

## Outline of FY 2011 1st Half Results

Note: Page numbers indicated next to headings correspond to presentation slide numbers.

### <Financial Highlights> p. 1

In spite of the severe conditions from the strong yen, net sales increased by ¥8.3 billion (+7.1 %) year-on-year, due to a recovery trend in R&D and capital investment in Japan and overseas and due to the introduction of new products.

Operating income increased by ¥2.6 billion (+56.1 %) year-on-year, and ordinary income increased ¥2.4 billion (+62.0 %) year-on-year.

Net income decreased by ¥700 million (-23.2 %) year-on-year, due to posting corporate taxes for past fiscal years in the first quarter.

In terms of the average foreign exchange rate (April to September), the yen strengthened by ¥9.32 ,year-on-year, versus the U.S. dollar and ¥0.80 versus the euro.

### <Major Factors Behind Profit Changes> p. 2

■Gross Profit (gross profit margin: 37.6 % (0.5 point improvement, year-on-year))

Due to increased sales and other factors, gross profit increased by ¥3.7 billion year-on-year. This includes ¥3.1 billion from increased sales and, though affected by the exchange rate, ¥0.6 billion from an improved breakeven point resulting from changes in the product mix, cost reductions, and so on.

■Operating Income (operating income margin: 5.8 % (1.8 point improvement, year-on-year))

Operating income increased by ¥2.6 billion year-on-year, due to increases in Selling General and Administrative expenses resulting from increased sales being kept to ¥1.1 billion. The ratio of selling and administrative expenses to sales improved by 1.3 percentage points, year-on-year.

■Ordinary Income (ordinary income margin: 5.1 % (1.8 point improvement, year-on-year))

The non-operating balance decreased by ¥200 million, year-on-year, due to an increase in foreign exchange losses (¥26 million increase, year-on-year) and other factors. Consequently, ordinary income increased by ¥2.4 billion.

### Breakdown by Business Segment p. 5 - p. 8

#### 1. Analytical & Measuring Instruments

■General Analytical Instruments

Sales of chromatographs expanded due to contribution from highly competitive new products and strong trends in chemical and pharmaceutical fields. Chromatographs increased its share of analytical and measuring instrument sales by 1.4 points, year-on-year, to 47.0 %.

■Testing Machines & Non-Destructive Inspection Machines

Sales of testing machines increased in chemical and other fields and sales of non-destructive

inspection machines were strong in electrical products and transportation equipment fields and government and academia markets.

## **2. Medical Systems**

In Japan, sales of FPD angiography systems and gastrointestinal fluoroscopy systems were strong due to the market shift to digital radiography, but the overall increase was slight due to the effect of the Great East Japan Earthquake and other factors.

Overseas, though the strong yen resulted in difficult business conditions, sales of mobile X-ray systems increased in North America and sales remain strong in China, where sales of local products are expanding, but sales struggled with increasing competition in Europe.

## **3. Aircraft Equipment**

Though sales of components and service parts for the new P-1 patrol plane increased, sales for the modernization of the F-15 fighter decreased, resulting in overall lower sales in Japan.

In contrast, sales of components for passenger aircraft recovered in North America, resulting in increase for the first half.

## **4. Industrial Machinery**

Sales of turbomolecular pumps decreased due to lower demand for semiconductor and LCD manufacturing equipment and sales of CVD equipment for solar cells also decreased due to postponed capital investments by solar panel manufacturers in Japan, but sales of glass winders and gear pumps to China increased.

Sales of hydraulic equipment for forklifts and other applications increased significantly due a recovery in market conditions.

## **Breakdown by Region** **p. 9 - p. 15**

Due to a recovery in corporate R&D expenditures and capital investment, sales grew both in Japan and overseas.

Sales were strong in North America, Europe, and China, with double-digit growth in terms of local currencies.

The overseas sales ratio increased by 1.9 percentage points in the first half, year-on-year, to 42.2 %. The overseas sales ratio for our strongest segment, analytical and measuring instruments, increased by 1.0 points, year-on-year, to 49.4 %.

### **1. Japan**

Sales of analytical and measuring instruments increased due to a recovery in market conditions and due to the introduction of new products. Sales of chromatographs were strong in pharmaceutical and chemical fields, testing machines in chemical fields, and non-destructive

inspection machines in electrical products and transportation equipment fields.

For industrial machinery, sales of hydraulic equipment increased, but overall sales decreased due to stagnant semiconductor and LCD markets.

## **2. Americas**

### **North America**

#### **■ Analytical & Measuring Instruments**

Sales of liquid chromatographs and mass spectrometers increased significantly due to market recovery and new products. In terms of local currencies, sales increased by a significant 22.4 %.

#### **■ Medical Systems**

Sales of digital mobile X-ray systems increased significantly and GPO (Group Purchasing Organization) sales increased significantly as well, for a total increase of 16.2 %, on a local currency basis.

#### **■ Aircraft Equipment**

Passenger aircraft business recovered, with expanded sales of B747-8 flap actuation systems and other products to Boeing.

#### **■ Industrial Machinery**

Sales of hydraulic equipment for forklifts and other applications increased and sales of turbomolecular pumps for semiconductor manufacturing equipment continued to grow.

## **3. Europe**

#### **■ Analytical & Measuring Instruments**

Sales of mainly general analytical instruments increased significantly in Russia. Sales of mass spectrometers increased due to the introduction of new products. In terms of local currencies, sales increased by a significant 21.3 %.

#### **■ Medical Systems**

Competition has become more severe due to the strong yen.

#### **■ Industrial Machinery**

Sales of hydraulic equipment increased in Europe.

## **4. China**

#### **■ Analytical & Measuring Instruments**

Sales to pharmaceutical, chemical, petrochemical, academia, and other markets continued to be strong, with a significant increase in chromatograph sales. Sales of spectrophotometers increased for inspecting smart phones. Sales of non-destructive inspection machines also increased significantly for applications such as inspecting lithium ion batteries. In terms of the local currency, sales increased by a remarkable 42.2 %.

#### ■ Medical Systems

Sales of products manufactured locally to Chinese specifications grew steadily. In terms of the local currency, sales increased by 21.1 %.

#### ■ Industrial Machinery

Sales of turbomolecular pumps for glass coaters increased. Also, glass winder sales to Chinese glass fiber manufacturers increased significantly. In terms of the local currency, sales growth achieved an extremely high 64.5 %.

### 5. Other Asian Countries

#### ■ Analytical & Measuring Instruments

Though the growth rate in liquid chromatograph sales in India has slowed, sales remain strong due to new gas chromatograph mass spectrometer products and sales of testing machines to Japanese companies in Southeast Asia.

#### ■ Medical Systems

Though sales increased in Taiwan and India, they decreased in Korea.

### <Current Assets> p. 16

#### ■ Cash & Time Deposits

Even though trade notes and accounts receivables increased by ¥2.8 billion year-on-year (compared to end of September 2010), turnover improved by 0.1 months.

#### ■ Inventories

Inventories increased by ¥6.5 billion year-on-year (compared to end of September 2010). Turnover worsened by 0.1 months as well.

Inventories increased in the first half due to anticipation of increased demand resulting from the earthquake disaster.

### <Liabilities & Net Assets> p. 17

#### ■ Liabilities

Due to repayment of long-term and short-term loans, total debt decreased by ¥2.6 billion year-on-year to ¥27.9 billion.

#### ■ Net Assets

Due to a further increase in net assets, the equity ratio improved by 0.9 percentage points year-on-year to 56.4 %.

### <Cash Flow> p.18

#### ■ Cash Flows from Operating Activities

Though net income before taxes increased, operating cash flow decreased year-on-year by ¥10.2 billion due to increased inventories and other factors. Total cash flow from operating activities in

the first half resulted in an inflow of ¥1.4 billion.

■ Cash Flows from Investing Activities

Acquisition of fixed assets and other factors resulted in an outflow of ¥2.8 billion.

Consequently, free cash flow decreased by ¥9.4 billion year-on-year, resulting in an outflow of ¥1.4 billion.

■ Cash Flows from Financing Activities

Repayment on short-term loans and payment of dividends resulted in an outflow of ¥4.8 billion.

**<Highlights>** 📄 p. 19 - p. 25

**1. Analytical & Measuring Instruments**

**A. New Chromatography Products and Increased Sales in Newly Emerging Economies**

New products were again aggressively introduced in the first half, mainly involving chromatographs that feature high throughput.

The Nexera MP was introduced in May. An optimal ultra high performance liquid chromatograph for mass spectrometry, Nexera MP systems include high performance automatic sample injection functionality (an autosampler) to provide high-accuracy high-speed automated MS analysis. Significant demand is expected from fields developing new drugs.

In July, the LabSolutions CS analysis data system was released. This networking system allows controlling multiple LC or GC units from any computer on the network and centrally managing analysis data. With efforts to increase safety and quality being promoted in pharmaceutical, chemical, foods, and other fields, demand is expected to increase for this system as a means to improve productivity.

In September, the UF-Amino Station high-speed amino acid analysis system was released. Developed jointly with Ajinomoto, this system is able to analyze the 38 amino acid-related components in only 9 minutes. Demand is expected from food and beverage fields involving fermentation, dairy products, and meat.

In October, a sales subsidiary was established in the Republic of South Africa to promote expanding sales in newly emerging economies. This subsidiary will promote developing new markets in academic, research, mining, foods, agricultural, and pharmaceutical fields.

**B. Advanced R&D**

Joint R&D projects with academic institutions or other customers provide a valuable opportunity that allows utilizing a wide range of pathogen samples, for example.

By incorporating the expert opinions and experience of customers, we hope to convert these opportunities into creating truly useful high value-added products and services.

In terms of advanced research fields, we plan to steadily establish a foothold for developing the life science business.

Neonatal mass screening using tandem mass spectrometry: Neonatal blood samples are analyzed using an LCMS-8030 system for the early detection of congenital abnormalities to prevent their occurrence. About 30,000 specimens are analyzed, which are used to develop analytical methods and application software.

Comprehensive analysis of lipids: A biological sample pretreatment system and a comprehensive lipid analytical method are being developed and biomarkers are being searched for as well.

Ultra-early cancer diagnosis: Ultra-early diagnosis of cancers, pharmacokinetic analytical methods, and treatment technologies are being developed.

Search for biomarkers: Mass spectrometers are being used for proteomic analysis of iPS cells to search for and identify biomarkers.

Automatic protein pretreatment system: An outstanding advanced instrument is being developed that fully automates pretreatment processing (separation, desalting, and enzymatic digestion) for protein analysis. Applications will be developed at Shimadzu and packaged with LC and LCMS systems.

## **2. Medical Systems**

With the growing popularity of digital radiography systems, a new MobileDaRt Evolution mobile X-ray system was released. Featuring a wireless FPD (flat panel detector) and improved maneuverability and operability characteristics, it allows significantly reducing the burden to patients and operators. In addition to use in patient rooms within hospitals, this instrument is also ideal for emergency, disaster relief, and contagious disease containment applications.

A value-oriented angiography system, the Bransist Alexa, was released, which features an indirect conversion type FPD to maximize the performance-to-cost ratio. This is being promoted overseas, including in newly emerging economies.

A new FLEXAVISION F3 system was introduced. This is a gastrointestinal radiography system that features a large FPD and enables displaying both dynamic (fluoroscopy) images and static (radiography) images using a single system.

In terms of software, a new product was released that increases the accuracy of stent positioning

during cardiovascular intervention procedures.

Sales expansion measures are actively promoted overseas.

In North America, sales through GPOs (Group Purchasing Organizations) and sales of mobile X-ray systems expanded, resulting in a significant 16 % increase year-on-year in terms of local currencies. Also, Shimadzu received high evaluation from healthcare accreditation organizations. In China, an increase in local production and government investment in inland medical facilities combined to help achieve a high 21 % growth rate in terms of the local currency.

In Australia, Shimadzu purchased the sales and service rights for dental radiography systems, to expand sales in this region.

### **3. Aircraft Equipment**

Passenger aircraft equipment sales to Boeing and others in North America recovered. In terms of local currencies, sales increased by 78.6 %.

In the defense industry, demand increased for equipment on Japan Maritime Self Defense Force's new P-1 patrol plane.

### **4. Industrial Machinery**

In Korea, a manufacturing subsidiary was established for turbomolecular pumps. Production start is scheduled for January 2012. Capacity will be increased for supplying turbomolecular pumps to Samsung and other semiconductor and LCD manufacturers that continue to grow rapidly in Korea.

Overseas demand for hydraulic equipment has increased as well, as Japanese customers advance overseas. In terms of local currencies, sales grew significantly, with a 34 % increase in North America, a 27 % increase in Europe, and a 52 % increase in China.

### **5. China**

#### **A. Increased Range of Models and Services**

Sales of chromatographs increased even further. Sales growth reached a high 47 %, in the local currency, for pharmaceutical, chemical, and petrochemical fields.

In addition, new demand was captured in the new growing field of inspecting smart phones and lithium ion batteries.

Sales increased for Shimadzu spectrophotometers, which offer superior wavelength range extendibility, for inspecting the transmittance of smart phone touch panels.

For lithium ion batteries, efforts to develop new customers in China yielded results with higher sales of non-destructive inspection machines.

## **B. Strengthen and Develop Capabilities in China**

To strengthen business management capabilities in China, the previous sales subsidiary Shimadzu International Trading (Shanghai) Co., Ltd was reorganized to form Shimadzu (China) Co., Ltd.

Strengthening the shared service functions will ensure the eight Group companies in China operate in a smooth and efficient manner in the expanding markets in China.

In addition, due to an expected increase in demand in inland regions from economic development policies, we are also planning to establish new locations in inland areas as well.

A new analysis center, essential for expanding sales of analytical and measuring instruments, will be built in Chengdu, Sichuan province. The fifth analysis center in China, after Beijing, Shanghai, Shenyang, and Guangzhou, this center is expected to play a critical role in developing new markets in the inland regions.

We also plan to establish a new sales base in Zhengzhou, Henan province, to capture the major increases in demand expected in the inland areas. This will be our 13th branch in China.

Once these facilities are operational, our business operations in China will comprise 9 subsidiaries, 13 branches, and 5 analysis centers, which will help establish a more solid foundation.

## **<FY 2011 Full-Year Forecast> p. 26 - p. 28**

In the second half, we expect to face a yen that remains strong, effects from the European financial crisis, concerns regarding the economic slow-down in the U.S., and concerns regarding a concomitant slow-down of growth rates in newly emerging economies. Based on our major overseas subsidiaries, the outlook for the U.S. and China looks good, but circumstances in Europe will remain tough due to market conditions. Progress is expected to be slow in Japan as well. Therefore, estimates for the full fiscal year remain at the previously indicated levels.

Specifically, the forecast for the current fiscal year is ¥265.0 billion in net sales, ¥19.0 billion in operating income, ¥17.5 billion in ordinary income, and ¥10.0 billion in net income.

These estimates assume an average foreign exchange rate of ¥78 per dollar, which is ¥8.50 stronger year-on-year, and ¥110 per euro, which is ¥3.88 stronger year-on-year.

By segment, net analytical and measuring instrument sales are expected to increase, mainly in chemical and pharmaceutical fields, which were strong in the first half. In addition, operating income is expected to increase for all segments, excluding the "Other" segment. The operating income margin will improve in the analytical and measuring instrument and industrial machinery segments and the medical systems and aircraft equipment segments will return to profitability.