

Precision Equipment and Other Products

The precision equipment business segment combines leading-edge technology products and products for special fields. Amid the ongoing evolution of successive leading-edge industries, NTN pursues further advances in the precision technology it has built up through the development of high-precision bearings, and applies it to state-of-the-art fields, including electronics, semiconductors and computers.

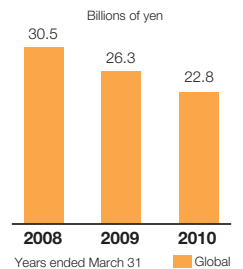


Review of Operations

Sales of precision equipment and other products during the fiscal year under review declined ¥3.5 billion, or 13.2%, to ¥22.8 billion mainly due to customers curbing capital investment because of dwindling worldwide demand.

NTN develops products with a variety of high-precision and high-functionality characteristics. These products include spindles and XY tables centered on semiconductor and electronic equipment applications, mechatronic products such as LCD repair equipment, and parts feeders used in a variety of industries such as automobiles and food.

Precision Equipment and Other Products Sales



New Products

Large-type precision positioning drive unit

Commercialization of "high performance large-type gantry XY table"

NTN Corporation has commercialized a "high performance large type gantry XY table." This product is a gantry type high precision positioning XY table for large-type work targeted towards manufacturing solar energy panels, and producing and inspecting flat panel displays. Panel manufacturers have been using increased work sizes, such as liquid crystal glass substrates, and also requiring light weight, high rigidity and high precision. With this "high performance large-type gantry XY table," NTN has achieved light weight, high rigidity and high precision by changing the steel tubing used and by optimizing the design.



Commercialization of "food feeding high speed linear feeder"

NTN has developed a "food feeding high speed linear feeder." This product enables the feeding of a variety of kinds of foods and vibration-absorbable parts. A conventional linear feeder is a machine designed to feed and supply foods and parts by vibrating the equipment. However, the feeding of vibration absorbable foods, such as konnyaku jelly, is not possible. For these foods, increased vibration amplitude of approximately double size is needed. This new feeder uses an "amplification spring mechanism" which provides an increased vibration amplitude in comparison to the conventional linear feeder. In addition, by using this amplification spring mechanism, the new product maintains the same power consumption as that of the conventional feeder, thereby contributing to saving energy.



Commercialization of "2 way sorting feeder (bowl type)"

NTN has commercialized a "2 way sorting feeder (bowl type)." This new product enables various kinds of part feedings by means of the integration of the basic technology of parts feeders and a new part feeding mechanism. A parts feeder is a piece of equipment designed to line up and supply parts by vibrating the equipment (bowl). For part feeding, a wide variety of parts feeders has been needed. In response, NTN has already commercialized the Mono-drive 2 Way Feeder which not only lines up and supplies two kinds of parts as a one-bowl feeder, but is able to offer variable speed feeding and also to feed parts in the other direction. The newly developed "2 way sorting feeder (bowl type)" combines this basic technology with a new feed function to improve our customers' production efficiency and contribute to saving energy.

