

Research and development activities were almost entirely funded by the reporting entity (The Japan Steel Works, Ltd.). Combined spending on research and development for the Steel Products business and the Machinery Products business amounted to ¥3,312 million (US\$28 million).

As a materials and mechatronics company, we strive to develop new products and production techniques using our own technology, while also actively promoting widespread technical alliances and joint development in an effort to put new products and technology into effect as quickly as possible. In terms of the direction of research and development, our Research & Development Headquarters continues to promote cooperation with individual business divisions in order to: (1) improve the capabilities, performance and reliability of our core products and (2) develop products and businesses to meet the requirements in new business fields.

Our Research & Development Headquarters encompasses our headquarters (within the Yokohama Plant), the Muroran Research Laboratory (situated on the premises of the Muroran Plant), and the Machinery Research Laboratory (part of which is located at the Hiroshima Plant and the remaining part located at the Yokohama Plant).

Our basic research and development policy is as follows.

1. Promoting the development of new products and businesses by focusing on the five technological fields of new energy & energy savings, information & telecommunications, environmental protection, nanotechnology & materials, and new production technologies. We aim to expand our fields of business by improving our core technologies.
2. Making strenuous efforts to identify new themes for research and development that meet current market needs, and selecting new key development projects that have a high potential to become significant earners for the Company in the future. We will make investments in human resources and property, and allocate funds to selected fields, taking into due consideration the forming of alliances to shorten development time.
3. Promoting promising themes for future technology and basic research to fulfill the needs of 21st century society, and developing them into research and development projects that will translate into new products and businesses in the future.

### Overview of R&D activities by business segment

#### Steel Products

In terms of the development of materials-related products, we have been carrying out research and development in areas such as clad steel pipes for natural gas drilling, high alloy materials for combined cycle power generation and nonferrous alloys for the IT industry. We have also been working on the development of hydrogen absorbing alloys, as well as their applied systems such as hydrogen tanks for fuel cells. For fiscal 2006, spending on steel product research and development totaled ¥1,243 million (US\$11 million).

#### Machinery Products

In the field of machinery-related products, we have been developing high-performance, highly reliable, cost-effective technology for magnesium alloy injection molding machines, high-precision molding technology for plastic extruder and injection molding machinery, and supercritical fluid-assisted processing technology. We have also been working on laser applications, including systems for cutting-edge laser annealing equipment used in the production of TFT (thin-film transistor) liquid crystal displays, as well as telecommunications equipment. In the field of technology for environmental preservation applications, we are currently working on the development of waste plastic melting treatment equipment. Spending on machinery product research and development totaled ¥2,068 million (US\$18 million) for fiscal 2006.