

# Financial Position, Operating Results, and Cash Flow Analysis

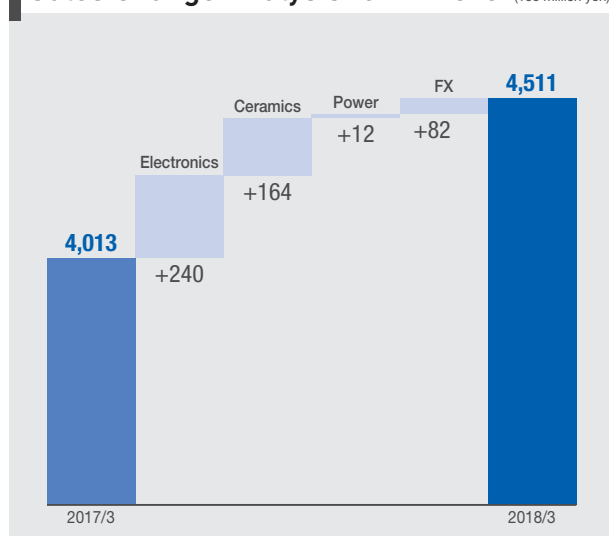
## Operating Results

During the fiscal year ended March 31, 2018, the Japanese economy remained on a moderate recovery, underpinned by improvements in the employment and income environment. Among overseas economies, developed economies, such as the U.S. and Europe, continued on a moderate recovery, and China and emerging countries were also robust with a sign of pick up.

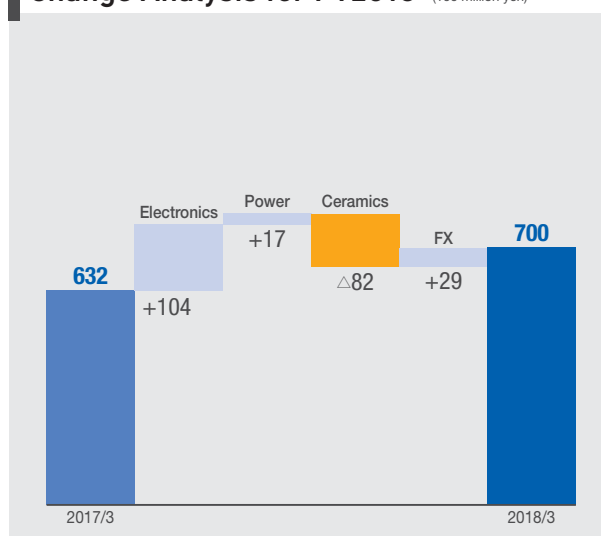
The NGK Group saw sluggish shipments of both insulators and NAS<sup>®</sup> (sodium-sulfur) batteries in the Power Business Segment. In the Ceramics Business Segment, the volume of automotive ceramics increased mainly due to an increase in sales of trucks in the Chinese market and tighter emissions regulations in Europe. In the Electronics Business Segment, whereas the quantity of ceramic packages for mobile phone base stations in China fell, the quantities of beryllium copper products and components for semiconductor manufacturing equipment rose.

As a result of the above, the total consolidated net sales for the fiscal year ended March 2018 increased by 12.4% year on year to ¥451,125 million. In terms of earnings, despite increases in costs for depreciation, research and development, etc., operating income increased by 10.8% year on year to ¥70,027 million and ordinary income increased by 9.4% to ¥70,615 million as a result of increased consolidated net sales and a weaker yen, etc. With respects to extraordinary income and loss, while posting impairment loss totaling ¥3,769 million and a ¥2,146 million provision for loss related to competition law under extraordinary loss, a gain on sale of investment securities of ¥1,286 million was recorded as extraordinary income. In addition to them, in the previous period (the fiscal year ended March 31, 2017), ¥11,213 million was posted for income taxes for prior periods. As a result of the above, profit attributable to owners of parent increased by 25.9% to total ¥45,814 million.

**Sales Change Analysis for FY2018** (100 million yen)



**Operating Income Change Analysis for FY2018** (100 million yen)



|         | 2017/3    | 2018/3    |
|---------|-----------|-----------|
| FX rate | ¥ 109/USD | ¥ 111/USD |
|         | ¥ 119/EUR | ¥ 129/EUR |

## Segment Overview

### Power Business

Net sales of the Power Business Segment increased by 3.1% year on year to ¥54,452 million.

Although demand for power distribution equipment contracted in light of domestic electric power companies reducing capital investments mainly to cope with sluggish demand for electricity, shipments for China and the Middle East increased. As a result, sales of insulators increased. Sales of NAS® batteries were sluggish due to a lack of large shipments.

In terms of earnings, operating income recovered from a loss of ¥6,622 million in the previous fiscal year to a loss of ¥4,715 million.

### Ceramics Business

Net sales of the Ceramics Business Segment increased by 9.2% year on year to ¥267,830 million.

Sales volumes of automobile ceramics, such as ceramic substrates for catalytic conversion (large-size HONEYCERAM), rose due to an increase in truck sales in the Chinese market. In addition, the quantity of sensors increased as the number of applied units per vehicle grew, accompanying tighter emissions regulations in Europe and China. Revenues from industrial process apparatuses, especially industrial heating systems, were up due to increasing capital investments related to automotive lithium-ion batteries by Chinese customers.

In terms of operating income, although volumes of automotive ceramics and industrial process apparatus rose, costs for launching equipment for production expansion increased in addition to increases in depreciation and development costs. As a result, operating income fell by 10.1% year on year to ¥58,086 million.

### Electronics Business

Net sales of the Electronics Business Segment increased by 24.6% year on year to ¥128,955 million.

Sales volumes of components for semiconductor manufacturing equipment grew as capital investments of semiconductor manufacturers remained high in response to the trend toward multi-layering and microfabrication of semiconductors. The shipments of metals, such as beryllium copper products, rose primarily for industrial equipment in the Chinese market. The sales volumes of electronic components, such as composite wafers and piezoceramic actuators for HDD, increased whereas demand for ceramic packages declined. Soshin Electric Co., Ltd., our consolidated subsidiary, marked sales growth due to vibrant demand for components for industrial equipment.

Operating income surged by 217.2% year on year to ¥16,656 million primarily due to a sales increase in components for semiconductor manufacturing equipment.

(100 million yen)

|                             | 2014/3 | 2015/3 | 2016/3 | 2017/3 | 2018/3 |
|-----------------------------|--------|--------|--------|--------|--------|
| <b>Power business</b>       |        |        |        |        |        |
| Sales                       | 590    | 728    | 835    | 528    | 544    |
| Operating income            | (39)   | (23)   | 26     | (66)   | (47)   |
| <b>Ceramics business</b>    |        |        |        |        |        |
| Sales                       | 1,908  | 2,271  | 2,509  | 2,450  | 2,678  |
| Operating income            | 450    | 576    | 707    | 646    | 581    |
| <b>Electronics business</b> |        |        |        |        |        |
| Sales                       | 589    | 788    | 1,014  | 1,035  | 1,290  |
| Operating income            | 31     | 63     | 77     | 53     | 167    |

## Financial Position

As of March 31, 2018, total assets increased by 10.1% from the previous fiscal year-end to ¥836,335 million.

Current assets increased by 7.8% from the previous fiscal year-end to ¥472,473 million, mainly reflecting increases in cash and bank deposits, notes and accounts receivable trade, and inventories, etc., despite a decrease in securities.

Non-current assets increased by 13.3% from the previous fiscal year-end to ¥363,862 million, mainly due to an increase in tangible assets. Current liabilities decreased by 1.2% from the previous fiscal year-end to ¥126,906 million. This was mainly due to decreases in provision for loss related to competition law and income taxes payable. Long-term liabilities increased by 16.3% from the previous fiscal year-end to ¥236,566 million, mainly due to increases in long-term borrowings and issuance of bonds payable.

Total net assets stood at ¥472,863 million, up 10.6% year on year, due to increases in retained earnings and foreign currency translation adjustments.

As a result, the ratio of net worth to total assets as of March 31, 2018 was 55.1% (compared with 54.9% at the previous fiscal year-end), with net worth per share standing at ¥1,432.67, up ¥137.01 from the previous fiscal year-end.

(100 million yen)

|                           | 2014/3 | 2015/3 | 2016/3 | 2017/3 | 2018/3 |
|---------------------------|--------|--------|--------|--------|--------|
| <b>Financial position</b> |        |        |        |        |        |
| Total assets              | 6,142  | 7,022  | 7,119  | 7,594  | 8,363  |
| Net assets                | 3,445  | 4,040  | 4,180  | 4,276  | 4,729  |

## Cash Flows

There was a net increase of ¥25,225 million in cash and cash equivalents from the previous fiscal year-end to ¥169,918 million. This reflected ¥50,554 million in net cash provided by operating activities, ¥49,414 million in net cash used in investing activities, and ¥22,546 million in net cash provided by financing activities.

### Cash Flows from Operating Activities

Net cash provided by operating activities was total ¥50,554 million. This was mainly attributable to posting an income before income taxes and non-controlling interests of ¥65,772 million and depreciation and amortization, despite cash outflows mainly due to increases in income taxes paid, inventories, and notes and account receivable trade. In comparison with the previous fiscal year, net cash provided by operating activities decreased by ¥29,618 million.

### Cash Flows from Investing Activities

Net cash used in investing activities was total ¥49,414 million. This was mainly due to purchases of property, plant and equipment, and marketable securities, despite cash inflows due to proceeds from sales and redemption of marketable securities. In comparison with the previous fiscal year, net cash used in investing activities decreased by ¥7,039 million.

### Cash Flows from Financing Activities

Net cash provided by financing activities was total ¥22,546 million. This was mainly due to proceeds from long-term borrowings and issuance of bonds payable, despite cash outflows due to cash dividends paid and repayment of long-term borrowings. In comparison with the previous fiscal year, net cash provided by financing activities increased by ¥35,559 million.

(100 million yen)

|                                      | 2014/3 | 2015/3 | 2016/3 | 2017/3 | 2018/3 |
|--------------------------------------|--------|--------|--------|--------|--------|
| Cash flows from operating activities | 326    | 730    | 594    | 802    | 506    |
| Cash flows from investing activities | (212)  | (395)  | (478)  | (565)  | (494)  |
| Cash flows from financing activities | 20     | (260)  | (4)    | (130)  | 225    |
| Cash and cash equivalents            | 1,198  | 1,286  | 1,361  | 1,447  | 1,699  |

## Capital Investment Overview

For the current consolidated accounting year, capital investment for the NGK Group totals ¥71,714 million.

For Power Business, ¥3,566 million in capital investment is being spent primarily on insulator production facility upgrades.

For Ceramics Business, ¥46,038 million in capital investment is being spent primarily on production facilities for automotive-related ceramic products.

For Electronics Business, ¥16,137 million in capital investment is being spent primarily on production facilities for semiconductor manufacturing equipment-related products.

For Headquarters, ¥5,973 million in capital investment is being spent primarily on equipment and facility upgrades and new business equipment and facilities.

## Basic Policy for Profit Sharing and Dividends for the Current and Next Fiscal Years

NGK views the return of profits to shareholders as one of its most important management policies.

As a basic policy, we strive for shareholder-oriented management that emphasizes return on equity (ROE), and distribute the benefits of successful management with a medium-term target consolidated payout ratio of approximately 30% after consideration of a comprehensive range of factors, including business performance, financial position, and future business development.

NGK paid a year-end dividend of ¥23 per share for the fiscal year ended March 31, 2018. This and the interim dividend of ¥21, which had already been paid, brought the total annual dividend per share to ¥44.

Taking forecast of increases both in sales and earnings into consideration, NGK expects to raise both of the interim and the fiscal year-end dividend per share to ¥25 respectively for the fiscal year ending March 31, 2019. The total annual dividend per share will result in ¥50.

Meanwhile, NGK plans to utilize retained funds primarily to extend its existing core business and capital investments in new business projects, with a view to enhancing its corporate value.

|  | 2014/3 | 2015/3 | 2016/3 | 2017/3 | 2018/3 |
|--|--------|--------|--------|--------|--------|
| <b>Overview of capital expenditures</b>  |        |        |        |        |        |
| Capital expenditures (100 million yen)   | 284    | 304    | 454    | 601    | 717    |
| Depreciation and amortization (100 million yen)  | 199    | 255    | 274    | 266    | 303    |
| <b>Basic policy for profit sharing and dividends for the current and next fiscal years</b> |        |        |        |        |        |
| Dividend per share (yen)   | 22     | 28     | 38     | 40     | 44     |
| Payout ratio (%)   | 26.6   | 22.0   | 23.3   | 35.5   | 30.9   |