

Results of Operations

Historically, revenues and earnings may or may not be representative of future operating results due to various economic and other factors. The following table sets forth the Consolidated Statements of Operations for the periods indicated (amounts in thousands):

	Fiscal Years Ended March 31,		
	2019	2018	2017
Net sales ⁽¹⁾	\$ 1,382,818	\$ 1,200,181	\$ 757,338
Operating costs and expenses:			
Cost of sales ⁽¹⁾	924,276	860,744	571,944
Selling, general and administrative expenses	202,642	173,620	107,658
Research and development ⁽¹⁾	44,612	39,114	26,693
Restructuring charges	8,779	14,843	5,404
(Gain) loss on write down and disposal of long-lived assets	1,660	(992)	10,671
Total operating costs and expenses	1,181,969	1,087,329	722,370
Operating income ⁽¹⁾	200,849	112,852	34,968
Non-operating (income) expense:			
Interest income	(2,035)	(809)	(24)
Interest expense	21,239	32,882	39,755
Acquisition (gain) loss	—	(130,880)	—
Change in value of TOKIN options	—	—	(10,700)
Other (income) expense, net ⁽¹⁾	11,214	24,592	(3,871)
Income before income taxes and equity income (loss) from equity method investments ⁽¹⁾	170,431	187,067	9,808
Income tax expense (benefit) ⁽¹⁾	(39,460)	9,132	4,294
Income before equity income (loss) from equity method investments ⁽¹⁾	209,891	177,935	5,514
Equity income (loss) from equity method investments	(3,304)	76,192	41,643
Net income ⁽¹⁾	\$ 206,587	\$ 254,127	\$ 47,157

⁽¹⁾ Fiscal years ended March 31, 2018 and 2017 adjusted due to the adoption of ASC 606.

Consolidated Comparison of Fiscal Year 2019 to Fiscal Year 2018

Net Sales

Net sales of \$1.4 billion in fiscal year 2019 increased 15.2% from \$1.2 billion in fiscal year 2018 primarily due to an increased in Solid Capacitor net sales \$164.6 million. In addition, Film and Electrolytic net sales increased by \$4.3 million, and MSA net sales increased by \$13.8 million.

The increase in Solid Capacitors net sales was primarily driven by a \$111.8 million increase in distributor sales across the Americas, APAC, and EMEA regions. The \$111.8 million increase consisted of a \$72.8 million increase in Ceramic product line sales and a \$39.0 million increase in Tantalum product line sales. Also contributing to the increase in net sales was a \$30.6 million increase in OEM sales across the APAC, EMEA, and JPKO regions, and a \$28.0 million increase in EMS sales across all regions. These increases in net sales were partially offset by a \$3.2 million decrease in distributor sales in the JPKO region and a \$2.7 million decrease in OEM sales in the Americas region. In addition, Solid Capacitors net sales was unfavorably impacted by \$0.5 million from foreign currency exchange due to the change in the value of the Euro compared to the U.S. dollar.

The increase in Film and Electrolytic net sales was primarily driven by a \$10.5 million increase in distributor sales across the Americas and EMEA regions. Also contributing to the increase in net sales was \$1.7 million increase in EMS sales in the Americas region and a \$0.8 million increase in OEM sales in the JPKO region. These increases in net sales were partially offset by a \$5.6 million decrease in OEM sales across the APAC and EMEA regions and a \$3.1 million decrease in distributor sales across the APAC and JPKO regions. In addition, there was an unfavorable impact of \$0.1 million from foreign currency exchange primarily due to the change in the value of the Euro compared to the U.S. dollar.

The increase in MSA net sales was primarily driven by a \$15.0 million increase in OEM sales in the JPKO region. Also contributing to the increase in net sales was a \$4.3 million increase in EMS sales across all regions and a \$3.7 million increase in distributor sales across the Americas and EMEA regions. These increase in net sales were partially offset by a \$5.5 million decrease in distributor sales across the APAC and JPKO regions and a \$3.8 million decrease in OEM sales across the Americas, APAC, and JPKO regions.

In fiscal years 2019 and 2018, net sales by channel and the percentages of net sales by region to total net sales were as follows (dollars in thousands):

	Fiscal Year 2019		Fiscal Year 2018	
	Net Sales	% of Total	Net Sales	% of Total
APAC	\$ 533,340	38.6%	\$ 479,987	40.0%
EMEA	315,535	22.8%	277,898	23.1%
Americas	337,842	24.4%	259,105	21.6%
JPKO	196,101	14.2%	183,191	15.3%
Total	<u>\$ 1,382,818</u>		<u>\$ 1,200,181</u>	

In fiscal years 2019 and 2018, the percentages of net sales by channel to total net sales were as follows (dollars in thousands):

	Fiscal Year 2019		Fiscal Year 2018	
	Net Sales	% of Total	Net Sales	% of Total
OEM	\$ 598,306	43.3%	\$ 563,495	46.9%
Distributor	584,618	42.2%	470,324	39.2%
EMS	199,894	14.5%	166,362	13.9%
Total	<u>\$ 1,382,818</u>		<u>\$ 1,200,181</u>	

Gross Margin

Gross margin for the fiscal year ended March 31, 2019 of \$458.5 million (33.2% of net sales) increased \$119.1 million or 35.1% from \$339.4 million (28.3% of net sales) in the prior fiscal year. Gross margin as a percentage of net sales improved 490 basis points.

Solid Capacitors gross margin increased \$118.4 million, or 43.1% primarily due to an increase in net sales, as well as continued margin improvement due to our restructuring activities, vertical integration, and manufacturing process improvements resulting from our cost reduction activities.

Film and Electrolytic gross margin increased \$4.8 million, or 31.6% primarily due to an increase in net sales, as well as continued margin improvement due to our restructuring activities and manufacturing process improvements resulting from our cost reduction activities.

MSA gross margin decreased \$4.1 million, or 8.4% primarily due to a change in the sales mix to lower margin products.

Selling, General and Administrative Expenses ("SG&A")

SG&A expenses of \$202.6 million (14.7% of net sales) for fiscal year 2019 increased \$29.0 million, or 16.7% compared to \$173.6 million (14.5% of net sales) for fiscal year 2018. The increase was primarily attributable to a \$11.8 million increase in payroll and related expenses, primarily consisting of salaries and incentive-based compensation, a \$8.7 million increase in ERP integration and technology transition costs, a \$4.0 million increase in rent and software costs, and a \$2.8 million increase in consulting expenses. Additionally, \$2.5 million of the overall increase was attributed to 19 additional days of ownership of our TOKIN subsidiary during the fiscal year ended March 31, 2019, compared to the fiscal year ended March 31, 2018. Partially offsetting these increases was a \$1.5 million decrease in legal fees incurred defending anti-trust litigation claims.