

Financial Position, Operating Results, and Cash Flow Analysis

Overview of Business Results and Others

During the fiscal year ended March 31, 2020, the Japanese economy recorded negative growth during the fourth quarter of the fiscal year due to the spread of COVID-19, which turned from the moderate growth due to improvements in the employment and income environments. Overseas, the world experienced a sharp deterioration in economic, reflecting curbs on economic activities due to the spread of COVID-19 during the fourth quarter of the fiscal year despite being underpinned by the good employment environment and monetary easing.

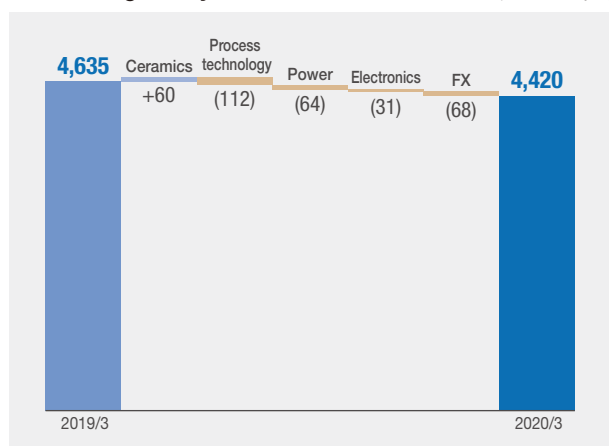
Under the circumstance, the NGK Group experienced weak shipments of both insulators and NAS[®] batteries in the Power Business Segment. In the Ceramics Business Segment, shipments of automotive ceramics were sluggish due to declines in global car sales and production. In the Electronics Business Segment, demand for ceramic packages declined against the backdrop of stagnant capital investment for mobile phone base

stations in China. In the Process Technology Business Segment, the distribution volume of products for semiconductor manufacturing equipment dropped against a backdrop of reduced capital investment by semiconductor manufacturers. As a result of the above, consolidated net sales for the fiscal year ended March 31, 2020 decreased 4.6% year on year to ¥441,956 million.

In terms of earnings, an increase in depreciation costs in addition to a decrease in net sales hereinabove causing operating income to fall 15.0% year on year to ¥55,000 million, and ordinary income was down 19.3% year on year to ¥51,952 million. Profit attributable to owners of the parent decreased 23.6% year on year to ¥27,135 million due to the recording of impairment loss of ¥12,558 million in the subsidiary manufacturing automotive ceramics in Thailand and package business, reflecting the impact of COVID-19.

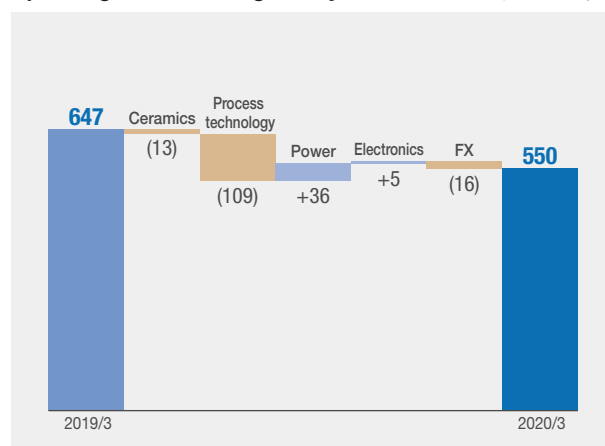
Sales Change Analysis for FY2020

(100 million yen)



Operating Income Change Analysis for FY2020

(100 million yen)



	2019/3	2020/3
FX rate	¥111/USD	¥109/USD
	¥128/EUR	¥121/EUR

Segment Overview

■ Power Business Segment

(Renamed to Energy Infrastructure Business in April 2020)

Net sales of the Power Business Segment decreased by 13.0% year on year to ¥43,377 million.

Sales of insulators decreased due to sluggish domestic shipments against the backdrop of reduced capital investment by electric power companies, coupled with a decrease in overseas shipments due to scaling down of manufacturing base. Sales of NAS® batteries decreased due to a lack of large shipments.

In terms of earnings, there was an operating loss of ¥4,915 million compared with an operating loss of ¥8,498 million in the previous fiscal year.

■ Ceramics Business Segment

Net sales of the Ceramics Business Segment increased by 0.1% year on year to ¥251,785 million.

Net sales were comparable to the result of the previous fiscal year due to the impact of declines in global car sales and production and strong yen despite the distribution volume of gasoline particulate filters (GPFs) for gasoline fueled vehicles increased with tightened regulation of emissions in Europe and China.

Operating income decreased 4.4% year on year to ¥53,484 million due to an increase in depreciation.

■ Electronics Business Segment

Net sales of the Electronics Business Segment decreased by 5.8% year on year to ¥55,426 million.

Regarding metal-related products, the distribution volume of beryllium copper products decreased due to a deterioration the Chinese market. Regarding electronic components, the distribution volumes of bonded wafers for SAW filters and piezoelectric micro-actuators for HDDs increased. On the other hand, the distribution volume of ceramic packages dropped against the backdrop of stagnant capital investment for mobile phone base stations in China. Net sales of Soshin Electric, our consolidated subsidiary, decreased year on year due to a deterioration in the semiconductor and machine tools market.

In terms of earnings, there was an operating income of ¥25 million compared with an operating loss of ¥314 million in the previous fiscal year.

■ Process Technology Business Segment

Net sales of the Process Technology Business Segment decreased by 11.5% year on year to ¥94,296 million.

Net sales of products for semiconductor manufacturing equipment decreased from the previous fiscal year due to a decline in demand, reflecting a reduction of capital investment by semiconductor manufacturers. Regarding components for industrial equipment, sales decreased due to a decline in demand for kilns for cathode materials used in lithium-ion batteries for vehicle.

Operating income decreased 63.5% year on year to ¥6,436 million due to an increase in depreciation in addition to decrease in distribution volume.

(100 million yen)

	2016/3	2017/3	2018/3	2019/3	2020/3
Power business					
Sales	835	528	545	499	434
Operating income	26	(66)	(47)	(85)	(49)
Ceramic business					
Sales	2,511	2,452	2,407	2,515	2,518
Operating income	707	646	567	559	535
Electronics business					
Sales	1,014	1,035	613	588	554
Operating income	77	53	9	(3)	0
Process technology business					
Sales	—	—	975	1,065	943
Operating income	—	—	171	176	64

From the beginning of fiscal year ended March 31, 2019, following organizational change, the segment classification of the NGK Group has been changed from the "Power Business Segment," "Ceramic Products Business Segment," and "Electronics Business Segment" to the "Power Business Segment," "Ceramics Business Segment," "Electronics Business Segment," and "Process Technology Business Segment." Note that figures for the fiscal year ended March 31, 2018 have been calculated based on this new segment classification.

Financial Position, Operating Results, and Cash Flow Analysis

Financial Position

As of March 31, 2020, total assets were decreased by 3.5% from the previous fiscal year end to ¥833,085 million.

Current assets decreased by 10.1% from the previous fiscal year end to ¥398,374 million, mainly reflecting decreases in cash and bank deposits and securities despite an increase in inventories. Non-current assets were increased by 3.4% from the previous fiscal year end to ¥434,710 million, mainly due to an increase in tangible assets, reflecting capital investment to increase production capacity for automotive ceramics and semiconductor manufacturing equipment.

Current liabilities decreased by 22.7% from the previous fiscal year end to ¥114,289 million. This was mainly due to decreases in

current portion of long-term borrowings and notes and accounts payable trade. Long-term liabilities increased by 10.2% from the previous fiscal year end to ¥249,677 million, mainly reflecting an increase in long term borrowings.

Total net assets stood at ¥469,118 million, down 4.1% year on year, due to decreases in foreign currency translation adjustments and unrealized gain on available for sale securities despite an increase in retained earnings.

As a result, the ratio of net worth to total assets as of March 31, 2020 was 55.0% (compared with 55.3% at the previous fiscal year end), with net worth per share standing at ¥1,448.62, down ¥35.36 from the previous fiscal year end.

(100 million yen)

	2016/3	2017/3	2018/3	2019/3	2020/3
Financial position					
Total assets	7,119	7,594	8,262	8,636	8,331
Net assets	4,180	4,276	4,729	4,892	4,691

Cash Flows

There was a net decrease ¥29,293 million in cash and cash equivalents from the previous fiscal year end to ¥94,691 million. This reflected ¥53,200 million in net cash provided by operating

activities, ¥60,830 million in net cash used in investing activities, and ¥18,796 million in net cash used in financing activities.

■ Cash flows from operating activities

Net cash provided by operating activities was total ¥53,200 million. This was mainly attributable to posting an income before income taxes and non-controlling interests of ¥43,836 million and depreciation and amortization, despite cash outflows mainly due to income tax paid and an increase in inventories. In comparison with the previous fiscal year, net cash provided by operating activities decreased by ¥8,024 million.

■ Cash flows from investing activities

Net cash used in investing activities was total ¥60,830 million. In terms of sales of investment securities, there were proceeds from sales of a part of stock of associated company, sales of cross shareholdings, and redemption of marketable securities. In terms of purchases of property, plant and equipment, there were cash outflows due to capital investment for the plants manufacturing automotive ceramics in China and Poland and the plant in Tajimi, Japan manufacturing semiconductor manufacturing equipment, and purchases of marketable securities. In comparison with the previous fiscal year, net cash used in investing activities decreased by ¥48,912 million.

■ Cash flows from financing activities

Net cash used in financing activities was total ¥18,796 million. This was mainly due to cash dividends paid, repayment of long-term borrowings, and the acquisition of own shares to improve capital efficiency and enable NGK to flexibly exercise its capital policy in response to the changing managerial environment, despite proceeds from long term borrowings in foreign currency appropriated to overseas capital investment. In comparison with the previous fiscal year, net cash provided by financing activities decreased by ¥22,360 million.

(100 million yen)

	2016/3	2017/3	2018/3	2019/3	2020/3
Net cash provided by operating activities	594	802	506	612	532
Net cash used in investing activities	(478)	(565)	(494)	(1,097)	(608)
Net cash provided by financing activities	(4)	(130)	225	36	(188)
Cash and cash equivalents	1,361	1,447	1,699	1,240	947

Capital Expenditure Overview

As of March 31, 2020, capital expenditure for the NGK Group totaled ¥93.997 billion.

For Power Business, ¥1.245 billion in capital expenditure is being spent primarily on insulator production facility upgrades.

For Ceramics Business, ¥52.265 billion in capital expenditure is being spent primarily on production facilities for automotive-related ceramic products.

For Electronics Business, ¥8.778 billion in capital expenditure is being spent primarily on production facilities for piezoelectric

micro-actuators for HDDs and wafer-related products.

For Process Technology Business, ¥22.221 billion in capital expenditure is being spent primarily on production facilities for semiconductor manufacturing equipment-related products.

For Head Office, ¥9.487 billion in capital expenditure is being spent primarily on office employee welfare facilities and new business equipment and facilities.

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

NGK places a high priority on the interests of shareholders, and positions continuous improvement of corporate value and return of profits as one of the most important management policies. NGK regards return on equity (ROE) that exceeds the cost of capital as an essential medium- to long-term goal for its major management indicators, and it is working to make improvements by using the NGK version of ROIC (calculating operating income, equipment, inventory, and accounts receivable by product), which can be managed by each business segment. NGK pays cash dividends with a dividend rate of 3% on net assets and a consolidated dividend payout ratio of approximately 30% over the medium term, considering the management of net assets in line with changes in business risks and the linkage to business results (ROE) for approximately three years, as well as in consideration of

cash flow forecasts and other factors.

NGK paid a year-end dividend of ¥25 per share for the fiscal year ended March 31, 2020. This and the interim dividend of ¥25, which has already been paid, will bring the total annual dividend per share to ¥50.

Considering the forecast of dividend payout ratio and ratio of dividends to net worth, NGK expects the total annual dividend per share for the fiscal year ending March 31, 2021 to be ¥30, comprised of an interim dividend per share of ¥10 and a fiscal year-end dividend per share of ¥20.

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

	2016/3	2017/3	2018/3	2019/3	2020/3
Overview of capital expenditures, depreciation and amortization					
Capital expenditures (100 million yen)	454	601	717	1,053	940
Depreciation and amortization (100 million yen)	274	266	303	357	396

Basic policy for profit sharing and dividends for the current and next fiscal years

Dividend per share (yen)	38	40	44	50	50
Payout ratio (%)	23.3	35.5	30.9	45.3	59.0