

# Hitachi Metals Financial Results for the First Half of Fiscal Year 2019 (April 1, 2019 to September 30, 2019)

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**Financial Results for the First Half of Fiscal Year 2019**

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3. Assets, Liabilities, and Net Assets
4. Consolidated Cash Flows

Revisions to Operating Forecast for FY2019

October 29, 2019

## Overview

- Chinese economy slowed down mainly due to the trade conflict with the U.S.
- The effects spread across the global economy especially to Europe and Asia.

## By region

- |                             |   |
|-----------------------------|---|
| [U.S.]                      | There are concerns of a slowdown as represented by the emerging effects on agriculture due to trade conflicts between the U.S. and China.       |
| [China]                     | A slowdown trend in domestic demand is clear as shown in automotive sales. Future prospects are uncertain due to a slowdown in economic growth. |
| [ Japan<br>Europe<br>Asia ] | Uncertainty continued reflecting China's economic slowdown and policy uncertainties in many countries (such as Brexit).                         |

## By market

- |                  |  |
|------------------|--|
| [Automobiles]    | Automotive sales decreased year on year for 12 consecutive months in the global market.                              |
| [FA/robots]      | Demand continued to decline significantly although it was expected to recover in the second half of the fiscal year. |
| [Smartphones]    | Sales of smartphones weakened.   |
| [Semiconductors] | Sales of semiconductors remained sluggish.   |

# 1-2. Overview of the Company's Performance

## ● Sales by product area

### [Automobiles]

- Demand for many mainstays decreased due to decreased automotive sales in the global markets. Mainstays include: molds and tool steel, specialty steel automotive components (CVT belt materials and piston ring materials), the casting components business in North America, ferrite magnets, and electronic components of cable materials.

### [FA/robots]

- Significant decline in demand greatly affected rare earth magnets and cable materials.

### [Smartphones]

- Weak sales of smartphones affected rare earth magnets and specialty steel (electronic materials).

### [Semiconductors]

- While the customer inventory adjustment of both copper and nickel series was completed, no signs of strong recovery have been witnessed.

## ● Income decreased due to a devaluation in raw material prices

- Decrease of ¥3.9 billion as a whole, largely in the specialty steel segment.

## ● The Magnetic Materials and Applications segment posted impairment losses of ¥42.6 billion

- (property, plant and equipment: ¥22.6 billion, goodwill on the acquisition of NEOMAX Co., Ltd.: ¥20.0 billion).

## ● Implemented measures to improve operational efficiency and raise cash flows

- Free cash flow improved by ¥33.3 billion year on year.
- Reduction in inventory: ¥22.2 billion from the end of last fiscal year

## ● Reduction in fixed costs

- Brought forward the timing of reaping the benefits of reducing fixed costs and other measures (Annual target of ¥2.4 billion → Reduction of ¥9.4 billion year on year).

**While operational efficiency and cash flows improved, revenues and profits decreased year on year.**

# 1-3. Operating Results for the First Half of Fiscal Year 2019

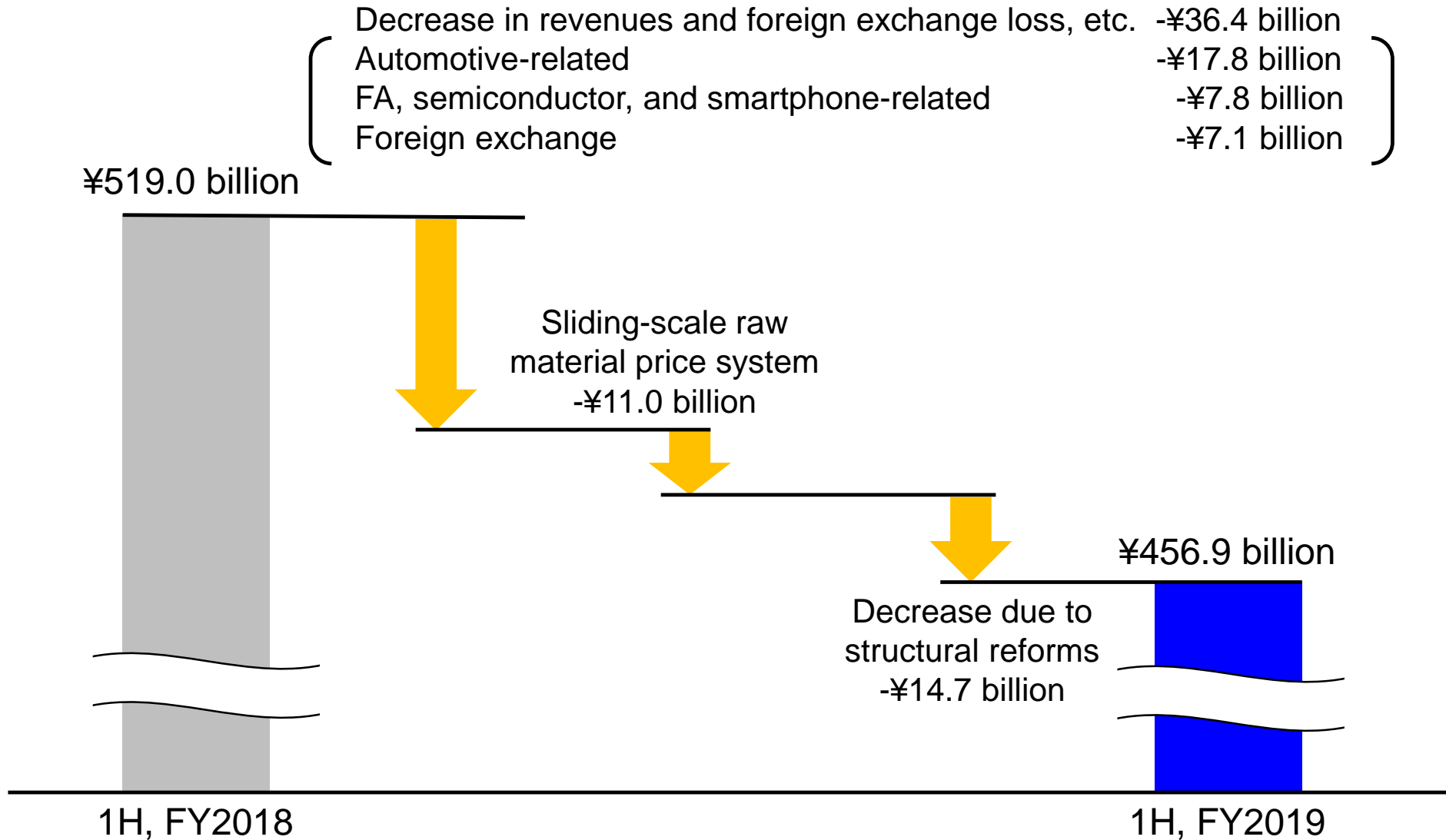
¥ billions Profit margin in brackets	1H, FY2018 US\$1 = ¥110 € 1 = ¥130 1 yuan = ¥16.8	1H, FY2019 US\$1 = ¥109 € 1 = ¥121 1 yuan = ¥15.7	Year-on-Year
Revenues	519.0	456.9	-12%
Adjusted operating income*	[6.4%] 33.1	[1.3%] 5.9	-27.2
IFRS operating income	[6.9%] 35.8	[-8.2%] -37.6	-73.4
Income before income taxes	37.2	-38.7	-75.9
Net income attributable to shareholders of the parent company	28.1	-41.0	-69.1
Overseas sales ratio	56%	55%	-1%

## Sales by region

¥ billions		Japan	North America	China	Other Asian countries	Europe	Other
1H, FY2018	Revenues	226.7	155.7	41.0	63.3	26.6	5.6
	Sales ratio	44%	30%	8%	12%	5%	1%
1H, FY2019	Revenues	207.7	130.4	32.4	53.3	22.5	10.6
	Sales ratio	45%	29%	7%	12%	5%	2%
	YoY	-19.0	-25.3	-8.6	-10.0	-4.1	+5.0

\* Adjusted operating income = Revenues – Sales cost – Selling, general, & administrative expenses

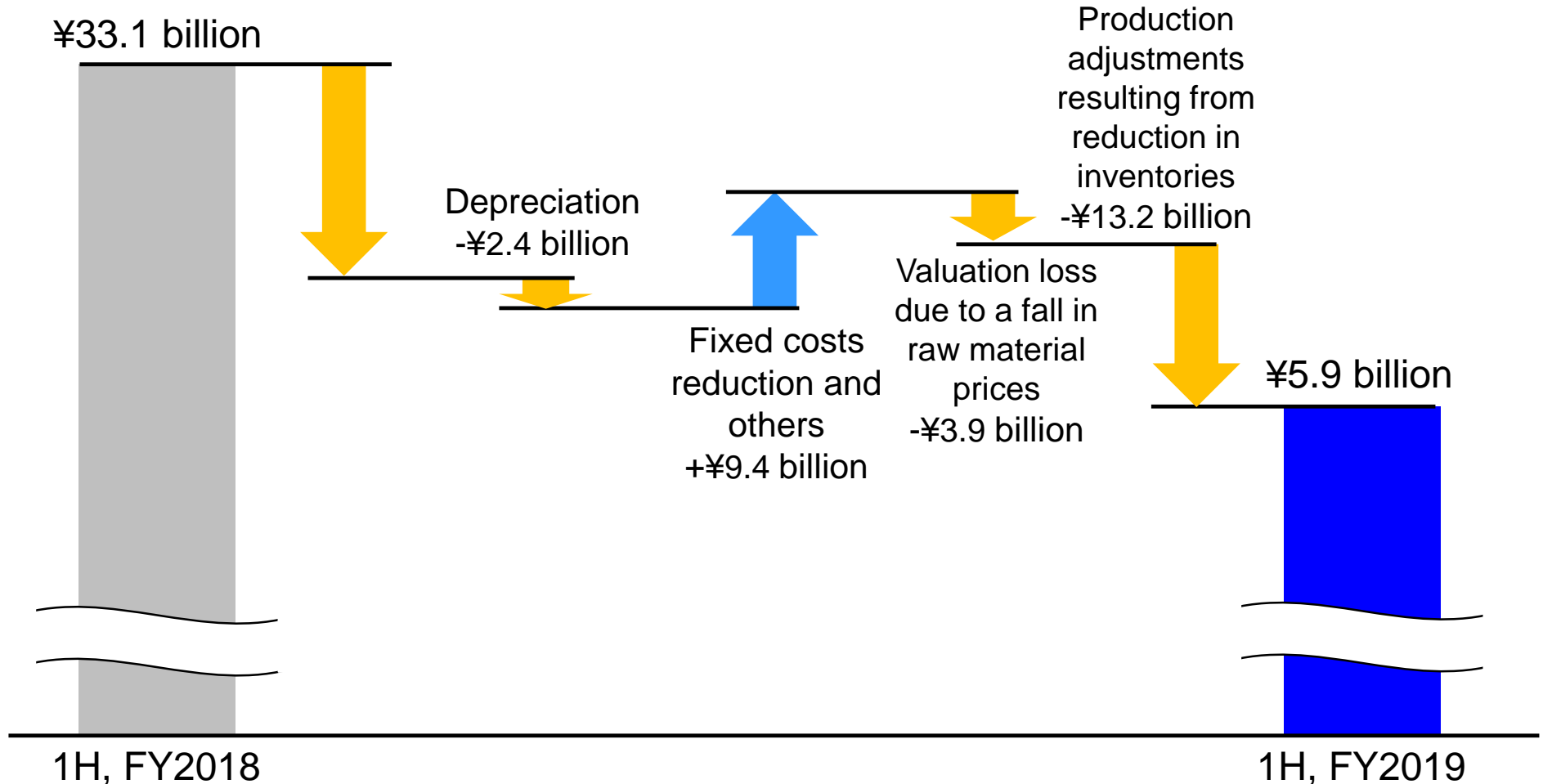
# 1-4. Factors Behind Increase/Decrease in Revenues (Year-on-Year)



# 1-5. Factors Behind Increase/Decrease in Adjusted Operating Income (Year-on-Year)

Decrease in revenues, impact of the change in product mix, and foreign exchange loss, etc.

-¥17.1 billion  
 (Automotive-related  
 FA, semiconductor, and smartphone-related  
 -¥8.4 billion  
 -¥3.8 billion)



# Hitachi Metals

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### (April 1, 2019 to September 30, 2019)

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#### Revisions to Operating Forecast for FY2019

# 2-1. Operating Results by Segment for the First Half of Fiscal Year 2019

¥ billions Profit margin in brackets			1H, FY2018 US\$1 = ¥110 € 1 = ¥130 1 yuan = ¥16.8	1H, FY2019 US\$1 = ¥109 € 1 = ¥121 1 yuan = ¥15.7	Year-on- Year
Advanced Metals	Specialty Steel Products	Revenues	140.6	127.3	-9%
		Adjusted operating income	[10.8%] 15.2	[0.3%] 0.4	-14.8
		Operating income of the segment	[10.3%] 14.5	[0.3%] 0.4	-14.1
	Functional Components and Equipment	Revenues	184.4	157.5	-15%
		Adjusted operating income	[3.7%] 6.9	[0.8%] 1.2	-5.7
		Operating income of the segment	[2.7%] 4.9	[0.4%] 0.6	-4.3
	Subtotal <sup>◎</sup>	Revenues	325.0	284.8	-12%
		Adjusted operating income	[6.8%] 22.1	[0.6%] 1.6	-20.5
		Operating income of the segment	[6.0%] 19.4	[0.4%] 1.0	-18.4
Advanced Components & Materials	Magnetic Materials and Applications / Power Electronics	Revenues	72.1	60.6	-16%
		Adjusted operating income	[4.3%] 3.1	[-1.2%] -0.7	-3.8
		Operating income of the segment	[12.2%] 8.8	[-71.6%] -43.4	-52.2
	Wires, Cables, and Related Products	Revenues	121.0	111.0	-8%
		Adjusted operating income	[6.0%] 7.2	[3.3%] 3.7	-3.5
		Operating income of the segment	[5.7%] 6.9	[3.3%] 3.7	-3.2
	Subtotal <sup>◎</sup>	Revenues	193.1	171.6	-11%
		Adjusted operating income	[5.3%] 10.3	[1.7%] 3.0	-7.3
		Operating income of the segment	[8.1%] 15.7	[-23.1%] -39.7	-55.4
Others/Adjustments	Revenues	0.9	0.5	—	
	Adjusted operating income	0.7	1.3	+0.6	
	Operating income of the segment	0.7	1.1	+0.4	
Total	Revenues	519.0	456.9	-12%	
	Adjusted operating income	[6.4%] 33.1	[1.3%] 5.9	-27.2	
	IFRS operating income	[6.9%] 35.8	[-8.2%] -37.6	-73.4	

◎ Simple sum before eliminating intersegment revenues

Remarks: As of April 1, 2019, soft magnetic components and materials were transferred from the Specialty Steel Products segment to the Magnetic Materials and Applications segment, and the name of the Magnetic Materials and Applications segment was changed to the Magnetic Materials and Applications / Power Electronics segment. The figures in the FY2018 actual results were adjusted retrospectively to reflect this segment change.



## 2-2. Operating Results by Segment: Specialty Steel Products (1)

### [Revenues]

Decreased due to a decline in demand and a fall in raw material prices (sliding-scale raw material price system)

#### • Molds and tool steel

Decreased due to a fall in raw material prices as well as a decline in demand in international markets mainly in China and inventory adjustments in Japan

#### • Rolls

Rolls: Both domestic and international sales increased  
Injection molding machine parts:  
Remained unchanged year on year

#### • Industrial equipment materials

Decreased on the back of a decline in demand for products related to automobiles and a fall in raw material prices

#### • Aircraft- and energy-related materials

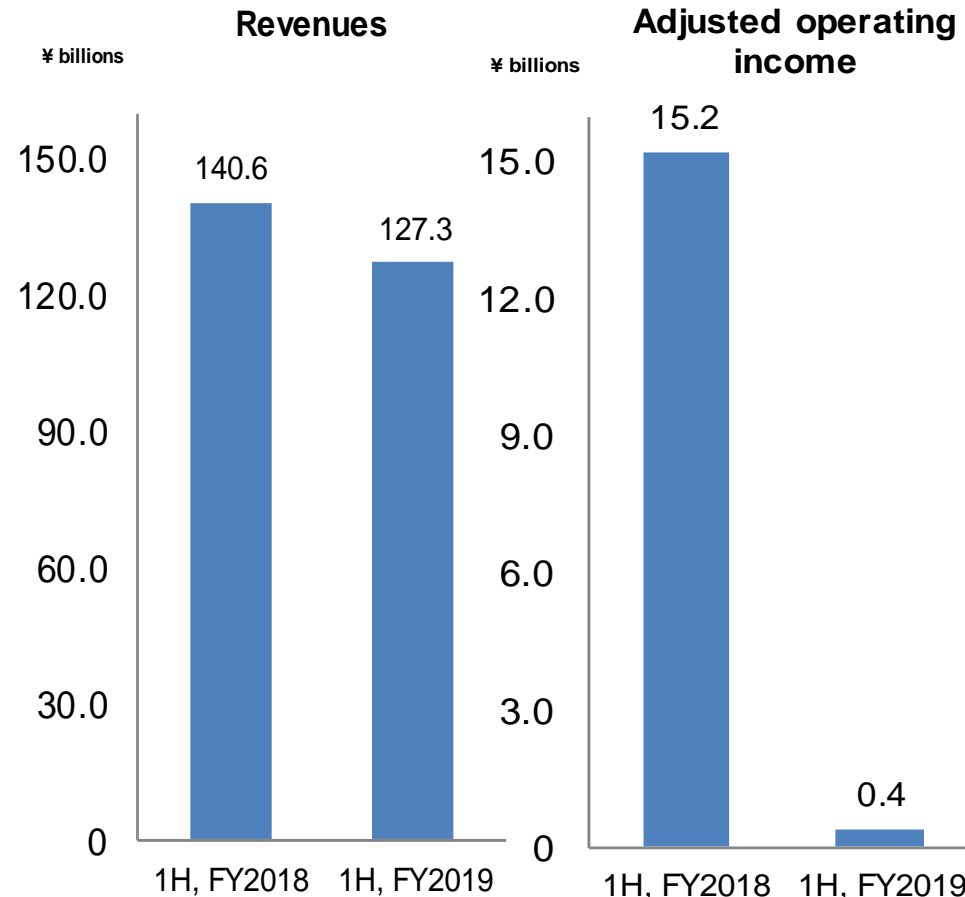
Increased due to an increase in demand for aircraft-related components and materials

#### • Electronic materials

Decreased due to a decline in demand for smartphone-related materials and semiconductor package components, despite an increase in sales of organic EL panel-related materials and continuously firmed sales of battery-related components

### [Adjusted operating income]

Decreased due to a decline in demand for the mainstays including tool steel and electronic materials, and expansion of production adjustments resulting from an increase in inventories in the previous fiscal year, as well as the effects of valuation loss owing to a fall in raw material prices



## 2-3. Operating Results by Segment: Specialty Steel Products (2)

¥ billions		1H, FY2018 US\$1 = ¥110 € 1 = ¥130 1 yuan = ¥16.8	1H, FY2019 US\$1 = ¥109 € 1 = ¥121 1 yuan = ¥15.7	Year-on- Year
Specialty Steel Products	Revenues	140.6	127.3	-9%
	Molds and tool steel <sup>□</sup>			-14%
	Rolls <sup>□</sup>			+7%
	Industrial equipment materials <sup>□</sup>			-15%
	Aircraft- and energy-related materials <sup>□</sup>			+21%
	Electronic materials <sup>□</sup>			-12%
	Adjusted operating income	15.2	0.4	-14.8
	Adjusted operating margin	10.8%	0.3%	-10.5%
	Operating income of the segment	14.5	0.4	-14.1

□ Indicates the change in revenues calculated by a simplified method

# 2-4. Operating Results by Segment: Functional Components and Equipment (1)

## [Revenues]

Decreased due to a drop in automotive sales, the withdrawal from the aluminum wheel business, and a fall in raw material prices (sliding-scale raw material price system)

### ▪ Casting components for automobiles

**Cast iron products:** Decreased due to a decline in demand for light trucks, passenger vehicles, and agricultural machinery, as well as a fall in raw material prices, despite an increase in demand for commercial vehicles in North America.

**Heat-resistant exhaust casting components:**

Decreased mainly due to a decrease in sales of new vehicles in China and Europe

### ▪ Piping components

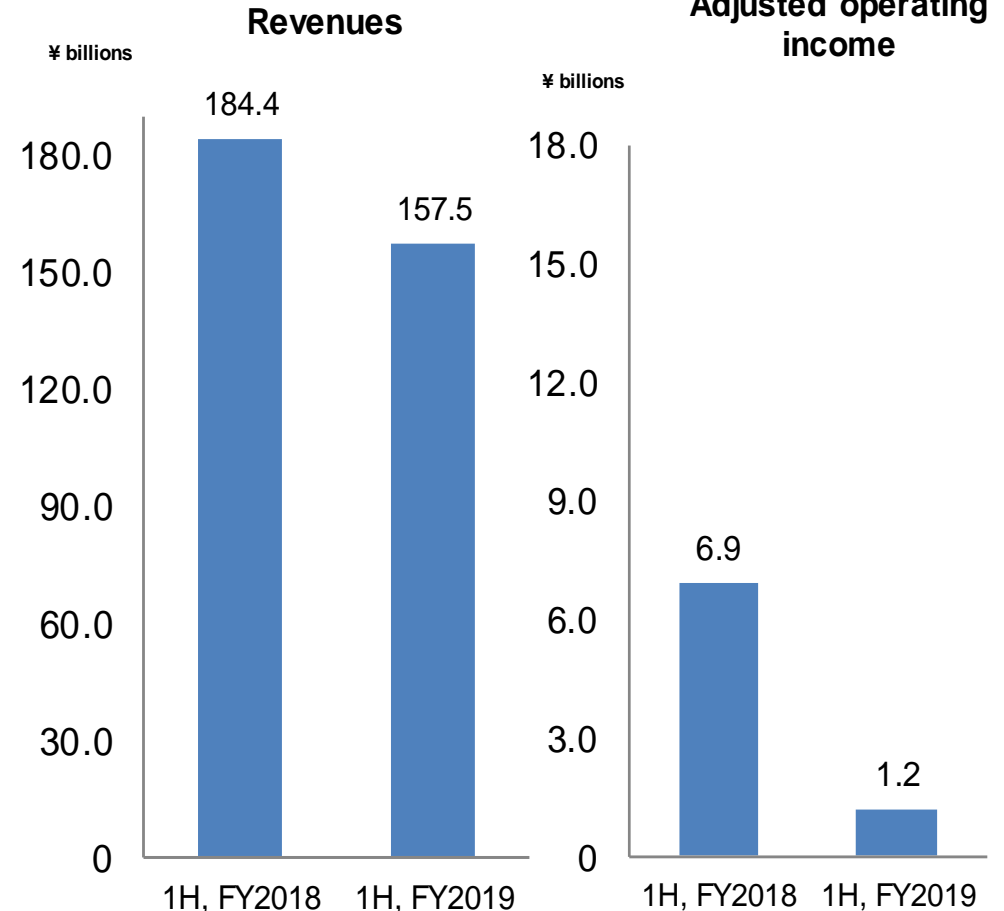
**Pipe fittings:** Decreased due to a decline in exports mainly to North America. and the Middle East, while domestic sales remained unchanged year on year

**Semiconductor manufacturing equipment:**

Decreased due to the delay of some capital investment projects

## [Adjusted operating income]

Decreased largely due to a decrease in sales from the automotive casting components business in North America, which is the Company's core business, and continuously sluggish sales of semiconductor manufacturing equipment



## 2-5. Operating Results by Segment: Functional Components and Equipment (2)

¥ billions		1H, FY2018 US\$1 = ¥110 € 1 = ¥130 1 yuan = ¥16.8	1H, FY2019 US\$1 = ¥109 € 1 = ¥121 1 yuan = ¥15.7	Year-on- Year
Functional Components and Equipment	Revenues	184.4	157.5	-15%
	Casting components for automobiles <sup>Ⓞ</sup>	160.8	135.0	-16%
	Waupaca Foundry, Inc.	108.8	98.4	-10%
	Cast iron products (weight)			-7%
	Heat-resistant exhaust casting components (HERCUNITE™) (weight)			-25%
	Piping components <sup>Ⓞ</sup>	23.6	22.5	-5%
	Adjusted operating income	6.9	1.2	-5.7
	Adjusted operating margin	3.7%	0.8%	-2.9%
	Operating income of the segment	4.9	0.6	-4.3

Ⓞ Simple sum before eliminating intersegment revenues

## 2-6. Operating Results by Segment:

### Magnetic Materials and Applications / Power Electronics (1)



#### [Revenues]

Decreased due to a decrease in demand for magnetic materials and applications for FA, robots, and automotive applications

- **Magnetic materials**

Rare earth magnets:

Demand for FA/robots declined significantly.

Demand for automotive components also decreased.

Ferrite magnets:

Demand for automotive components decreased.

- **Power electronics materials** Increased mainly for xEV\* applications

Soft magnetic materials and the applied products:

Decline in demand for amorphous metals for transformers and some components for the use of consumer equipment, despite an increase in demand for the use of automotive components

Ceramic components:

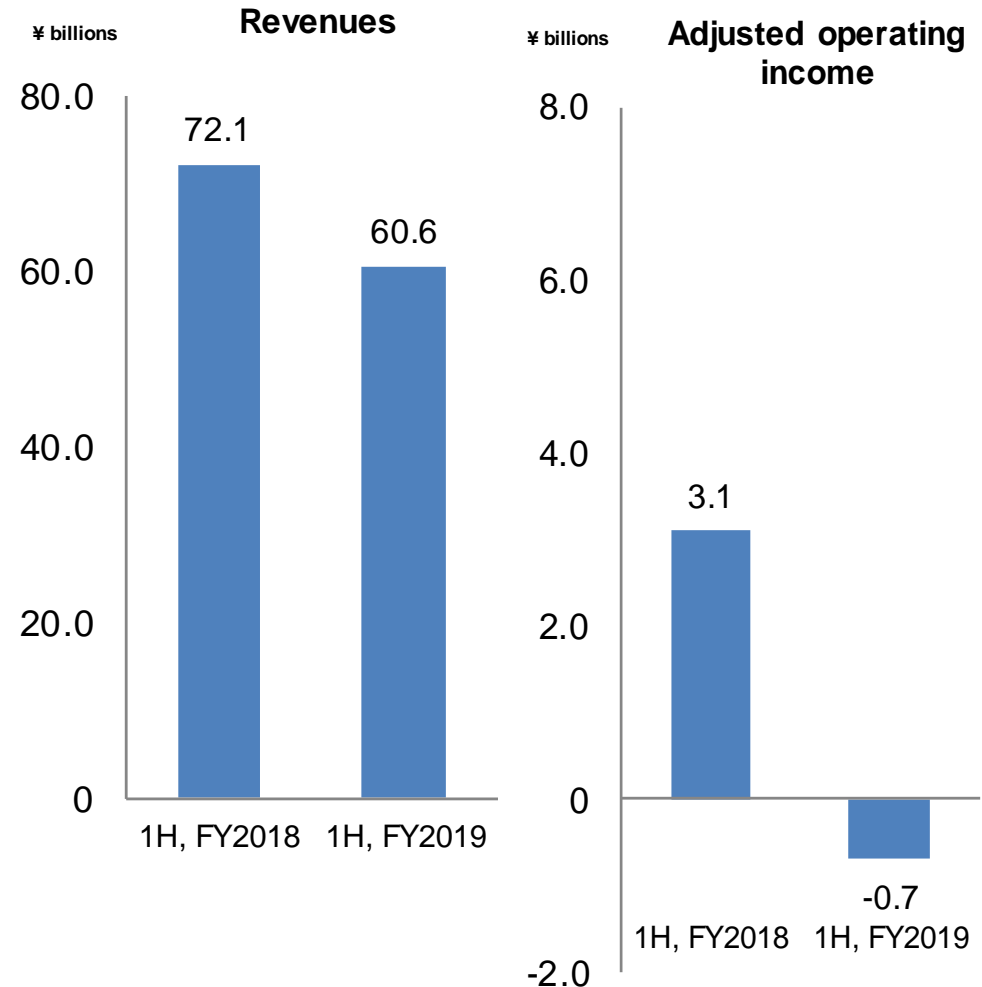
Increased due to an increase in demand mainly for the use of automotive electronic components

#### [Adjusted operating income]

Decreased due to a decrease in demand for magnetic materials and applications

#### [Operating income of the segment]

Decreased as a result of the posting of impairment losses of ¥42.6 billion (property, plant and equipment: ¥22.6 billion, goodwill: ¥20.0 billion), in addition to a decline in demand for magnetic materials and applications



\* xEV: A general term for electric vehicles (EVs), hybrid electric vehicles (HEVs), and plug-in hybrid electric vehicles (PHEVs).

## 2-7. Operating Results by Segment:

### Magnetic Materials and Applications / Power Electronics (2)

¥ billions		1H, FY2018 US\$1 = ¥110 € 1 = ¥130 1 yuan = ¥16.8	1H, FY2019 US\$1 = ¥109 € 1 = ¥121 1 yuan = ¥15.7	Year-on- Year
Magnetic Materials and Applications / Power Electronics	Revenues	72.1	60.6	-16%
	Rare earth magnets (weight)			-11%
	Ferrite magnets (weight)			-12%
	Power Electronics Materials <sup>□</sup>			+1%
	Adjusted operating income	3.1	-0.7	-3.8
	Adjusted operating margin	4.3%	-1.2%	-5.5%
	Operating income of the segment*	8.8	-43.4	-52.2

□ Indicates the change in revenues calculated by a simplified method

## 2-8. Operating Results by Segment: Wires, Cables, and Related Products (1)

### [Revenues]

Decreased mainly in automotive electronic components, FA/ robots.

#### ▪ Electric wires and cables

Overall sales of wires, cables, and related products decreased year on year.

**Medical use:** Sales of both tubes and cables increased.

**Wires for rolling stock:** Decreased as large-scale projects entered the in-between season

**Magnet wires:** Decreased both for automotive and industrial applications

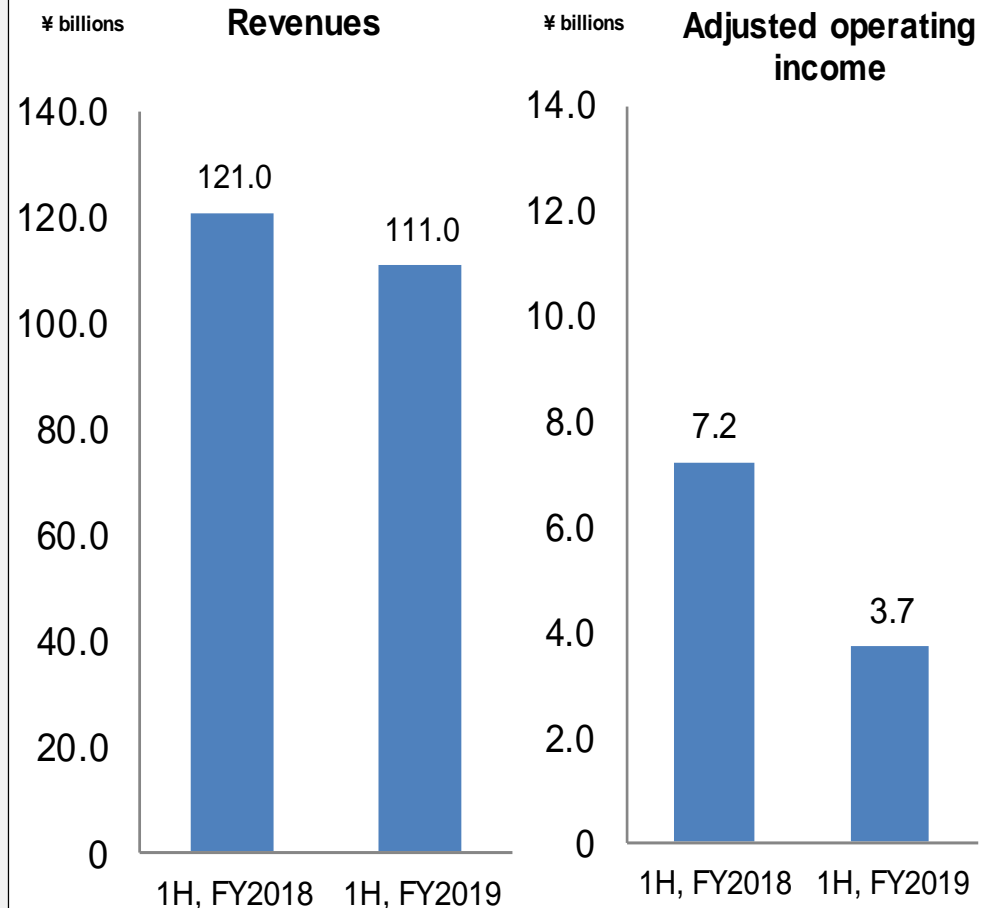
**Electronic wires:** Decreased mainly for the use of FA/ robots

#### ▪ Automotive components

Demand fell for both automotive electronic components and brake hoses due to a decrease in new vehicle sales in the international markets

### [Adjusted operating income]

Decreased mainly due to a decline in demand



## 2-9. Operating Results by Segment: Wires, Cables, and Related Products (2)

¥ billions		1H, FY2018 US\$1 = ¥110 € 1 = ¥130 1 yuan = ¥16.8	1H, FY2019 US\$1 = ¥109 € 1 = ¥121 1 yuan = ¥15.7	Year-on- Year
Wires, Cables, and Related Products	Revenues	121.0	111.0	-8%
	Focus sectors			
	Rolling stock <sup>□</sup>			-25%
	Medical devices <sup>□</sup>			+23%
	Automotive electronic components <sup>□</sup>			-8%
	FA, robots <sup>□</sup>			-47%
	Magnet wires <sup>□</sup>			-22%
	Adjusted operating income	7.2	3.7	-3.5
	Adjusted operating margin	6.0%	3.3%	-2.7%
Operating income of the segment	6.9	3.7	-3.2	

□ Indicates the change in revenues calculated by a simplified method

Sales proportion of the focus sectors: 1H, FY2019: 43%  
1H, FY2018: 40%



### 3. Assets, Liabilities, and Net Assets

¥ billions	March 31, 2019 US\$1 = ¥111 € 1 = ¥125 1 yuan = ¥16.5	September 30, 2019 US\$1 = ¥108 € 1 = ¥118 1 yuan = ¥15.1	Change
Total assets	1,099.3	1,024.1	-75.2
Trade receivables	195.3	188.6	-6.7
Inventories	214.8	192.6	-22.2
Total liabilities	504.1	490.7	-13.4
Interest-bearing debt	202.1	227.0	+24.9
Equity attributable to shareholders of the parent company	588.0	529.4	-58.6
Non-controlling interests	7.2	3.9	-3.3
Equity attributable to shareholders of the parent company ratio	53.5%	51.7%	-1.8%
D/E ratio (times)	0.34	0.43	+0.09

- Inventories decreased by ¥22.2 billion through the measures to improvement.
- Interest-bearing debts increased by ¥24.9 billion mainly due to the effect of the first year in which IFRS 16 “Leases” was adopted (¥17.4 billion), in addition to short-term funding.

## 4. Consolidated Cash Flows

¥ billions	1H, FY2018	1H, FY2019	Year-on-Year
Cash flows from operating activities (Operating CF)	22.0	40.5	+18.5
Cash flows from investing activities (Investing CF)	-51.2	-36.4	+14.8
Free cash flows (FCF)	-29.2	4.1	+33.3
Core free cash flows*	-31.3	4.1	+35.4

**Free cash flow improved by ¥33.3 billion year on year, through measures such as reducing working capital and selecting investments more carefully.**

\* Core free cash flows = Cash flows from operating activities – Capital expenditure

# Reference Data (1)

¥ billions	FY2016	FY2017	FY2018	1H, FY2018	1H, FY2019	FY2019 Previous forecast	FY2019 Revised forecast
	US\$1 = ¥108 € 1 = ¥119 1 yuan = ¥16.1	US\$1 = ¥111 € 1 = ¥130 1 yuan = ¥16.8	US\$1 = ¥111 € 1 = ¥128 1 yuan = ¥16.5	US\$1 = ¥110 € 1 = ¥130 1 yuan = ¥16.8	US\$1 = ¥109 € 1 = ¥121 1 yuan = ¥15.7	US\$1 = ¥110	US\$1 = ¥107
Revenues	910.5	988.3	1,023.4	519.0	456.9	1,000.0	895.0
Adjusted operating income <sup>*1</sup>	66.0	65.1	51.4	33.1	5.9	54.0	14.0
Adjusted operating margin	7.2%	6.6%	5.0%	6.4%	1.3%	5.4%	1.6%
Other income	14.1	5.4	10.7	7.7	1.8		
Other expenses	-11.8	-24.2	-19.7	-5.0	-45.3		
IFRS operating income	68.3	46.3	42.4	35.8	-37.6		
EBIT	68.5	48.9	45.3	38.2	-37.5	40.0	-41.0
Income before income taxes	66.0	47.0	43.0	37.2	-38.7	38.0	-43.5
Net income attributable to shareholders of the parent company	50.6	42.2	31.4	28.1	-41.0	28.5	-47.0
Interest-bearing debt	194.5	160.8	202.1	201.4	227.0		
Capital expenditure	63.8	91.8	95.4	44.4	25.2	62.0	50.0
Depreciation	43.0	46.1	50.9	24.8	28.1	60.0	55.5
R&D expenses	18.0	17.7	18.6	9.3	8.2	18.5	17.5
D/E ratio (times)	0.36	0.29	0.34	0.34	0.43	0.36	0.38
Earnings per share (basic) (yen)	118.32	98.72	73.37	65.81	-95.87	66.66	-109.92
Dividend per share (yen)	26.0	26.0	34.0	17.0	13.0	34.0	26.0
Equity per share attributable to shareholders of the parent company (yen)	1,254.9	1,316.1	1,375.2	1,398.6	1,238.3	1,401.2	1,211.2
Employees	28,754	30,390	30,304	31,016	30,201	30,900	30,200
ROIC <sup>*2</sup>	7.0%	5.8%	4.1%			3.5%	-6.2%
ROE <sup>*3</sup>	9.8%	7.7%	5.5%			4.8%	-8.5%
ROA <sup>*4</sup>	4.9%	4.0%	2.9%			2.5%	-4.5%
CCC <sup>*5</sup>	71.1	82.7	90.7	95.3	98.8	84.2	87.8
Overseas sales ratio	56%	56%	56%	56%	55%	56%	55%

\*1 Adjusted operating income = Revenues – Sales cost – Selling, general, & administrative expenses

\*2 Rate of Return on Invested Capital (ROIC) = Net income attributable to shareholders of the parent company / (average of beginning and end-year interest-bearing debts + average of beginning and end-year equity attributable to shareholders of the parent company)

\*3 Return on equity attributable to shareholders of the parent company (ROE) = Net income attributable to shareholders of the parent company / Average of beginning and end-year equity attributable to shareholders of the parent company \* 100

\*4 Return on total assets (ROA) = Net income attributable to shareholders of the parent company / Average of beginning and end-year total assets \* 100

\*5 Cash Conversion Cycle (CCC) = Working capital (trade receivables + inventories – debts) / daily average revenues

## Major products' volume trends (weight basis)

Index numbers calculated by taking the value of 1Q FY2018 as 100

Product		FY2017				FY2018				FY2019	
		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q
Specialty Steel Products	Molds and tool steel	101	94	92	99	100	98	87	87	80	82
	CVT belt materials	93	104	109	119	100	106	112	100	99	87
	Piston ring materials	98	91	90	96	100	96	98	93	89	78
	Organic EL-related materials	49	80	85	106	100	87	87	79	95	123
Magnetic Materials and Applications	Rare earth magnets	101	103	107	100	100	100	93	87	91	86
Functional Components and Equipment	Cast iron products	99	91	86	97	100	94	91	96	95	86
	Heat-resistant exhaust casting components (HERCUNITE™)	99	97	104	100	100	88	82	71	63	77

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October 29, 2019

## ■ Main Managerial Indicators

Profit margin in brackets	FY2018 Actual US\$1 = ¥111	FY2019 Initial forecast US\$1 = ¥110	FY2019 Revised forecast US\$1 = ¥107	Comparison with initial forecast
Revenues	¥1,023.4 billion	¥1,000.0 billion	¥895.0 billion	-10.5%
Adjusted operating income <sup>*1</sup>	[5.0%] ¥51.4 billion	[5.4%] ¥54.0 billion	[1.6%] ¥14.0 billion	-¥40.0 billion
Structural reform expenses <sup>*2</sup> , impairment losses	(-¥5.0 billion)	(-¥9.0 billion)	(-¥52.0 billion)	(-¥43.0 billion)
Income before income taxes	¥43.0 billion	¥38.0 billion	-¥43.5 billion	-¥81.5 billion
Net income attributable to shareholders of the parent company	¥31.4 billion	¥28.5 billion	-¥47.0 billion	-¥75.5 billion

\*1 Adjusted operating income = Revenues – Sales cost – Selling, general, & administrative expenses

\*2 Structural reform expenses: Net gain on business reorganization, Structural reform expenses, and others

## ■ Dividends

	Interim Dividends	Year-end Dividends	Annual Dividends
FY2016	¥13	¥13	¥26
FY2017	¥13	¥13	¥26
FY2018	¥17	¥17	¥34
FY2019 (Revised forecast)	(Determined amount) ¥13	(Revised forecast) ¥13	(Revised forecast) ¥26

## 2. Revenues, Adjusted Operating Income, and ROIC by Segment

¥ billions		FY2018 Actual	FY2019 Initial forecast	FY2019 Revised forecast	Comparison with initial forecast	
Profit margin in brackets		US\$1 = ¥111 € 1 = ¥128 1 yuan = ¥16.5	US\$1 = ¥110	US\$1 = ¥107		
Advanced Metals	Specialty Steel Products	Revenues	276.9	280.0	251.0	-10%
		Adjusted operating income	[8.1%] 22.4	[7.5%] 21.0	[1.4%] 3.5	-17.5
		ROIC <sup>*2</sup>	6.3%	5.5%	0.7%	-4.8%
	Functional Components and Equipment	Revenues	367.6	350.0	307.0	-12%
		Adjusted operating income	[2.9%] 10.5	[4.3%] 15.0	[1.0%] 3.0	-12.0
		ROIC <sup>*2</sup>	-0.6%	3.7%	0.2%	-3.5%
	Subtotal <sup>*1</sup>	Revenues	644.5	630.0	558.0	-11%
		Adjusted operating income	[5.1%] 32.9	[5.7%] 36.0	[1.2%] 6.5	-29.5
		ROIC <sup>*2</sup>	2.7%	4.6%	0.4%	-4.2%
Advanced Components and Materials	Magnetic Materials and Applications / Power Electronics	Revenues	137.0	140.0	118.0	-16%
		Adjusted operating income	[2.9%] 4.0	[4.3%] 6.0	[0.8%] 1.0	-5.0
		ROIC <sup>*2</sup>	3.9%	2.6%	-19.2%	-21.8%
	Wires, Cables, and Related Products	Revenues	240.1	230.0	219.0	-5%
		Adjusted operating income	[5.2%] 12.5	[4.8%] 11.0	[2.7%] 6.0	-5.0
		ROIC <sup>*2</sup>	8.2%	6.1%	0.7%	-5.4%
	Subtotal <sup>*1</sup>	Revenues	377.1	370.0	337.0	-9%
		Adjusted operating income	[4.4%] 16.5	[4.6%] 17.0	[2.1%] 7.0	-10.0
		ROIC <sup>*2</sup>	5.5%	3.9%	-11.2%	-15.1%
Others/Adjustments	Revenues	1.8	0	0	-	
	Adjusted operating income	2.0	1.0	0.5	-0.5	
Total	Revenues	1,023.4	1,000.0	895.0	-11%	
	Adjusted operating income	[5.0%] 51.4	[5.4%] 54.0	[1.6%] 14.0	-40.0	
	ROIC <sup>*3</sup>	4.1%	3.5%	-6.2%	-9.7%	

\*1 Simple sum before eliminating intersegment revenues

\*2 ROIC by segment = IFRS operating income \* (1 - Tax rate of 30%) / (Average of beginning-and end-year working capital + Average of beginning- and end-year fixed assets)

\*3 Return on Invested Capital (ROIC) = Net income attributable to shareholders of the parent company / (Average of beginning and end-year interest-bearing debt + Average of beginning and end-year equity attributable to the parent company)

### 3. Trend of Main Business Fields

#### Automobiles

[Main related products]

Tool steel, CVT belt materials, Piston ring materials, casting components, magnetic materials, electronic components

[Market trend]

- The Chinese market saw a significant fall. Sales declined in Europe and the U.S. Sales in Japan are also forecast to decrease in the second half
- Labor disputes involving leading automobile manufacturers have been prolonged
- Commercial vehicles, agricultural machinery and construction machinery also suffered from the stagnant global economy
- Recovery of relevant products is expected to be delayed from the second half of FY2019 to FY2020 and after

#### FA/ robots

[Main related products]

Magnetic materials, cable materials

[Market trend]

- 2Q-4Q of FY2019: Demand is expected to remain flat

#### Electronics

[Main related products]

Lead frame materials, organic EL panel related components, clad metals, magnetic materials

[Market trend]

- While inventory adjustment of lead frame materials was almost completed, recovery of real demand lacks strength
- Sales of organic EL panel related components and clad metals for some applications are expected to grow on a year-on-year basis



# 4. Factors Behind Revisions to Operating Forecast

Significantly reduced the profit  
due to a decline in demand and an increase in fixed costs

[Adjusted operating income]

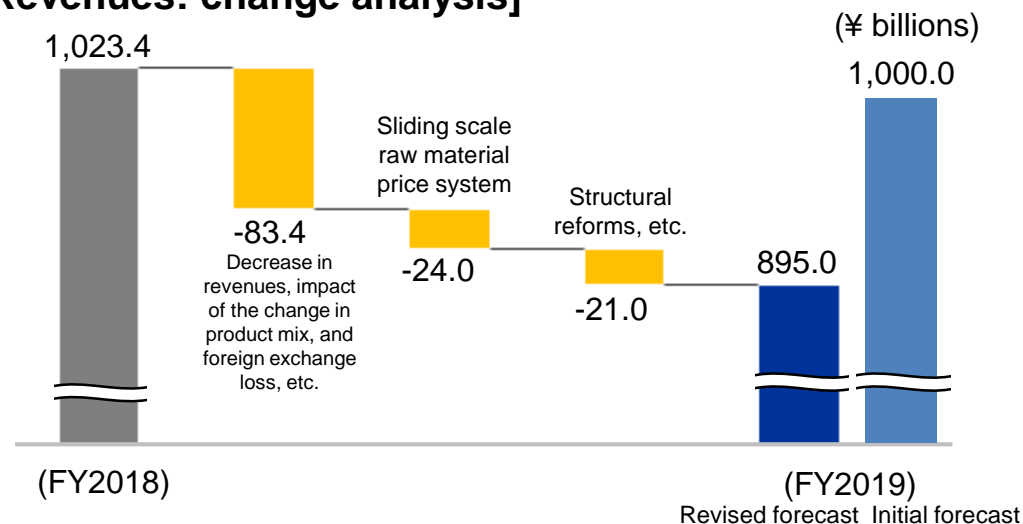
Operating environment continued to decline

1. Large-scale investment and increased production (increase of work in process) in anticipation of future growth in demand in the previous Medium-term Management Plan
  - ↓
  - Decrease in demand and a fall in raw material prices
  - Insufficient operation and increase in inventory write-down
  
2. Expectations for a recovery in demand in the second half of FY2019
  - ↓
  - Demand is anticipated to remain unchanged

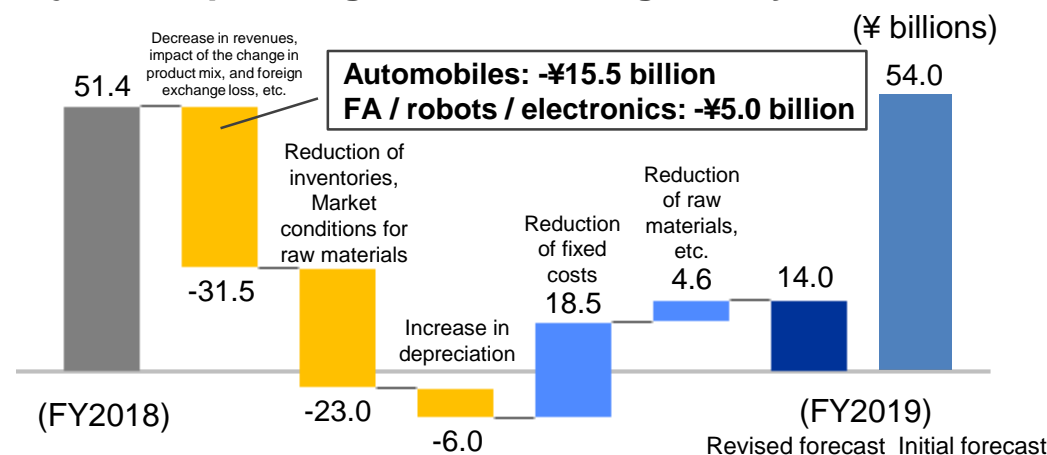
[Net loss before income taxes]

Magnetic materials and applications: impairment losses of ¥42.6 billion were posted (property, plant and equipment: ¥22.6 billion, goodwill: ¥20.0 billion).

[Revenues: change analysis]



[Adjusted operating income: change analysis]



# 5. Revitalization of the Magnet Business

## ■ Background Behind the Impairment Losses (Changes in operating environment for rare earth magnets)

Market environment	<ul style="list-style-type: none"><li>• Sluggish demand for FA / robots has prolonged</li><li>• In the xEV market, customers have shifted towards more cost oriented policies</li></ul>
Competitive environment	<ul style="list-style-type: none"><li>• Price competition with peer manufacturers has intensified</li></ul>
<i>Monozukuri</i>	<ul style="list-style-type: none"><li>• Initial targets for costs and production capacity have not been achieved, which resulted in deterioration of profitability</li></ul>

**Impairment losses of ¥42.6 billion (including goodwill) have been posted by the Magnetic Materials and Applications business as a whole**

**Shift to business strategy more focused on cost competitiveness**

## ■ Measures

Reorganization of business sites	It has been determined to close down multiple production sites, and it has been considered to consolidate the remaining production sites
Global production	Develop production systems with a higher ratio of international production sites (China and the Philippines)
<i>Monozukuri</i>	Realize both quality improvement and cost reduction through <i>monozukuri</i> by leveraging Hitachi Metals' proprietary technologies

**Revitalize the magnet business as a strategic business area**

## ■ Management Responsibilities

Claw back of part of Compensation for Directors and Executive Officers

## ■ Reduction of Fixed Costs

### Personnel costs

- Personnel reduction in accordance with revenues, implementation of furlough
- Promotion of early retirement system (March 2020)
- Personnel reduction in line with closures of business sites

### Depreciation

- Careful selection and reduction of capital investment (Investment amount for FY2019: Initial forecast of ¥62.0 billion has been revised to ¥50.0 billion)
- Disposal of business assets based on early assessment of business strategies / potentiality

### Others

- Reduction of non-urgent R&D costs and repair costs
- Promotion of the *Monozukuri* Innovation Project

Effective amount for FY2019: ¥18.5 billion,  
effective amount for FY2021: ¥39.0 billion (compared to FY2018)

## ■ Business Disposal

- Brought forward the timing for decision-making on disposal of non-core, low profit businesses based on quantitative judgment criteria in the management reform project

## Adequate Management of Invested Capital

### Optimization of inventories

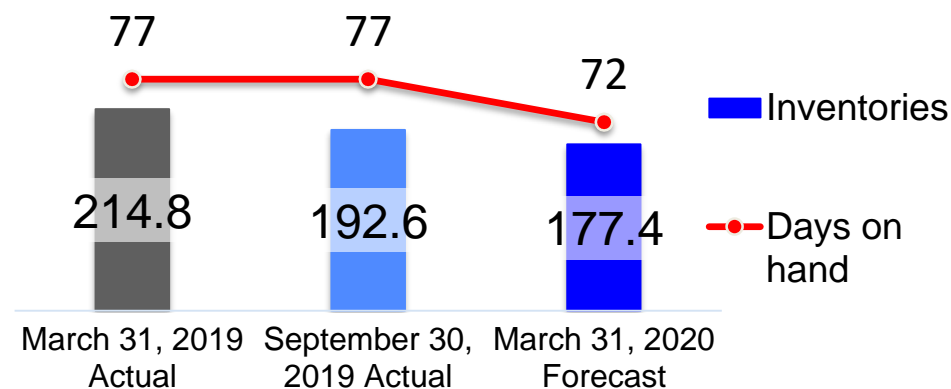
- Launch of corporate project by the Technology, Research & Development Division
- Selection of processes to boost improvement, incorporation into specific measures and follow-up

### Introduction of ROIC

- Holding of ROIC awareness caravan within the Company (implemented at major business sites during the first half of FY2019)
- Reflection of ROIC on operations of each business field / layer based on developing the ROIC tree

### [Cash flows]

(¥ billions)	FY2018 Actual	FY2019 Forecast	YoY
Operating CF	66.6	98.0	+31.4
Investing CF	-96.3	-60.0	+36.3
FCF	-29.7	38.0	+67.7

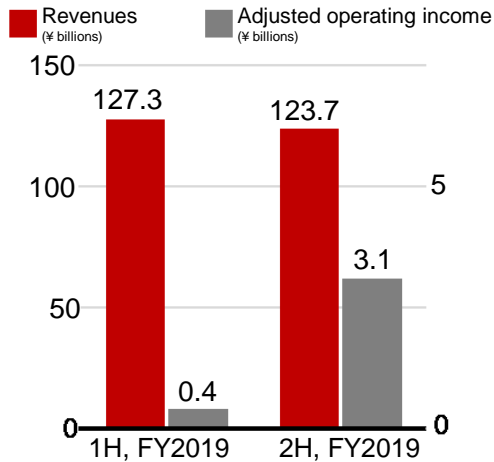


## Cost Structure Reforms

- |   |   |   |
|---|---|---|
| <ul style="list-style-type: none"> <li>•Capital investment</li> <li>•Inventories</li> <li>•<i>Monozukuri</i> / R&amp;D</li> <li>•Fixed costs</li> </ul> | } | <ul style="list-style-type: none"> <li>•Management / operations based on mutual collaboration</li> <li>•Concentration of operating resources</li> <li>•Maximization of benefits to be reaped</li> </ul> |
|---|---|---|

Break-even point has been lowered by 5 points (FY2018 => FY2021)

## Specialty Steel Products



### ■ Situation in the first half

- **Posted an inventory write-down and promoted the reduction of inventories (Adjusted operating income: -¥11.0 billion year on year)**
- **Insufficiency in reaping benefits of investment in increased production**

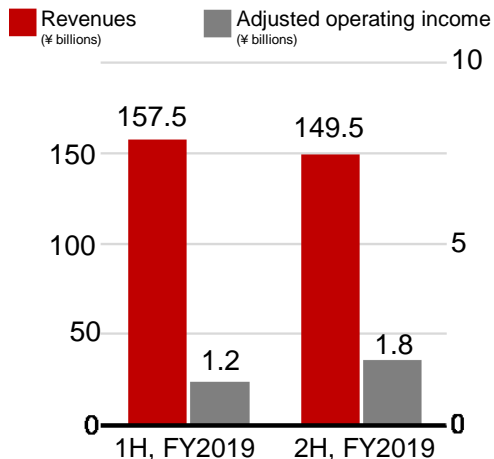
#### Clad metals

- The world's largest new facility has been completed. Full-scale operation commenced in August 2019.
- Smartphone and battery related markets continued to grow.

#### Components and materials for aircraft

- Newly acquired melting certification for materials used at Yasugi Works (1 certification in 1H of FY2019)
- Steadily launched projects based on orders received

## Functional Components and Equipment



#### Waupaca

- Automobile, construction machinery and agricultural machinery markets in the U.S. slowed down. Currently revising product portfolios.
- Promotion of factory automation

#### Cast iron products

- Win orders for new programs for construction machinery and passenger vehicles



Ductile cast iron

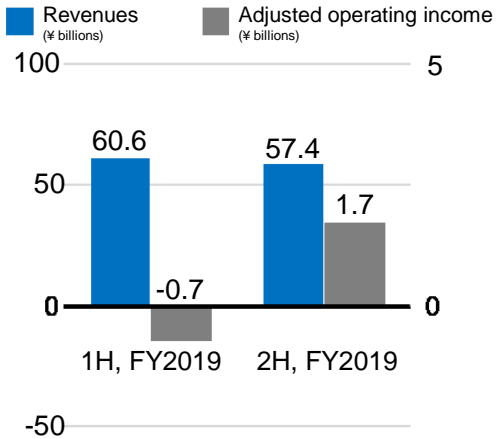


OMEGA KNUCKLE®

#### HERCUNITE

- Currently promoting factory automation and certification of new casting methods

## Magnetic Materials and Applications / Power Electronics



**Power Electronics**

Magnetic Materials and Applications

- **FINEMET:** Sales for automobile and smartphone applications remain robust
- **SiN substrate:** Sales for automobile application have been brisk, production capacity is currently being reinforced
- **Scintillator materials:** Sales of new products (for security applications) are expanding



FINEMET® Ribbon



FINEMET® applications



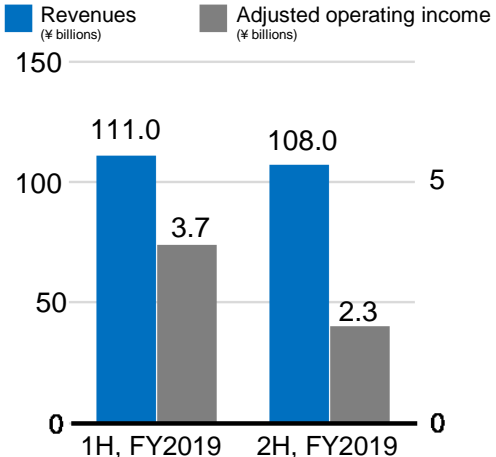
SiN substrate



Scintillator materials

- **Magnets:** Promoting the revitalization plan

## Wires, Cables, and Related Products



**5 Growth Areas in Wires, Cables, and Related Products**

Basic Products

- **Automobile electronic components:** Sales remained stagnant due to a decrease in automobile production
- **Magnet wires:** Sales were weak reflecting sluggish demand for automobiles and FA
- **FA/ robots:** Decreased as a result of weak demand
- **Rolling stock:** Expected to recover slightly from the latter half of 2H despite the in-between season
- **Medical devices:** Demand was robust, promoted new product development

- **Full-scale launch of the new continuous casting & rolling line**  
(Full-production in 2H of FY2019)

# 10. Changes in Operating Results

## <2015 Medium-Term Management Plan>

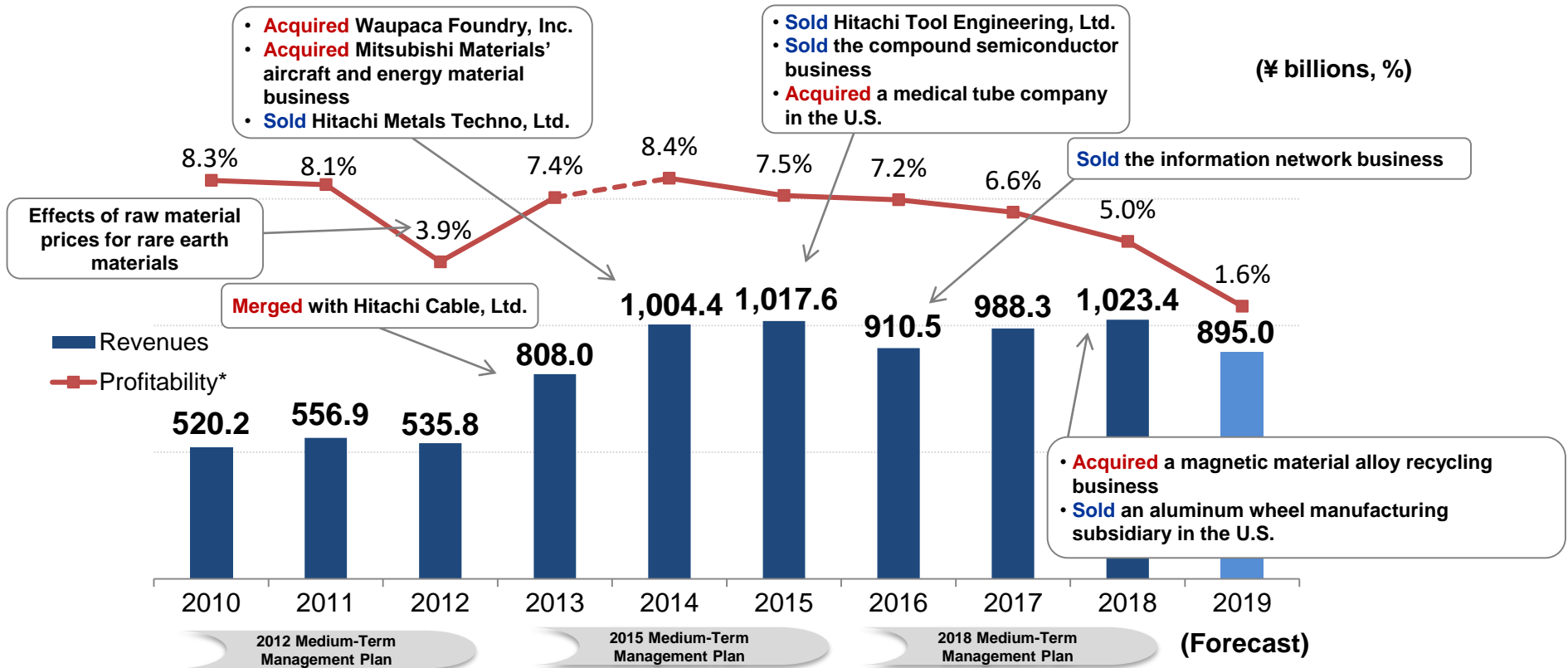
- Organic growth stagnated
- Expanded business scale through M&A

## <2018 Medium-Term Management Plan>

- Promoted aggressive omnidirectional investments
  - ⇒ Fixed cost increased, failed to reap the benefits of investments sufficiently
- Inventories increased

## <2019 Forecast>

- Significant deterioration in profitability due to a decline in demand and valuation loss, despite efforts to reduce fixed costs
  - ⇒ Profitability: 1.6% (lowest since 2003)
  - Largest net loss ever (¥47.0 billion)



Profitability deteriorated significantly due to lack of structural reforms during ordinary times and aggressive omnidirectional investments

Board of Directors

Sharing of issues and strategic discussions through close communication between the Board and Executive Officers

CEO

Management reform project

Organizational and cultural reform

Optimization of portfolios (including countermeasures in businesses with issues)

Cost structure reform

Strengthening of marketing capabilities

Investment management reinforcement PJ\*

Monozukuri capability reinforcement PJ

Inventory optimization PJ

Fixed cost reduction PJ

Enhance the speed and transparency of processes for solving issues and making decisions (large-scale investments, M&A, business strategies, etc.)

Reinforce multilateral KPI management (Thorough management of ROIC, CCC, etc.)

Thoroughly execute management transformation of Hitachi Metals

\*PJ stands for project



## Organizational and cultural reforms

- Enhance the speed and transparency of processes for solving issues and making decisions

Cost structure reform

### Investment management reinforcement PJ

- Complete reaping the benefits of investments
- Careful selection of investments: Invest in high-growth, high-profit areas
- Carefully assess the sales and disposal of idle assets

### Depreciation and amortization

¥42.9 billion (FY2015)

↓ +¥17.1 billion

¥60.0 billion (prior to revisions to FY2019 forecast)

2018 Medium-Term Management Plan

Capital investment amount

¥251.0 billion (accumulated total during the period)

Impairment losses (FY2016-September 2019)

¥61.8 billion (accumulated total during the period)

- Aluminum wheels: ¥8.0 billion (FY2017)
- Heat resistant exhaust casting components: ¥7.0 billion (FY2018)
- Magnetic materials and applications: ¥42.6 billion (FY2019)

2021 Medium-Term Management Plan

Capital investment amount

¥186.0 billion (accumulated total during the period)

(Revised) Capital investment amount

Focus on the electrification & evolution of mobility

¥135.0 billion (accumulated total during the period)

### Monozukuri capability reinforcement PJ

- Identify and prioritize key issues
- Staffing of corporate and R&D personnel  
→ Resolve issues as quickly as possible

### Inventory optimization PJ

- Realize minimum inventory holding days through production management using IoT (excluding strategic inventories)

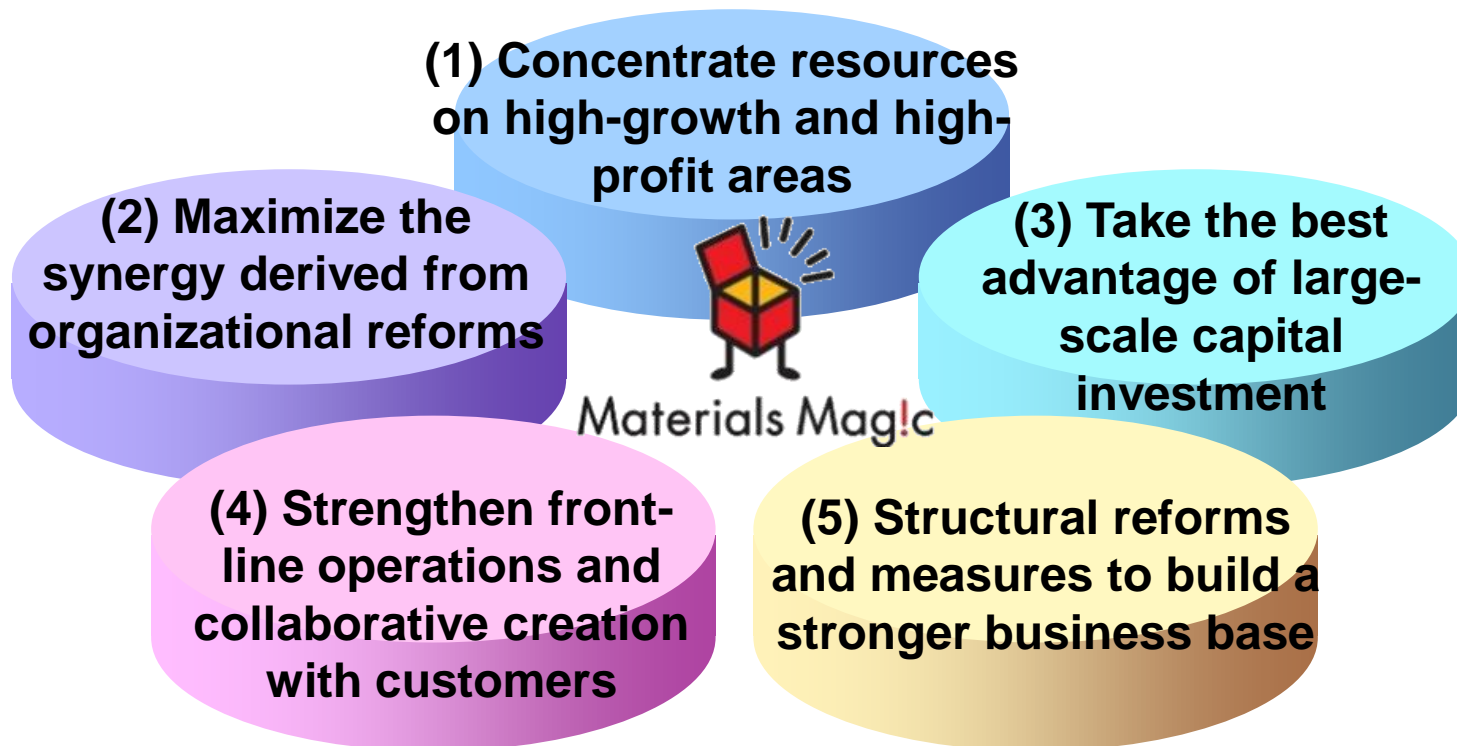
### Fixed cost reduction PJ

- Significantly improve human productivity through the usage of multilateral KPIs
- Concentrate R&D themes into core businesses and growth fields

# A High-performance Materials Company Supporting Sustainable Societies

– Building People, Building Innovation, and Building the Future –

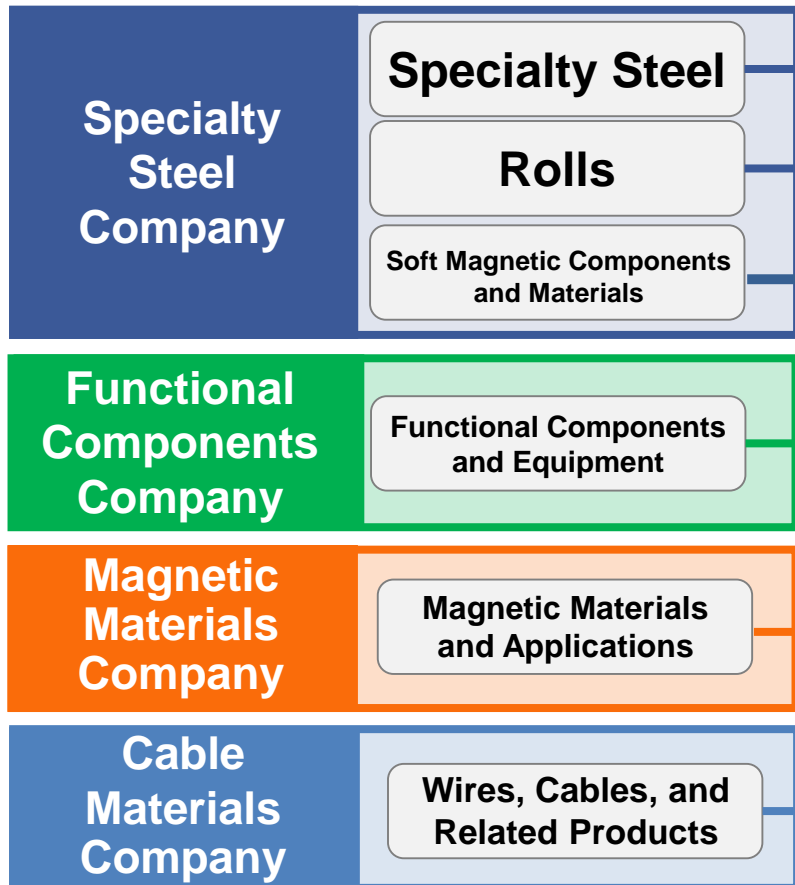
## Expand “Only 1, No. 1” businesses and products



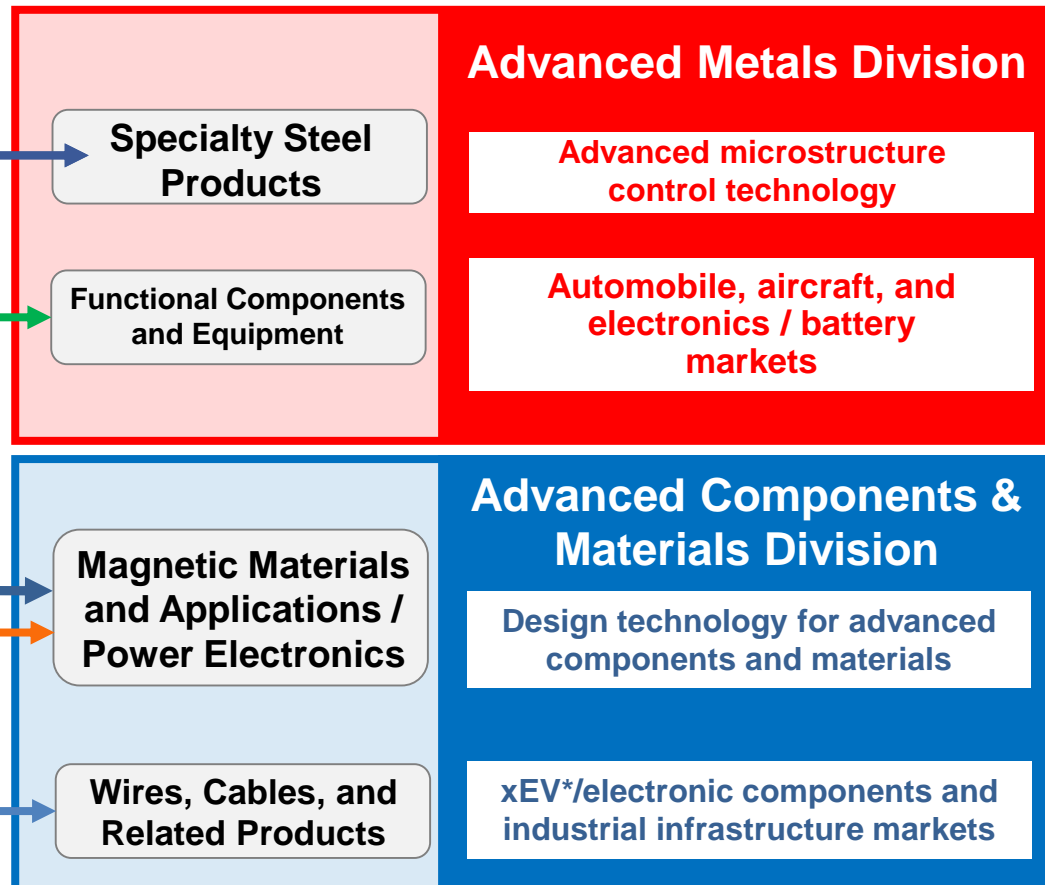
## Shift from four-company organization to two-divisional organization

- Commonality among markets / customer needs / elemental technologies  
→ maximize the synergy between segments
- Effective use of resources, enhance strategy function & governance

### ■ Before organizational restructuring













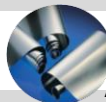

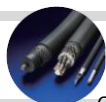
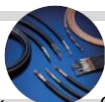



### ■ After organizational restructuring



# (For reference) Business Operations by Market (From April 2019)

## Business Portfolio

Business Divisions	Business Segments	Industrial Infrastructure	Automobiles	Electronics
Advanced Metals	Specialty Steel	 <b>Tool Steel &amp; Rolls</b> 		
		 <b>Industrial, Aircraft &amp; Energy Materials</b> 		
	Functional Components and Equipment	<b>Piping Components</b>  	<b>Casting Components for Automobiles</b>  	<b>Electronic Materials</b>  
Advanced Components & Materials	Magnetic Materials and Applications/ Power Electronics	 <b>Magnetic Materials</b> 		
		 <b>Power Electronics Materials</b> 		
	Wires, Cables, and Related Products	  <b>Electric Wires and Cables</b>		
<b>Automotive Components</b> 				

# (For reference) Business Operations of Hitachi Metals

## (From April 2019)

### Business Operations

Business Divisions	Business Segments	Business	Principal Products
Advanced Metals	Specialty Steel	Tool Steel & Rolls	Molds and tool steel, various rolls for steel mills, injection molding machine parts, structural ceramic products, and steel-frame joints for construction
		Industrial, Aircraft & Energy Materials	Automobile-related materials, razor and blade materials, precision cast components, and aircraft- and energy-related materials
		Electronic Materials	Display-related materials, semiconductor and other package materials, and battery-related materials
	Functional Components and Equipment	Casting Components for Automobiles	HNM™ high-grade ductile cast iron products, cast iron products for transportation equipment, HERCUNITE™ heat-resistant exhaust casting components, and aluminum components
		Piping Components	Piping and infrastructure components (Gourd™ brand pipe fittings, various valves, stainless steel and plastic piping components, water cooling equipment, precision mass flow control devices, and sealed expansion tanks)
Advanced Components & Materials	Magnetic Materials and Applications/ Power Electronics	Magnetic Materials and Applications	NEOMAX® rare-earth magnets, ferrite magnets, other various magnets and their applied products
		Power Electronics Materials	Soft magnetic materials (Metglas® amorphous metals, FINEMET® nanocrystalline magnetic materials, soft ferrite) and its applied products, and ceramic components
	Wires, Cables, and Related Products	Electric Wire & Cable	Industrial cables, electronic wires, electric equipment materials, cable assemblies, and industrial rubber products
		Automotive Components	Automotive electronic components and brake hoses

The Group's business results are disclosed by business segment.

**This document contains forward-looking statements, such as results forecasts, management plans and dividend forecasts, that are not historical facts.**

**All such forward-looking statements are based upon all available information and upon assumptions and projections that were deemed reasonable at the time the Company prepared this document.**

**Changes to the underlying assumptions or circumstances could cause the actual results to differ substantially.**

**The factors causing such differences include, but are not limited to, the following:**

- Risks associated with market conditions related to product demand
- Risks associated with changes in raw material prices
- Risks associated with financing activities
- Risks associated with changes in foreign exchange rates
- Risks associated with changes in the value of securities
- Risks associated with the global expansion of businesses
- Risks associated with competitiveness and development and commercialization of new technologies and products
- Risks associated with intellectual property rights
- Risks associated with environmental regulations
- Risks associated with product defects
- Risks associated with laws and regulations, and official regulations
- Risks associated with earthquakes and other natural disasters
- Risks associated with information security
- Risks associated with retirement benefit obligations
- Risks associated with relationship with the parent company
- Risks associated with M&A
- Risks associated with securing talent