operating Income	¥ 19,446	¥ 2,526	¥ 1,596	¥ 146	¥ 23,714	¥ (818)	¥ 22,896
II. Assets							
Assets	¥163,194	¥11,897	¥ 8,664	¥1,226	¥184,981	¥37,277	¥222,258

				ended 31st Mar ¥ (millions)			
	Japan	America	Europe	Asia and other	Total	Elimina- tions and corporate assets	Conso dated
I. Net Sales and Operating Income (Loss)	Japan	America	Europe	other	Total	assets	uated
Net Sales:							
Customers	¥ 70,716	¥11,689	¥11,415	¥1,186	¥ 95,006	¥ —	¥ 95,
Intersegment	14,258	2	88	_	14,348	(14,348)	
Total	84,974	11,691	11,503	1,186	109,354	(14,348)	95,
Operating Expenses	75,185	11,041	9,902	1,032	97,160	(13,539)	83,
Operating Income	¥ 9,789	¥ 650	¥ 1,601	¥ 154	¥ 12,194	¥ (809)	¥ 11,
II. Assets							
Assets	¥130,498	¥12,059	¥ 9,275	¥1,078	¥152,910	¥41,475	¥194,
			Year e	ended 31st Mar	ch, 1999		
			\$	(thousands) (No	te 4)		
						Elimina- tions and	
				Asia and		corporate	Conse
	Japan	America	Europe	other	Total	assets	date
I. Net Sales and Operating Income (Loss)							
Net Sales:							
Customers	\$ 586,611	\$ 96,964	\$94,691	\$9,839	\$ 788,105	\$ _ \$	5 788,
Intersegment	118,275	17	730		119,022	(119,022)	
Total	704,886	96,981	95,421	9,839	907,127	(119,022)	788,
Operating Expenses	623,683	91,589	82,140	8,561	805,973	(112,310)	693,
Operating Income	\$ 81,203	\$ 5,392	\$13,281	\$1,278	\$ 101,154	\$ (6,712)	<b>5</b> 94,
II. Assets							
Assets	\$1,082,522	\$100,033	\$76,939	¢0 042	\$1,268,436	¢ 244 049 9	1 612

Note (a) As described in Note 3. (6) of the Notes to the Consolidated Financial Statements, the Company and its consolidated subsidiaries employed the interperiod income tax method to specific timing difference items which have arisen due to elimination of inter-company transactions/account balances and unrealised inter-company profits, during the year ended 31st March, 1998. As a result of the change, operating expenses in Japan for the year ended 31st March, 1998, was decreased by ¥225 million and operating income in Japan was decreased by the same amount as compared with the amount which would have reported it the previous method had been applied consistently.

Note (b) As described in Note 3. (2) of the Notes to the Consolidated Financial Statements, the Company, during the year ended 31st March, 1998, changed the basis of securities valuation for securities with market value quotations on over-the-counter market and for investment trust with standard prices from a "moving average cost method" into an "at the lower of moving average cost or market value method".

#### (3) Export Sales and Sales by Overseas Subsidiaries

Overseas sales of the Companies (referring to the amounts of exports made by Company plus the sales by overseas consolidated subsidiaries) for the three years ended 31st March, 1999 are summarised as follows:

				¥ (millions)
				1997
Overseas sales				¥ 27,839
Consolidated net sales				¥108,007
Overseas sales as a percentage of consolidated net sales				25.8%
		¥ (m	illions)	
			Asia and	
	America	Europe	other	Total
Overseas sales	¥15,890	¥10,831	¥6,024	¥ 32,745
Consolidated net sales				¥122,815
Overseas sales as a percentage of consolidated net sales	12.9%	8.8%	4.9%	26.6%
		¥ (millions)/\$ (th	nousands) (Note 4)	
		19	999	
			Asia and	
	America	Europe	other	Total
Overseas sales	¥12,480	¥11,719	<b>¥</b> 4,141	¥28,340
	(\$103,525)	(\$97,213)	(\$34,351)	(\$235,089)
Consolidated net sales				¥95,006
				(\$788,105)
Overseas sales as a percentage of consolidated net sales	13.1%	12.3%	4.3%	29.8%



#### - 7 - UNAUDITED RELATED PARTY INFORMATION

Material transactions of the Company with its related companies and individuals, excluding transactions with consolidated subsidiaries which are eliminated in the consolidated financial statements and other than those disclosed elsewhere in these financial statements, for the years ended 31st March, 1997, 1998 and 1999 were as follows:

	As at 31st M						¥ (milli	ons)/\$ (th	ousands) (Note 4)				
Name of	Paid-in	Principal	Equity ownership percentage by the	Description of the Company's			year en	insactions ded 31st 1	March,	n .999			31st March,
related company	capital	business	Company	transactions				1998			Account	1998	1999
Dailian THK Co., Ltd.	RMB125 million	Manufacture and sales of ball screws	72.85%	Sales of industrial parts	¥1,	¥1,055 ¥	¥ 108	¥ (\$		Accounts receivable	¥ 28	¥ 23 (\$ 191)	
				Purchase of ball screws	¥	_	¥	48		154 ,277)	Accounts payable	¥ 24	¥ 14 (\$ 116)
											Advance payment	¥ 24	¥ 14 (\$ 116)
				Long-term loan	¥	_	¥	100		100 830)	Long-term loan	¥100	¥200 (\$1,659)
				Interest received	¥	—	¥	—	¥ (\$	7 58)	Accrued revenue	¥ —	¥ 7 (\$ 51)
				Sales of machinery and equipment	¥	_	¥	_	¥ (\$	1 8)			
Japan Sky Robot Co., Ltd.	¥181 million	Manufacture and sales of Sky Robots	68.41%	Sales of industrial parts	¥	22	¥	17	¥ (\$	9 75)	Accounts receivable	¥ 8	¥—
				Guarantee of loans	¥	13	¥	8	¥	—			
				Purchase of patent	¥	_	¥	_	¥ (\$	33 274)			



	As at 31st	March, 1999		¥ (millions)/\$ (thousands) (Note 4)							
		Paid-in Principal	Equity ownership percentage by the	Description of the Company's		ne of transactior year ended 31st		Resulting account balances at 31st March,			
related company	capital	business	Company	transactions	1997	1998	1999	Account 1998	1999		
Daito Seiki Co., Ltd.	¥4,255 million	Manufacture and sales of industrial machines	38.75%	Sales of industrial parts	¥2,946	¥2,759	¥2,114 (\$17,536)	Accounts ¥779 and notes receivable	€) ¥471 (\$3,907)		
				Manufacturing of the Company's product	¥3,119	¥4,457	¥2,585 (\$21,443)	Accounts ¥862 and notes payable	l ¥227 (\$1,883)		
				Sales of machinery and equipment	¥ 78	¥ 5	¥ 13 (\$ 108)	Accounts ¥ 9 receivable —other	) ¥—		
				Purchase of machinery and equipment	¥1,889	¥1,990	¥3,428 (\$28,436)	Accounts ¥2,013 payable —other	3 <b>¥1,506</b> (\$12,493)		
				Guarantee of loans	¥ —	¥ 700	¥ 990 (\$ 7,466)				
THK Mechanic Research Co., Ltd.	¥100 million	Manufacture and sales of industrial robots	50.00%	Sales of industrial parts	¥ —	¥ —	¥ 58 (\$ 481)	Accounts ¥ 103 and notes receivable	3 ¥ 103 (\$ 854)		
Co., Ltd.		10000		Manufacturing of the Company's products	¥ —	¥ —	¥ 338 (\$ 2,804)	Accounts ¥ 102 and notes payable	l ¥ 55 (\$ 456)		
				Purchase of machinery and equipment	¥ —	¥ —	¥ 7 (\$ 51)				
				Loans of fund	¥ —	¥ —	¥ 50 (\$ 415)	Short-term¥ 188 loan	3 ¥ 238 (\$ 1,974)		
				Interest received	¥ —	¥ —	¥ 8 (\$ 66)				
				Guarantee of loans	¥ —	¥ —	¥ 21 (\$ 174)				
THK Insurance	¥10 million	Insurance Agent	20.00%	Loans of fund	¥ —	¥ —	¥4,300 (\$35,670)	Short-term¥3,500 loans	) ¥4,300 (\$35,670)		
Service Co., Ltd.					¥ —	¥ —	¥ 60 (\$ 498)				

	As at 31st March, 1999	Equity				- (		\$ (thousands) (Note 4)		
lame of	Relationship with	ownership percentage by the	Description of the Company's		e of transactions year ended 31st l		Resulting account balances at 31st March,			
dividual	the Company	Company	transactions	1997	1998		99	Account	1998	1999
Akihiro Teramachi	The President of the Company	7.65%	Short-term loan	¥—	¥—	¥ —		Short-term loan to the Company officers	¥800	¥—
			Interest received	¥ 1	¥29	¥ (\$	7 58)			
			Sales of affiliates securities	¥—	¥12	¥	_			
Hiroshi Teramachi	Senior Advisor	6.40%	Transfer of trust certificate	¥—	¥—	¥3. (\$24.	,000 ,886)			
			Purchase of patent	¥—	¥ 2	¥3. (\$31.	,809 ,597)			

	As at 31st	March, 1999		¥ (millions)/\$ (thousands) (Note 4)								
Name of other related part	own perc me of Paid-in Principal by		Equity ownership percentage by the Company	Description of the Company's transactions		ear ende		s made in March, <b>1999</b>	Resulting account balances at 31st March, Account 1998 <b>1999</b>			
TG ¥10	, 1	Research and development of industrial machinery	15.00%	Manufacturing of the Company's products	¥—	¥		¥ 164 (\$ 1,360)	Accounts payable		5 ¥ (\$	3 25)
		and equipment		Purchase of labor uniform	¥—	¥	81	¥ 54 (\$ 448)	Accrued expenses	¥ —	- ¥ (\$	3 25)
				Purchase of machinery and equipment	¥—	¥	300	¥ 827 (\$ 6,860)	Accounts and notes payable	¥ —	- ¥ (\$	612 5,077)
				Loans of securities	¥—	¥	—	¥10,959 (\$90,908)	Securities loaned	¥5,613		0,565 7,640)
				Loans of fund	¥—	¥	—	¥ 6,095 (\$50,560)	Short- term loan	¥3,340	) ¥	—
									Long- term loan	¥ 103	¥	—
				Interest received	¥—	¥	91	¥ 42 (\$ 348)	Accounts receivable —other		₹¥ (\$	0 0)
				Furnishing the Company's assets pledged as collateral	¥—	¥2,	600	¥ 3,000 (\$24,886)				
Samick Industrial Co., Ltd.	W9,800 million	Manufacture and sales of baring	17.97%	Sales of machinery and equipment	¥—	¥	_	¥ 698 (\$ 5,790)	Accounts receivable		′¥ (\$	23 191)
				Manufacturing of the Company's products	¥—	¥		¥ 10 (\$ 83)	Accounts payable	¥ (	¥	_
				Loans of fund	¥—	¥	_	¥ 1,000 (\$ 8,295)		¥ —		1,000 8,295)
				Interest received	¥—	¥	—	¥ 44 (\$ 365)	Accounts receivable —other		- ¥ (\$	7 58)

The terms and conditions applicable to the above mentioned transactions have been determined on the basis of arm's length and by reference to normal market price levels.

#### REPORT OF THE INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS ON THE CONSOLIDATED FINANCIAL STATEMENTS

To: The Board of Directors of THK CO., LTD.

We have audited the accompanying consolidated balance sheets of THK CO., LTD. (the "Company") and its consolidated subsidiaries as at 31st March, 1998 and 1999, and the related consolidated statements of income and shareholders' equity, and cash flows for each of the three years in the period ended 31st March, 1999, all expressed in Japanese yen. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the auditing standards, procedures and practices generally accepted and applied in Japan. Those standards 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. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As described in Note 3. (2) of the Notes to the Consolidated Financial Statements, the Company, during the year ended 31st March, 1998, changed the basis of securities valuation for securities having market quotations on over-the-counter market and for investment trust having standard prices from a "moving average cost method" into an "at the lower of moving average cost or market value method". The change was made to state the carrying value of securities having market quotations held by the Company on a more conservative basis reflecting the decline in market value of such securities with their acquisition cost. Accordingly, we concur with the change as appropriate. As a result of the change, income before income taxes for the year ended 31st March, 1998 was decreased by  $\frac{12}{2}$ ,790 million as compared with the amount which would have been reported if the previous method had been applied consistently. Also, the effect of the change to the segment information has been described in Note 5 of the Notes to the Consolidated Financial Statements.

As described in Note 3. (6) of the Notes to the Consolidated Financial Statements, the Company and its consolidated subsidiaries, during the year ended 31st March, 1998, employed the interperiod income tax method to specific timing difference items which have arisen due to elimination of inter-company transactions/accounts balances and unrealised inter-company profits. The change was made in order to achieve the better matching of periodic cost against revenue, because that the materiality of inter-company transactions has increased and has been expected to increase. Accordingly, we concur with the change as appropriate. As a result of the change, income before income taxes and net income for the year ended 31st March, 1998 were increased by  $\frac{225}{2,926}$  million and  $\frac{1}{21,025}$  million, respectively, and retained earnings as at 31st March, 1998 was increased by  $\frac{22,926}{2,926}$  million as compared with the amount which would have been reported if the previous method had been applied consistently. Also, the effect of the change to the segment information has been described in Note 5 of the Notes to the Consolidated Financial Statements.

In our opinion, except for the preceding paragraphs, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of THK CO., LTD. and its consolidated subsidiaries as at 31st March, 1998 and 1999, and the consolidated results of their operations and their cash flows for each of the three years in the period ended 31st March, 1999, in conformity with accounting principles and practices generally accepted in Japan (see Note 1) applied on a consistent basis.

The amount expressed in U.S. dollars, provided solely for the convenience of the readers, have been translated on the basis set forth in Note 4 to the accompanying consolidated financial statements.

Chuo Audit Corporation

26th June, 1999 Tokyo, Japan

Chuo audit Corporation

## NETWORK

OVERSEAS

(As of March 31, 1999) (1999年3月31日現在)

OVERSEAS			
海外	Capital (Local Currency		
Company 会社名	in Thousands) 資本金(千現地通貨)	Employees 従業員人数	Operations 事業内容
THK Holdings of America, L.L.C.	US\$30,000		FFR15日 Holding company for THK Group marketing and manufacturing companies in America 米国販社ならびに製造会社の持ち株会社
THK America, Inc.	US\$20,100	198	Import and sale of LM systems in North America 北米向け LM システム輸入販売
THK Manufacturing of America, Inc.	US\$8,000	44	Manufacture of LM systems LM システムの製造
THK Brasil Ltda.	R\$293	7	Import and sale of LM systems in the Brazilian market ブラジル市場向け LM システム輸入販売
THK Europe B.V.	f.84,080	54	Import of LM systems, distribution center and holding company for THK Group European marketing companies 欧州販社向けLMシステム輸入、物流センターおよび持ち株会社
THK G.m.b.H.	DM 200	122	Import and sale of LM systems for the German and U.K. markets ドイツ・英国市場向け LM システム輸入販売
PGM Ballscrews Ltd.	£,5,233	97	Manufacture of precision ball screws for Europe and the United States 欧米向け精密ボールねじ製造
PGM Ballscrews Ireland Ltd.	IR£,975	24	Manufacture of rolled ball screws for Europe and the United States 欧米向け転造ボールねじ製造
THK International Finance (U.K.) Ltd.	£1,500		Finance subsidiary 金融子会社
THK Taiwan Co., Ltd.	NT\$40,000	17	Import and sale of LM systems for the Taiwanese market 台湾市場向け LM システム輸入販売
THK L.M.S. International Co., Ltd.	US\$10,500		Holding company for THK Group Chinese subsidiary 中国子会社持ち株会社
Dalian THK Co. Ltd. 大連 THK 瓦軸工業有限公司	Y 124,564	92	Manufacture of precision ball screws 精密ボールねじ製造
Shouzan Co., Ltd.	HK\$2,000	3	Import and sale of LM systems for Hong Kong and Chinese markets 香港・中国向け LM システム輸入販売
Samick Industrial Co., Ltd. 三益工業 (株)	W 9,800,000	295	Import and sale of LM systems for the Korean market 韓国市場向け LM システム輸入販売
Charoen Sakata (Thailand) Co., Ltd.	Bt 309,100	731	Semiconductor board mounting 半導体基板実装

#### **DOMESTIC** 国内

(As of March 31, 1999) (1999年3月31日現在)

Company	Capital (Millions of Yen)	Employees	Operations
会社名	資本金(百万円)	従業員数	事業内容
Beldex Corporation	195	59	Manufacturing of three-dimensional measurement instruments, sales of glass-
			cutting machines
(株)ベルデックス			三次元測定器製造・ガラス切断機販売
THK Yasuda Co., Ltd.	100	108	Manufacturing of splines for THK
THK 安田(株)			THK 向けスプライン製造
S-Factory Co., Ltd.	30	3	Sale of socks and related items
<u>エス・ファクトリー(株)</u>			靴下およびそれに関連する商品の販売
Nihon Slide Kogyo Co., Ltd.	80	34	Consumer-use furniture, copy machines and slide rails for drawers in office equipment
日本スライド工業(株)			民生用家具、コピー機、事務機引出用スライドレール
THK Laboratory Co., Ltd.	50		Research and development of manufacturing and processing technologies for
			a variety of bearings used in linear motion and related components
(株) THK 技術研究所			各種直線運動用軸受およびその部品の製造・加工技術の研究・開発
Talk System Corporation	480	128	Bearings, electric conductive devices, and other computer-aided design
			(CAD); also computer-aided manufacturing (CAM) and Internet provider
トークシステム (株)			ベアリング・伝導機・その他 CAD・CAM インターネットプロバイダー
THK Mechanic Research Co., Ltd.	100	17	Manufacture and sale of square robots
(株)THK メカニック技術研究所			スクエアロボット製造販売
THK Chubu Sales Co., Ltd.	30	6	LM systems purchasing and sales
ティエチケー中部販売(株)			LM システム仕入販売
Daito Seiki Co., Ltd	4,255	289	Manufacture of sock-knitting and production machinery; purchase and sale
			of LM systems
大東製機(株)			靴下編み機・産業機械製造・LM システム仕入販売
THK Insurance Service Co., Ltd.	10	2	Non-life insurance agency operations and life-insurance search operations
THK 保険サービス			損害保険の代理業務および生命保険の募集に関する業務

## CORPORATE DATA

THK CO., LTD.

Head Office 本社

3-11-6 Nishi-Gotanda, Shinagawa-ku, Tokyo 141-8503, Japan 〒 141-8503 東京都品川区西五反田 3-11-6

Tel.: 03-5434-0300

Established April 1971 設立 1971年4月

Number of Employees 2,751 従業員数 2,751 名

Common Stock: Authorized 467,642,100 会社が発行する株式の総数 467,642,100株

Issued 115,573,543 発行済株式数 115,573,543 株

Number of Shareholders 27,694 株主数 27,694 名

Transfer Agent: The Mitsubishi Trust & Banking Co., Ltd. 名義書換代理人: 三菱信託銀行株式会社

Equity Securities Registration: Japan Securities Dealers Association 登録証券業協会: 日本証券業協会

(As of March 31, 1999) (1999年3月31日現在)



## **BOARD OF DIRECTORS**



#### PRESIDENT AND CEO 代表取締役社長

Akihiro Teramachi 寺町彰博

SENIOR MANAGING DIRECTOR 専務取締役 Mikio Hayashi

MANAGING DIRECTOR 常務取締役

Katsuhito Imai 今井勝人

#### MANAGING DIRECTOR 常務取締役

Yoshimi Sato 佐藤吉見

DIRECTORS 取締役



Shigeharu Mabuchi 馬淵茂治



Katsuyoshi Muto 武藤勝良

林美喜夫

Takeki Shirai 白井武樹



Toshio Tonegawa 利根川敏夫



Mikio Matsui 松井幹夫

寺町俊博





Toshihiro Teramachi Hiroshi Funahashi 舟橋浩



Naohiro Yamashita 山下尚宏



Shigeru Wako 若生茂

STANDING AUDITORS 常勤監査役

Akira Sugi 杉彰

#### Yoshito Nagafuchi 永淵義人

#### AUDITORS 監査役

Kihachiro Yucho 遊長喜八郎

Syoji Namiki 並木章二

(As of March 31, 1999) (1999年3月31日現在)

