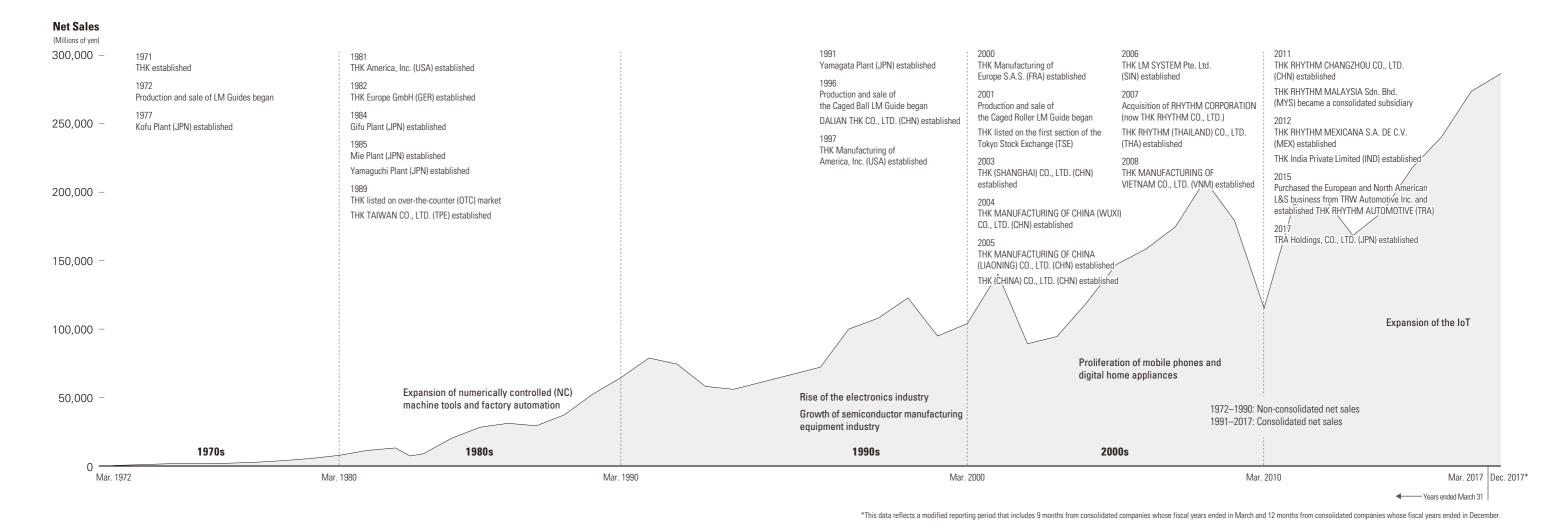
# **■** CORPORATE HISTORY



The 1970s:

## **Establishment and the Early Years**

While rolling motion was commonly achieved through rolling contact utilizing rotary bearings, linear motion was considered impossible to achieve through rolling contact, and it primarily came from sliding contact instead.

In 1971, THK developed the ball spline, which enabled a higher level of linear motion precision and performance. This ball spline was the predecessor to THK's current mainstay product, the LM Guide, which was first introduced in 1972.

In 1978, the Company's products were adopted by a U.S.-based pioneer of the machining center and world-class leader of its day. This breakthrough was the catalyst for the increased use of LM Guides in machine tools.

#### The Ball Spline

Developed in the same year that THK was established, the ball spline was the precursor to the LM Guide. This revolutionary product allows balls to roll along a rounded groove machined into the ball spline's shaft, boosting the load that the device can tolerate and permitting the transmission of torque.



The 1980s:

# Significant Developments in Factory Automation (FA)

The 1973 oil crisis saw the demise of heavy industry, pushing technology-based industries, such as the automotive, semiconductor, and home appliance industries, increasingly to the fore. Buoyed by depreciation in the value of the yen as well as the outstanding quality of products manufactured in Japan, export volumes to Europe and the United States climbed steadily. Under these circumstances, there was a demand for mass production of high-quality products. With FA advancing across production front lines, machine tool production volumes increased, and the proportion of advanced machine tools with numerical control (NC) saw steady growth. Against this backdrop, the application of LM Guides experienced explosive growth.

#### The LM Guide

Developed utilizing the structure and mechanism of ball splines, LM Guides today are THK's mainstay product. The use of LM Guides by a major U.S.-based machine tool manufacturer spurred a significant increase in the application of these products in machine tools.

The 1990s and Onward:

### The Rise of the Electronics Industry

During the 1990s, the number of LM Guides used in semiconductor manufacturing equipment surged dramatically, in line with the increase in semiconductor demand. Entering the 2000s, amid the proliferation of mobile devices and digital home appliances, as well as the upswing in demand for semiconductor, flat panel display, and other similar manufacturing equipment, there was a rise in the use of LM Guides, especially the second-generation Caged Ball LM Guide. In tune with the increasing globalization of manufacturing, THK accelerated its business development globally.

#### The Caged Ball LM Guide

The Caged Ball LM Guide was developed as the second-generation LM Guide. By keeping the balls in place, the use of caged ball technology extends service life, reduces noise, and enables long-term maintenance-free operation when compared with first-generation LM Guides.



Toward a New Era

## Achieving Management Targets and Expanding Business Domains by Implementing Three Growth Strategies

As globalization has progressed, the market around THK has also steadily expanded with the rapid development of new technologies such as Al and the IoT. Under these circumstances, the Company aims to expand its business domains through three growth strategies: expanding its geographical range through full-scale globalization; purposefully expanding its domains through the development of new business areas; and fully utilizing Al, robots, and other technologies in a variety of ways through a change in business style. While moving forward with those strategies, THK is accelerating the initiatives being conducted in its industrial machinery and automotive and transportation businesses to achieve the following management targets by the end of the 2022 fiscal year: consolidated net sales of ¥500 billion, an operating income of ¥100 billion, an ROE of 17%, and an EPS of ¥560. Furthermore, the Company will continue vigorously promoting its growth strategies to aim at achieving not only these management targets, but also long-term growth and an increase in its corporate value.

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