Products: Electronic Components

- **Micro motor** for zooming mechanism
- **Stepping motor** for focusing mechanism
- **Lens Actuator**
- **Mobile phone**
- **Digital camera**
- **Next-generation DVD Recorder**
  - **Stepping motor** for collimator
- **Car Mounted Devices**
  - **Sled motor** (stepping motor) for ODD
  - **Sled motor** (stepping motor) for car navigation systems
- **Stepping motor** for focusing mechanism
- **Loading motor**
- **Laptop PC**
- **Motors**
**Products: Electronic Components**

- **Sanitary Product**
  - Soft close unit for seat & cover
  - Nozzle drive motor for bidet
  - Auto flush actuator

- **Refrigerator**
  - Refrigerator valve unit
  - Ice maker
  - Defrost time switch
  - Damper control

- **Motor Drive Units**
  - Flow/Switching valve drive motor
  - DC pump (for tank circulation)
  - Motor Drive Units

- **Hot Water Supply**
  - Flow/Switching valve drive motor
  - DC pump (for tank circulation)

- **Washing machines**
  - Ice maker
  - Drain valve unit
  - Various pumps

- **Air Conditioner**
  - Louver drive units
  - Filter cleaner units
Products: Systems Machinery

**RBT Robots**
- Wafer handling robot
- Liquid Crystal Display
- Solar cell glass substrate handling robot
- LCD glass substrate handling robot

**ATM**
- Motorized card reader
- Passport scanner unit
- smart card and RFID/contactless reader
- Standalone unit

**CRD Card Readers**
Consolidated Sales Breakdown
(Fiscal year ended March 31, 2009)

**Systems Machinery** 32%
- RBT 21.8%
- MTR 23.6%
- HAU 12.8%
- Others 2.2%

**Electronic Components** 66%
- NIDEC PIGEON 5.3%
- NIDEC NISSIN 15.4%
- OPU 7.6%
- HAU 12.8%
- MTR 23.6%
- ORD 10.2%
- Others 2.2%

**Industrial Robots**
- Card Readers
- NIDEC PIGEON: Mechanical units, Speakers, Mechanical units for disc media
- NIDEC NISSIN: Precision plastic molding, Plastic lenses, others

**Motors**
- NIDEC NISSIN: Precision plastic molding, Plastic lenses, others
- Electronic Components: others 1.1%
- Motors
  - Lens actuators
  - For DSC, DVC, Audio, Video, Industrial sewing machinery, Robots, Optical disc drives, PPC • Digital photocopiers

**Home Appliance Units**
- NIDEC PIGEON: Mechanical units, Speakers, Mechanical units for disc media
- Electronic Components: others 1.1%
- Home Appliance Units
  - For Home appliances (Refrigerators, Air conditioners, Toilet, Washing machines, others)

**Optical Pickup Units**
- NIDEC PIGEON: Mechanical units, Speakers, Mechanical units for disc media
- Electronic Components: others 1.1%
- Optical Pickup Units
  - For combo drives, DVD writers

Total Sales: ¥100.5 billion
Motors: Products

Our wide-ranging expertise in motor development allows us to offer cutting-edge solutions.

NIDEC SANKYO’s motors play vital roles in the IT devices, audio-visual equipment and household electronics that characterize modern life. We offer products with a high degree of precision, speed, compactness and cost efficiency, meeting the highest standards in an age of diversifying needs. Our flexible development capabilities are sustained by our proprietary precision component processing and highly efficient design technologies. This allows us to offer innovative, customized products and optimal solutions.

Electronic components

- Stepping Motors
- Brush Motors
- Mid-Size Brushless DC Motors/AC Servo Motors
- Lens Actuators

Share of the Micro Stepping Motors: 40%
Motors: Strategy [Lens Actuators]

**Lens Actuators**

- Variety of product line-ups
- Targeting market share 50% in 2012
- Developing a unique structure and performance
- Point of Customer’s needs
  - Strengthening shock-tolerance
  - Adapting to high resolution
- High precise structure by own original ultra precision parts
- Turning of strategic model corresponding to market trend and market price

Starting production of Lens Actuators
NIDEC SANKYO(FUZHOU) CORP. At China

Expanding market share

- Slim type model
- High resolution spec model

Electronics components

Electronic components
Stepping motors

Diversifying product line-ups

- Promoting strategic model:
  - Blu-ray Disc drives
  - Motors for high precision device

- Stepping motor for collimator
  (for Blu-ray Disc drives)

- Develop light, thin and small models
- Enhance cost competitiveness

Innovation of production system and product design

- Introduction of low cost operation by new production system.
- Promoting value engineering.

DC motors

- Promoting to energy saving market

- Motor for heat pump compressor
  (energy saving hot water supply)
Motor Drive Units: Products

Proposal-based, pioneering development helps make NIDEC SANKYO’s products No.1 in the market.

High-reliability control device units, some of NIDEC SANKYO’s key devices, were developed through the fusion of compact, high-efficiency, low-energy motor technology, mechanical technology, and sensor technology. They have been highly successful in a number of applications, including electrical equipment and home appliances. We created a compound unit using sensors and non-standard gears, and achieved high reliability and optimal value through the use of long-lived, precision parts and a simple mechanical structure. Offering a broad lineup of high-efficiency motors, which allows selection of the best power source and control system for the intended application, NIDEC SANKYO is employing its original technology to meet its customers’ requirements.

- Share of the Drain valve operation units for Full Automatic Washing Machines: 50%
- Share of the Damper control units for Refrigerators: 70%
Motor Drive Units: Strategy

- **Reorganizing the system of production and reinforcing competitiveness of QCD**
  - Expanding capacity by reorganizing overseas facilities and optimizing location
  - Strengthening production foothold by 3Q6S activities and aiming to double production efficiency

- **Reinforcing and expanding current products, and new markets**
  - Filter cleaning unit for air conditioners
  - DC/BL pump and valve control unit for Eco-Cute
  - Development of fuel cell & medical equipment units etc
  - DC/BL pump unit for energy saving washing machines
  - Ice maker unit of energy saving model

- **Expanding line-up for high spec home appliances**

- **NIDEC SANKYO (ZHEJIANG) 2nd factory. Operation: June, 2009**
NIDEC SANKYO's ATM card readers have gained 80% market share due to their reliability and performance.

NIDEC SANKYO has been engaged in card reader research and development for approximately 30 years, emphasizing reliability and security. The Company has helped to establish advanced technologies in the areas of media handling, image processing, and smart card and RFID/Contactless readers. We have utilized the expertise amassed in the design of magnetic heads, motors and other core components in our card readers. Through our close association with major customers throughout the world, we have shaped our readers and dispensers to match the need of any marketplace. This intimate knowledge of the market has made NIDEC SANKYO’s card readers the world leader, found in many applications including POS terminals, kiosk terminals, ATMs and other financial terminals.
Card Readers: Strategy

Promoting to rising nations, transit and retail markets

Promoting to regions going cashless

Card reader for ATMs

China/Russia/Eastern Europe

Middle East/India

South America

Rising nations (BRICs, VISTA, MENA)

Retail

(Convenience stores, supermarkets and gas stations)

Secure card reader for PCI

Provide verification for security needs

Key card dispenser for hotel

Correspondence to simplify procedures and electronic settlements

Contact less IC card dispenser

Image scanner unit for authentication

Transit

(Rail road, Aviation)
NIDEC SANKYO is in an advantageous position in the market for robots that can stably handle glass substrates for large LCD panels.

NIDEC SANKYO’s clean type handling robots are highly successful in the LCD and semiconductor fields. Speed-control technology and expertise in robotic hands permits stable handling of large glass LCD panel substrates, and these robots also offer high rigidity, high reliability, and low energy consumption. Many LCD fabs for the 5th to 10th generation glass substrates of large LCD panels have adopted these robots with great success and satisfaction. NIDEC SANKYO also has class 1 clean room wafer-handling robots and vacuum-environment robots in its lineup, meeting handling needs with top quality products.
Industrial robots: Strategy

- **LCD glass substrate handling robot**
  - LCD panels sized larger moreover
  - Developing 11th generation robots
  - Promoting cost reduction and Increasing profits
    - Value engineering main models
    -Supplying parts abroad
    - Processing parts in-house
- **Introducing our robots to every clean environment market**
  - Adding glass-panel-handling robots for solar batteries
  - Wafer handling robots
Element technology underpins the competitiveness of NIDEC SANKYO products

The competitiveness of NIDEC SANKYO products is supported by our wide variety of element technologies as well as by our parts processing technologies that provide for the realization of such products. The superiority of our products has been solidified by a wide variety of vital parts processing such as press forming, injection molding, cut parts, sintered bearings, magnets, sensors and optical elements. Moreover, the application of nanotechnology has aided the development of high-precision core parts and units, to the benefit of our customers by allowing us to provide them with compact and reliable products.