

FY2017 1st Half Financial Results (Ended September 20, 2017)

FY2017 2nd Half and Full-year Forecasts (Ending February 28, 2018)

Notes:

- **Yaskawa Electric changes its accounting period from March 20 to the last day of February starting FY2017. The figures of FY2017 forecasts (Reference basis) in this document are based on the assumption that the accounting period remains unchanged. (from March 21, 2017 to March 20, 2018) (Please refer to the appendix on page 18 for details.)**
- The information within this document is made as of the date of writing. Any forward-looking statements are made according to the assumptions of management and are subject to change as a result of risks and uncertainties. YASKAWA Electric Corporation undertakes no obligation to update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise.
- Figures in this document are rounded off, and may differ from those in other documents such as financial results.

YASKAWA ELECTRIC CORPORATION (TSE6506)

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Business Overview

Motion Control

[Core products]

- AC servo motors and controllers
- Linear servo motors
- AC drives

etc.



AC servo motor
"Σ-7" series



General purpose
AC drive
"Zero series"



Matrix converter
U1000

Robotics

[Core products]

- Industrial Robots
 - Arc and spot welding robots,
 - Painting robots
 - FPD glass sheet transfer robots,
 - Handling robots,
- Semiconductor wafer transfer robots
- Biomedical robots
- Collaborative robots etc.



New miniature robot
MOTOMAN-GP8



Arc-welding robot
MOTOMAN-AR1730



Collaborative robot
MOTOMAN-HC10

System Engineering

[Core products]

- Electrical systems for steel plants
- Electrical instrumentation systems for water supply plants and sewage treatment facilities
- Large-scale wind power generator and converter etc.
- PV inverters



Large-scale wind
turbine and converter



Continuous-casting machine



PV inverter for
photovoltaic power
generation



Electrical instrumentation
systems for water
and sewerage

Other

[Core products]

- IT-related services
- Logistics, etc.

1. FY2017 1H Financial Results

(Ended September 20, 2017)

FY2017 1H Financial Results Highlights

- Sales and profits significantly increased due to robust demand especially from the Chinese market.**
(Sales and profits marked record high as 1H results)

	<u>FY2017 1H</u> <u>Results</u>	FY2016 1H Results	<u>Changes</u>		FY2017 1H Forecasts
			<u>Amounts</u>	<u>%</u>	
Net sales	<u>¥ 229.1bn.</u>	¥ 187.6bn.	<u>+¥ 41.5bn.</u>	<u>+22.1%</u>	¥ 228.5bn.
Operating income	<u>¥ 27.8bn.</u>	¥ 13.8bn.	<u>+¥ 14.0bn.</u>	<u>+101.2%</u>	¥ 28.2bn.
Ordinary income	<u>¥ 27.5bn.</u>	¥ 13.8bn.	<u>+¥ 13.7bn.</u>	<u>+99.6%</u>	¥ 27.2bn.
Profit attributable to owners of parent	<u>¥ 21.1bn.</u>	¥ 8.6bn.	<u>+¥ 12.5bn.</u>	<u>+145.0%</u>	¥ 18.3bn.

Note: The figures of FY2017 1H previous forecasts were announced on July 20, 2017

FY2017 1H Financial Results by Business Segment (1)

- (M): Record highs achieved by strong AC servo sales in China
- (R): Profitability improved because of the steady sales growth

		FY2017 1H		FY2016 1H		Changes		FY2017 1H	
		Results	Income ratio	Results	Income ratio	Amounts	%	Forecasts	Income ratio
Net sales		229.1		187.6		+41.5	+22.1%	228.5	
(M)	Motion Control	110.4		83.2		+27.1	+32.6%	109.5	
(R)	Robotics	80.4		68.4		+12.1	+17.7%	80.0	
(S)	System Engineering	28.2		24.7		+3.5	+14.1%	29.0	
	Other	10.1		11.4		-1.2	-10.8%	10.0	
Operating income		27.8	12.1%	13.8	7.4%	+14.0	+101.2%	28.2	12.3%
(M)	Motion Control	21.8	19.7%	10.8	13.0%	+11.0	+101.6%	21.6	19.7%
(R)	Robotics	8.6	10.6%	5.6	8.2%	+3.0	+53.3%	8.5	10.6%
(S)	System Engineering	-1.8	-6.3%	-1.6	-6.5%	-0.2	-	-0.8	-2.8%
	Other	-0.1	-0.5%	-0.4	-3.7%	+0.4	-	-0.2	-2.0%
	Elimination or Corporate	-0.7	-	-0.6	-	-0.2	-	-0.9	-
Ordinary income		27.5	12.0%	13.8	7.3%	+13.7	+99.6%	27.2	11.9%
Profit attributable to owners of parent		21.1	9.2%	8.6	4.6%	+12.5	+145.0%	18.3	8.0%

Note 1 : The figures of FY2017 1H previous forecasts were announced on July 20, 2017

Note 2 : Revisions were made to the division of businesses segments starting 1Q FY2017. The PV inverter business, which was previously included in Motion Control, is included in System Engineering. The figures for 1H FY2016 reflect this change. (Please refer to the appendix at the end of this material for details.)

FY2017 1H Financial Results by Business Segment (2)

Motion Control

- **AC servo sales and operating income grew significantly because of the production automation and strong smartphone-related demand.**
- **Sales and profitability grew on the back of recoveries in infrastructure investment in China and the U.S. oil- and gas-related demand.**

Robotics

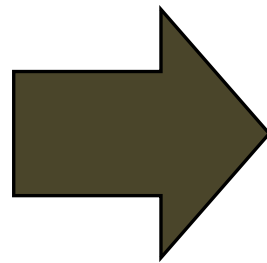
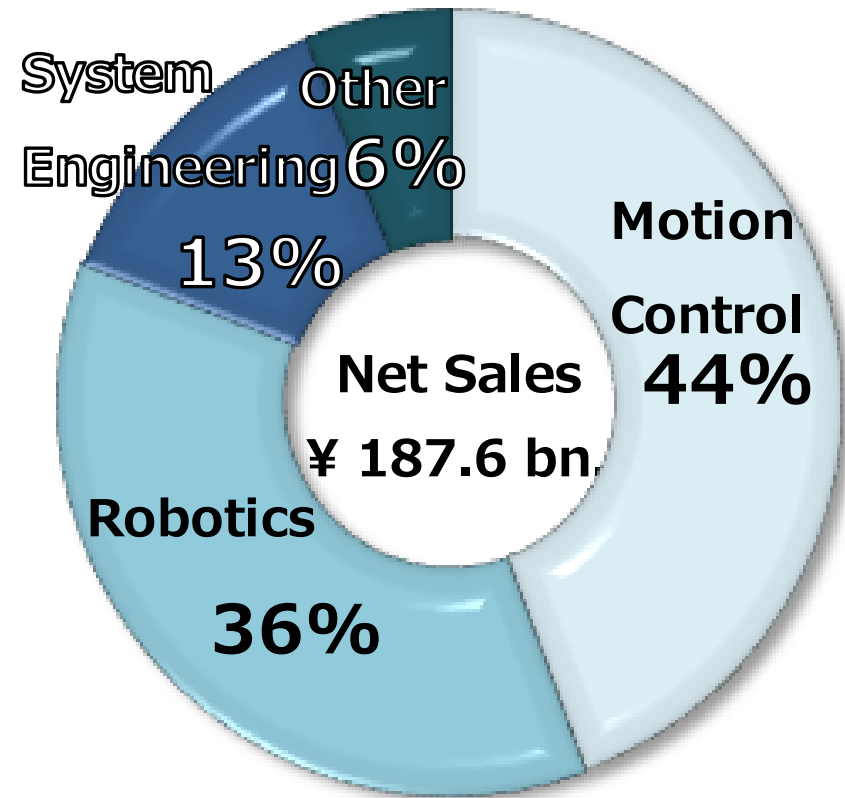
- **Automobile-related business was steady outside Japan.**
- **Sales for the general industries increased because of the strong demand for production automation of smartphones and home electronics in China.**

System Engineering

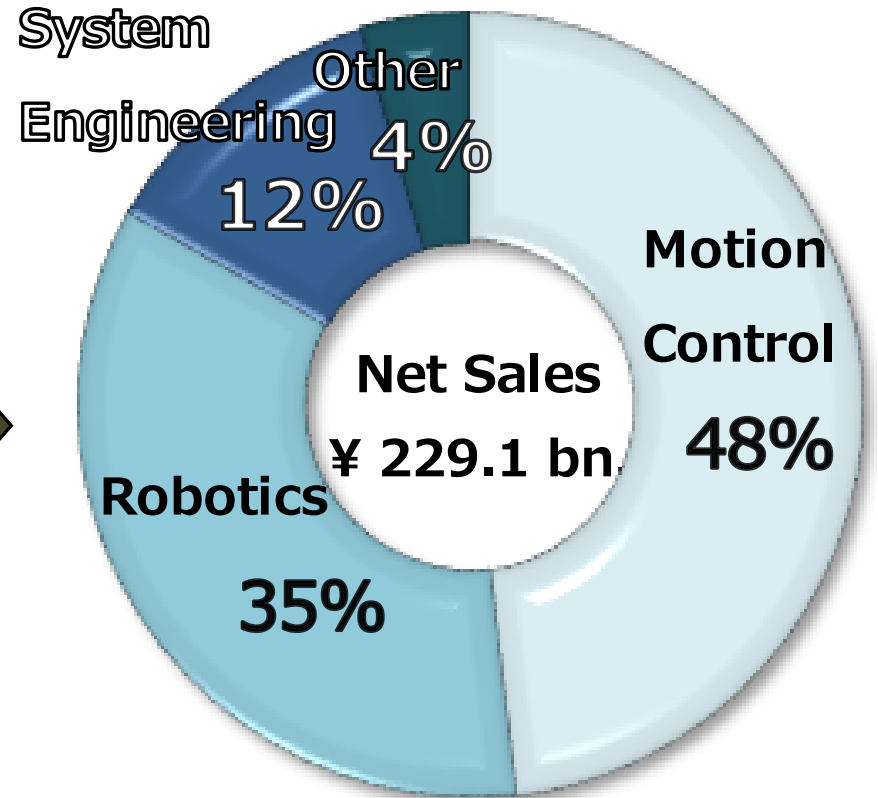
- **Sales for steel plant and social system businesses were solid.**
- **Sales related to large-scale wind turbines grew.**
- **Sluggish PV inverter sales weighed on earnings.**

Sales Breakdown by Business Segment

FY2016_1H



FY2017_1H



Sales Breakdown by Destination (1)

- Sales for all destination areas, especially China and other Asian countries, significantly increased.

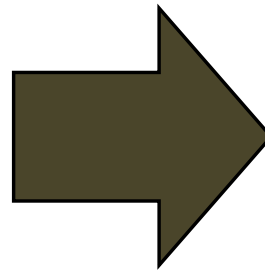
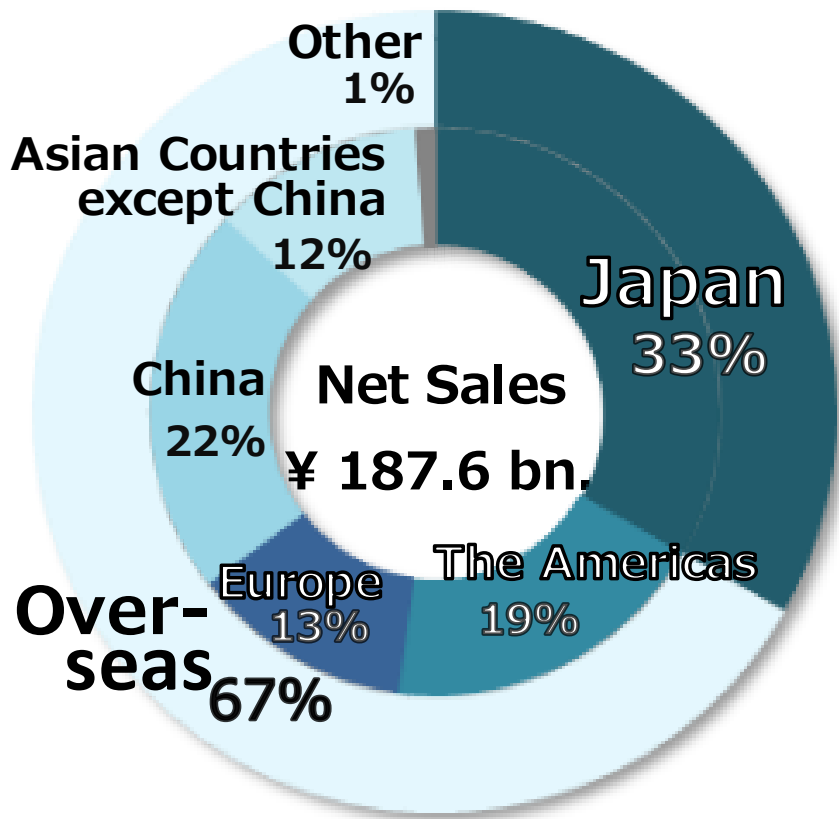
(Billions of yen)

	FY2017 1H	FY2016 1H	Changes	
			Amounts	%
Net sales	229.1	187.6	+41.5	+22.1%
Japan	70.6	62.5	+8.1	+13.0%
Overseas	158.6	125.2	+33.4	+26.7%
The Americas	42.4	35.4	+6.9	+19.6%
Europe	27.9	23.6	+4.3	+18.1%
China	55.5	41.5	+14.0	+33.9%
Asian Countries except China	30.9	22.6	+8.3	+36.5%
Other	1.8	2.0	-0.2	-7.8%

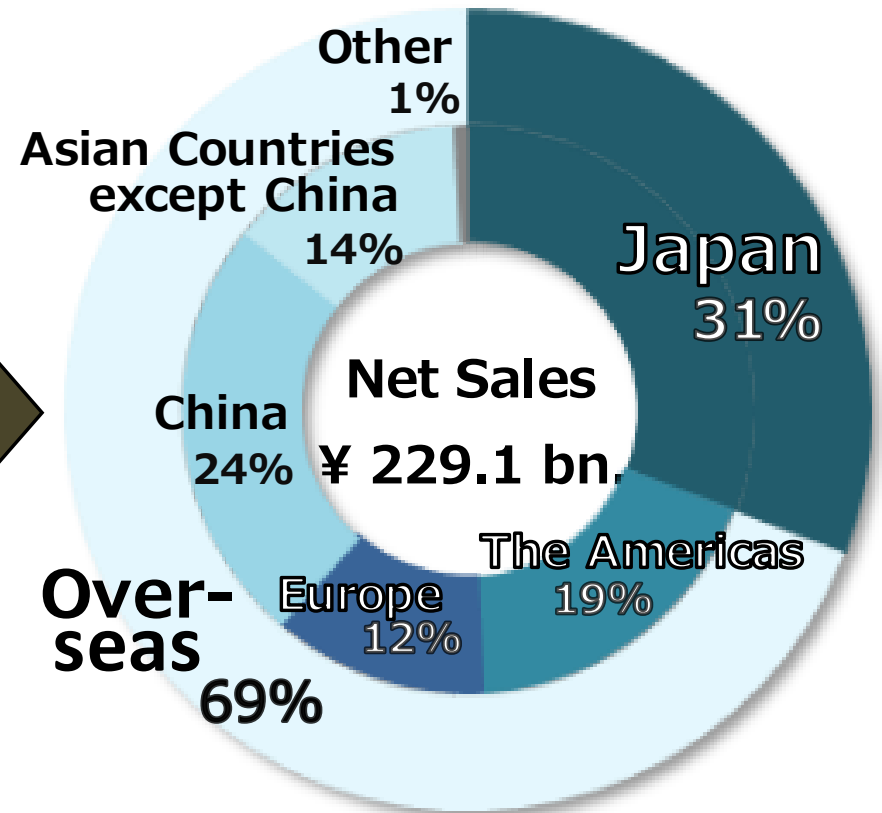
Note: Other includes Australia and South Africa, etc.

Sales Breakdown by Destination (2)

FY2016_1H

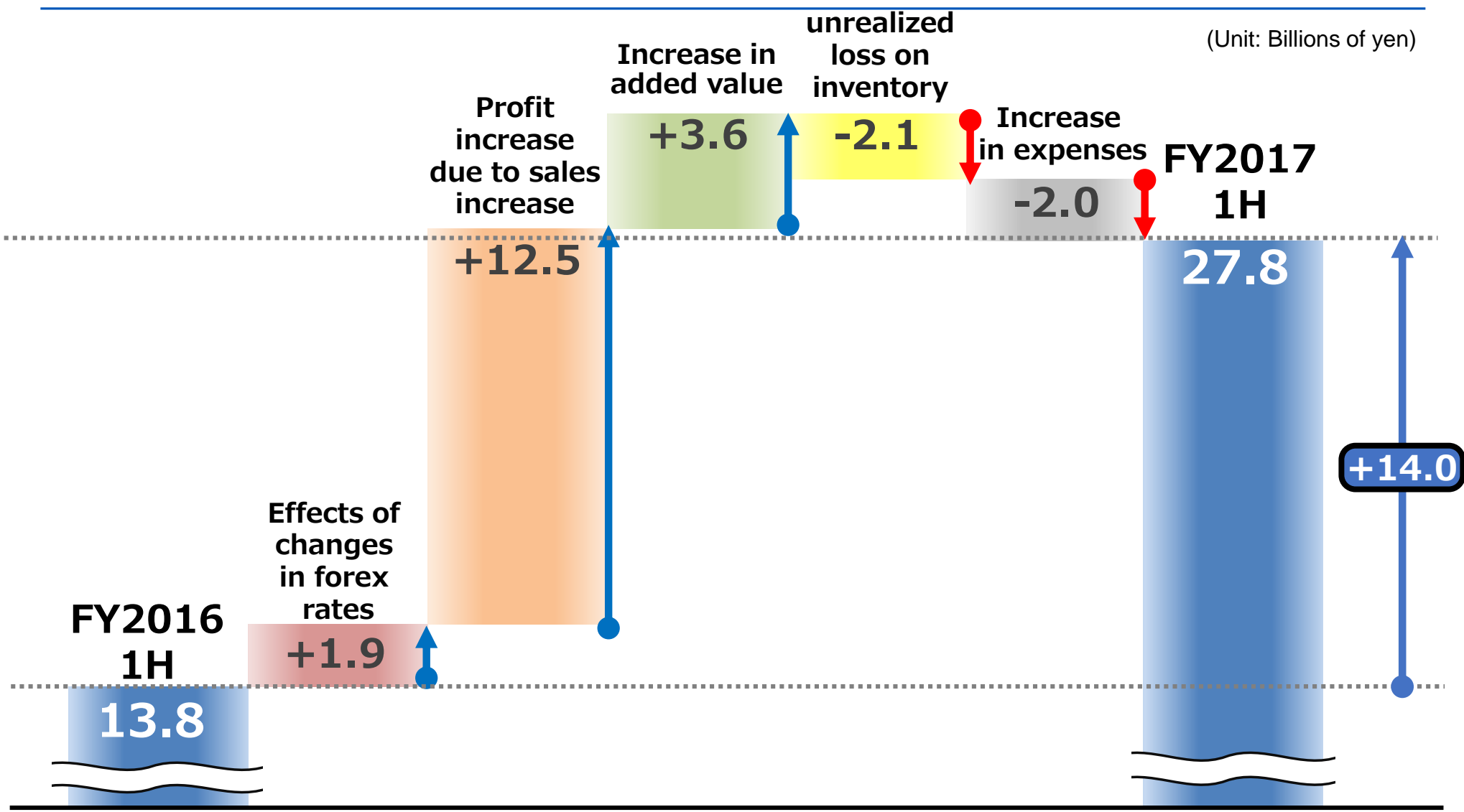


FY2017_1H



Breakdown of Change in Operating Income (FY2016/1H → FY2017/1H)

(Unit: Billions of yen)



➤ Profitability improvement in core businesses

➔ Promoted switch to AC servo Σ -7 series and enhanced its lineup

- Σ -7 switchover ratio in FY17 1H: 62% (China : 96%)
- Launched hollow shaft servo motor "SGM7T model" (Sep.21, 2017)



Hollow shaft servo motor
"SGM7T model"

AC drive "CR700" for
crane application

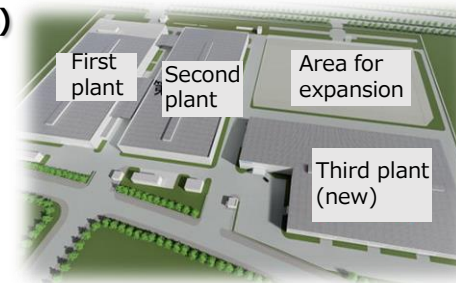
➔ Expanded lineup of AC drive Zero series

- Launched AC drive "CR700" for crane use (Aug.21, 2017)

➤ Improvement in production capacity

➔ Expansion of robot plant in China (Scheduled September, 2018)

- Capacity of robot production : 1,500 units/month*
- * including the capacity of existing plants



Robot plant No.3 in China
(Image)

➤ Promotion of new businesses

➔ Development of medical, nursing care, and welfare services field

- Launched upper limb rehabilitation device "CoCoroe AR2" (Sep.25, 2017)



CoCoroe AR2

2. FY2017/2H and Full-year Financial Forecasts (Ending February 28, 2018)

FY2017 Full-year Financial Forecasts (Highlights)

- Record high sales and profits are forecasted with upward revision based on strong orders

	FY2017	FY2016	Changes		FY2017
	Forecasts 〈Reference basis〉		Results	Amounts	%
Net sales	<u>¥ 466.0bn.</u>	¥ 394.9bn.	<u>+¥ 71.1bn.</u>	<u>+18.0%</u>	¥ 445.0bn.
Operating income	<u>¥ 57.0bn.</u>	¥ 30.4bn.	<u>+¥ 26.6bn.</u>	<u>+87.4%</u>	¥ 48.5bn.
Ordinary income	<u>¥ 57.0bn.</u>	¥ 32.0bn.	<u>+¥ 25.0bn.</u>	<u>+78.3%</u>	¥ 48.0bn.
Profit attributable to owners of parent	<u>¥ 41.0bn.</u>	¥ 20.4bn.	<u>+¥ 20.6bn.</u>	<u>+101.0%</u>	¥ 32.0bn.

Note1: The figures of FY2017 Forecasts 〈Reference basis〉 and previous forecasts are based on the assumption that the accounting period remains unchanged. (from March 21, 2017 to March 20, 2018) (Please refer to the appendix on P. 18 for details.)

Note2: The figures of FY2017 previous forecasts were announced on July 20, 2017

FY2016 Full-year Financial Forecasts by Business Segment

- Significant growth in sales and profits are forecasted especially in (M) and (R).

(Billions of yen)

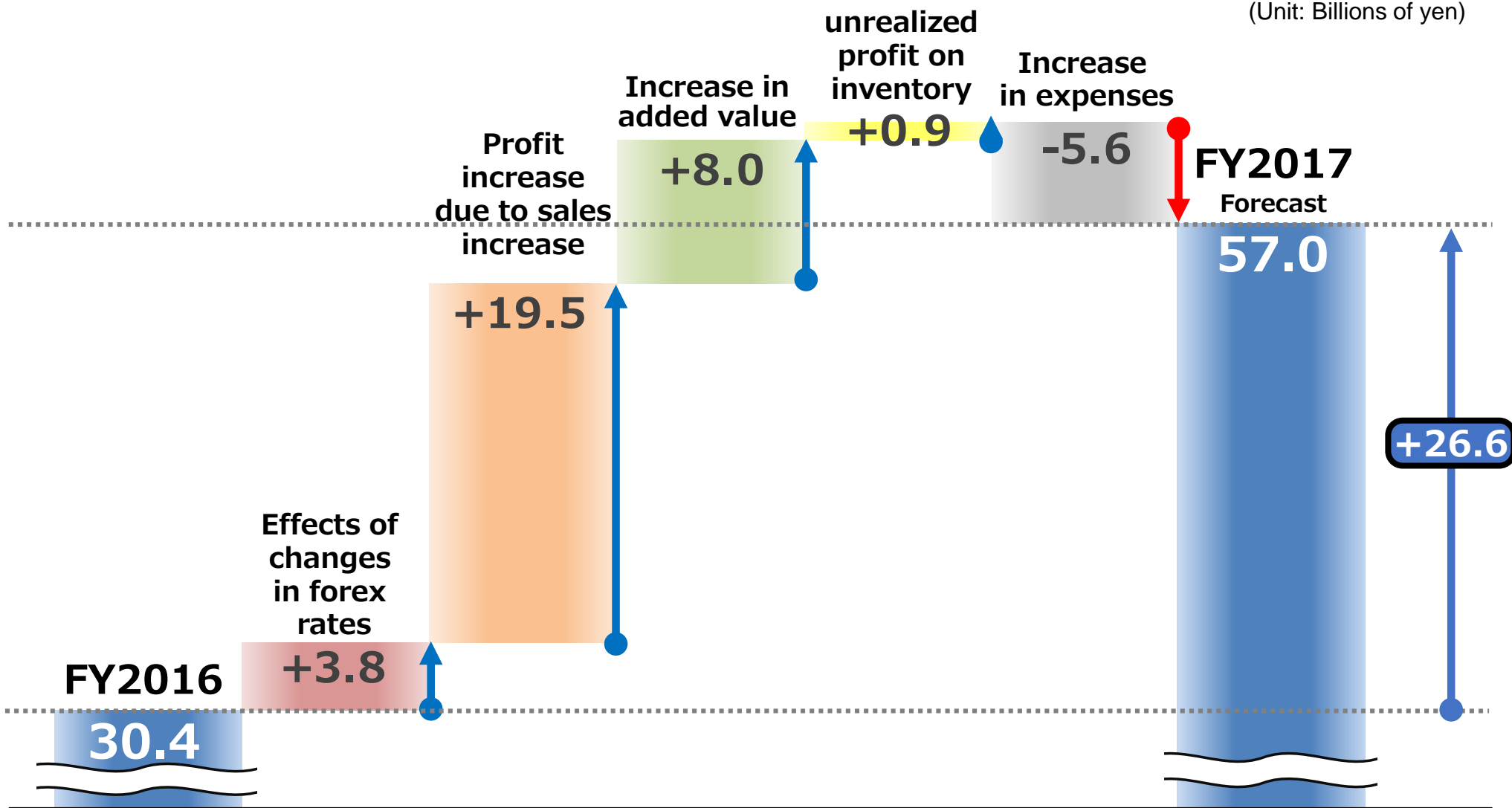
		FY2017		FY2016		Changes		FY2017	
		Forecasts (Reference basis)	Income ratio	Results	Income ratio	Amounts	%	Previous forecasts (Reference basis)	Income ratio
Net sales		466.0		394.9		+71.1	+18.0%	445.0	
(M)	Motion Control	213.4		172.0		+41.3	+24.0%	200.9	
(R)	Robotics	168.3		140.0		+28.3	+20.2%	160.0	
(S)	System Engineering	62.5		59.4		+3.1	+5.3%	62.8	
	Other	21.9		23.5		-1.6	-6.8%	21.3	
Operating income		57.0	12.2%	30.4	7.7%	+26.6	+87.4%	48.5	10.9%
(M)	Motion Control	41.4	19.4%	22.8	13.2%	+18.6	+81.7%	34.7	17.3%
(R)	Robotics	18.7	11.1%	10.3	7.3%	+8.5	+82.6%	15.3	9.6%
(S)	System Engineering	-1.4	-2.2%	-0.6	-1.0%	-0.8	-	0.6	1.0%
	Other	-0.3	-1.2%	-0.7	-3.1%	+0.5	-	-0.6	-2.6%
	Elimination or Corporate	-1.5	-	-1.3	-	-0.2	-	-1.6	-
Ordinary income		57.0	12.2%	32.0	8.1%	+25.0	+78.3%	48.0	10.8%
Profit attributable to owners of parent		41.0	8.8%	20.4	5.2%	+20.6	+101.0%	32.0	7.2%

Note1: The figures of FY2017 Forecasts (Reference basis) and previous forecasts are based on the assumption that the accounting period remains unchanged. (from March 21, 2017 to March 20, 2018) (Please refer to the appendix on p. 18 for details.)

Note2: The figures of FY2017 previous forecasts were announced on July 20, 2017

Breakdown of Change in Operating Income (FY2016 → FY2017 Forecast)

(Unit: Billions of yen)



Measures for FY2017 2H

➤ Profitability improvement in core businesses

- ➔ Sales promotion of new robots (GP series and MotoMINI)
- ➔ Enhance proposal of robotics solutions
 - Promote cross-divisional sales activity



MotoMINI, the smallest and lightest in industry, and can be embedded in equipment

➤ Reinforce development, production and sales capabilities

- ➔ Establishment of Yaskawa Solution Factory (scheduled Jun. 2018)
 - Innovative production system for higher productivity
- ➔ Promotion of “i³-Mechatronics”, a new solution concept
 - Rebuild R&D and sales structures for creating new value
 - Enhance R&D of IoT and AI through alliances



Rendering of Yaskawa Solution Factory

➤ Expansion of environment and energy business by optimizing resources

- ➔ Start production of EV powertrain at Chery Yaskawa (Jan. 2018)
- ➔ Launch a strategic PV inverter product

➤ Promotion of new businesses

- ➔ Full-scale entry into vegetable plant system and automation of home-meal replacement production



Filling food trays with sandwich

3. Reference

Impact of change in accounting period

Impact of change in accounting period from March 20 to the last day of February

FY2017 Financial Forecasts (Unit: Billions of yen)		Before Change			After Change		
		1H	2H Forecasts	Full-year Forecasts	2H Forecasts	Full-year Forecasts	Changes
Net Sales		229.1	236.9	466.0	220.9	450.0	-16.0
(M)	Motion Control	110.4	103.0	213.4	99.8	210.2	-3.1
(R)	Robotics	80.4	87.8	168.3	84.4	164.8	-3.5
(S)	System Engineering	28.2	34.3	62.5	26.0	54.1	-8.4
	Other	10.1	11.8	21.9	10.8	20.9	-1.0
Operating Income		27.8	29.2	57.0	26.2	54.0	-3.0
(M)	Motion Control	21.8	19.6	41.4	19.1	40.8	-0.5
(R)	Robotics	8.6	10.2	18.7	9.5	18.0	-0.7
(S)	System Engineering	-1.8	0.4	-1.4	-1.3	-3.1	-1.7
	Other	-0.1	-0.2	-0.3	-0.3	-0.3	-0.1
	Elimination or Corporate	-0.7	-0.7	-1.5	-0.8	-1.5	0.0
Ordinary Income		27.5	29.5	57.0	26.5	54.0	-3.0
Profit attributable to owners of parent		21.1	19.9	41.0	17.9	39.0	-2.0

Impact of retroactive application of revision in the division of business segments (FY2016)

- The PV inverter business, which was previously included in Motion Control, is included in System Engineering, starting fiscal 2017.

(Unit: Billions of yen)		FY2016 (After segment revision)						Changes	
		1Q	2Q	1H	3Q	4Q	2H	Full-Year	Full-Year
Net sales		90.4	97.3	187.6	97.0	110.2	207.2	394.9	-
(M)	Motion Control	40.8	42.4	83.2	42.5	46.3	88.8	172.0	-11.3
(R)	Robotics	32.4	36.0	68.4	33.7	37.9	71.6	140.0	-
(S)	System Engineering	11.7	13.0	24.7	15.5	19.2	34.7	59.4	11.2
	Other	5.5	5.9	11.4	5.4	6.8	12.2	23.5	0.1
Operating income		5.5	8.4	13.8	7.8	8.8	16.6	30.4	-
(M)	Motion Control	4.6	6.2	10.8	6.1	5.9	12.0	22.8	2.0
(R)	Robotics	2.2	3.4	5.6	2.3	2.3	4.7	10.3	-
(S)	System Engineering	-0.9	-0.7	-1.6	-0.1	1.1	1.0	-0.6	-1.5
	Other	-0.2	-0.2	-0.4	-0.1	-0.2	-0.3	-0.7	-0.5
	Elimination or Corporate	-0.3	-0.2	-0.6	-0.4	-0.4	-0.7	-1.3	-

Capital Expenditure, R&D Investment, Forex Rates

◆ Capital expenditure (Consolidated)

(Unit: Billions of yen)

	FY2015	FY2016	FY2017 Plan
Capital Expenditure	16.8	14.9	20.0
Depreciation and Amortization	13.1	12.1	13.0

◆ R&D investment (Consolidated)

(Unit: Billions of yen)

	FY2015	FY2016	FY2017 Plan
R&D investment	16.8	18.0	18.0

◆ Forex rates (Consolidated)

(Unit: Yen)

	FY2015			FY2016			FY2017 Forecasts		
	1H	2H	Full-year	1H	2H	Full-year	1H (Actual)	2H	Full-year
U.S. dollar	121.9	119.8	120.8	107.1	109.6	108.4	111.5	110.0	110.7
Euro	134.3	131.8	133.0	120.0	118.4	119.2	124.4	130.0	127.2

Note: Average rate during the period

Financial Indices

As of March 20, 2017

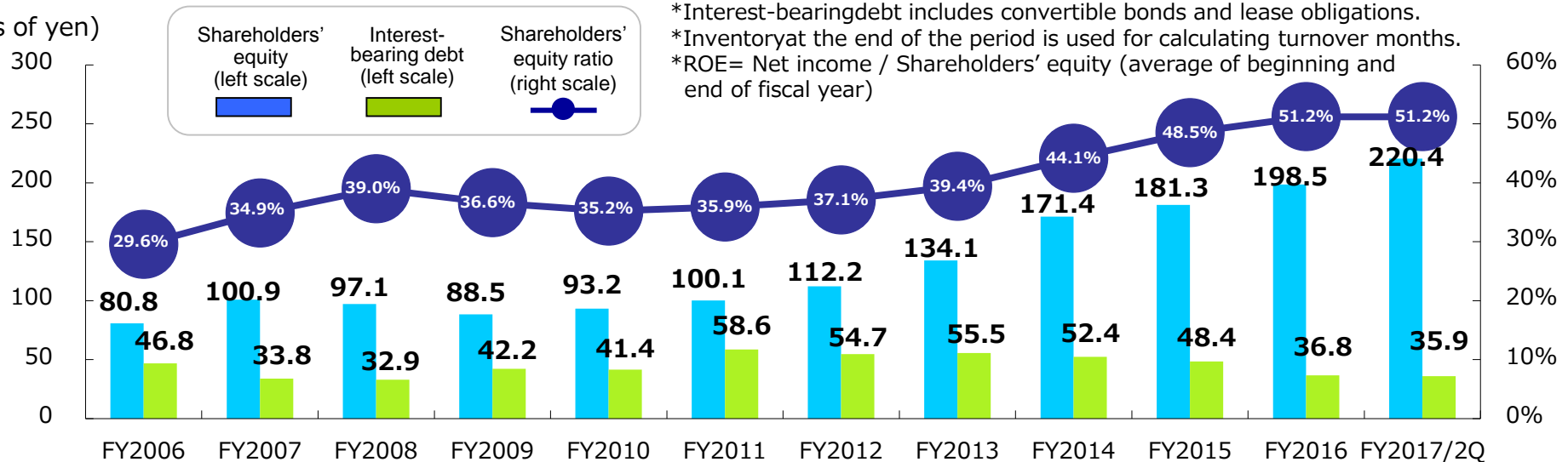
➤ Shareholders' equity ratio	51.2%
➤ Shareholders' equity	198.5 billion yen
➤ Interest-bearing debt	36.8 billion yen
➤ D/E ratio	0.19
(Net D/E ratio)	0.04
➤ Inventory	79.9 billion yen
Turnover	2.4 months
ROE	10.7%

As of September 20, 2017

➤ Shareholders' equity ratio	52.2%
➤ Shareholders' equity	220.4 billion yen
➤ Interest-bearing debt	35.9 billion yen
➤ D/E ratio	0.16
(Net D/E ratio)	0.00
➤ Inventory	93.0 billion yen
Turnover	2.4 months



(Billions of yen)

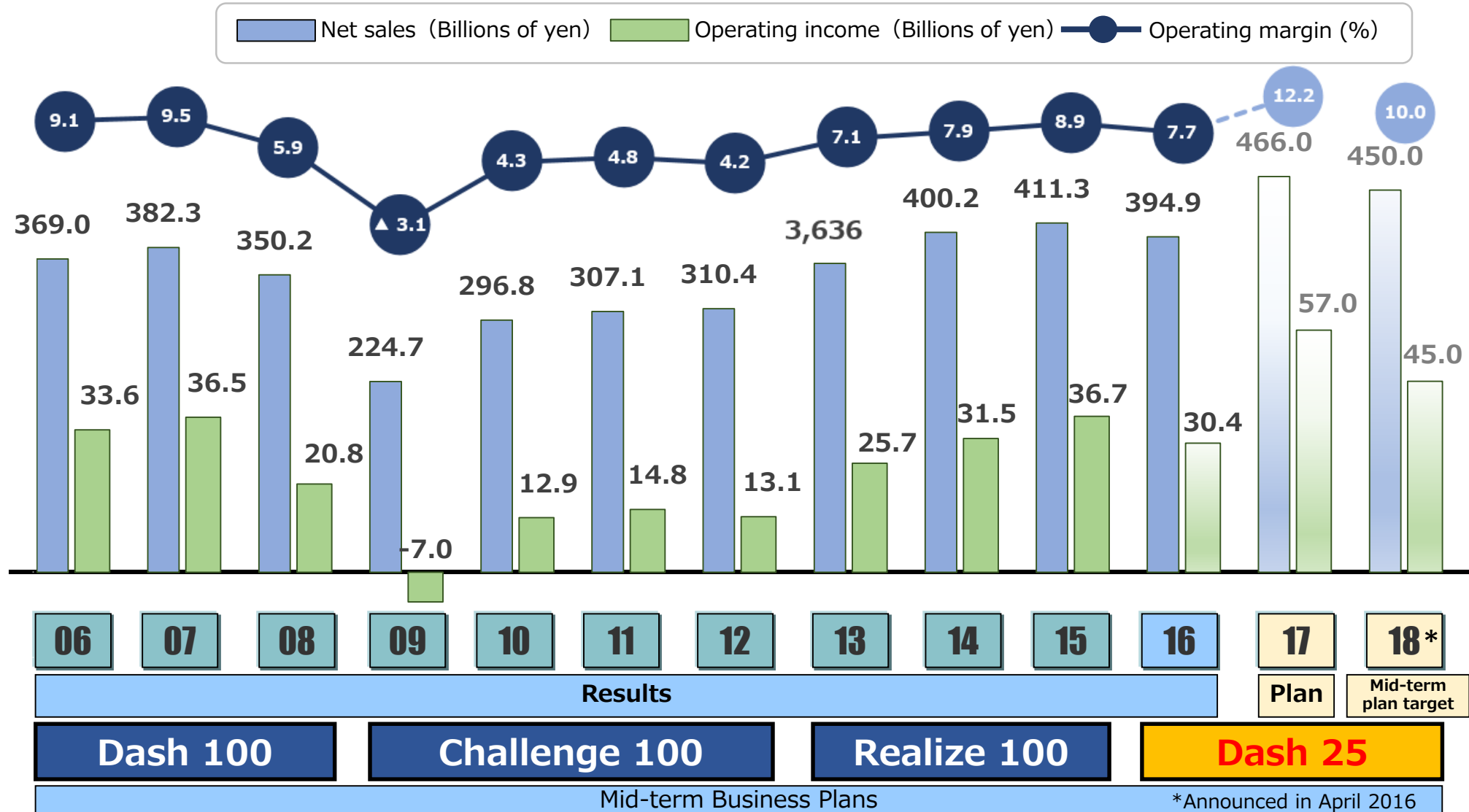


*Interest-bearing debt includes convertible bonds and lease obligations.
 *Inventory at the end of the period is used for calculating turnover months.
 *ROE = Net income / Shareholders' equity (average of beginning and end of fiscal year)

	FY2006	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017/2Q
Operating CF	15.0	17.7	12.5	4.0	2.5	6.4	24.6	24.0	29.0	32.0	33.8	19.6
Investment CF	-6.1	-9.9	-10.7	-6.5	-6.7	-11.9	-18.1	-16.9	-27.9	-22.4	-18.9	-8.8
Free CF	8.9	7.8	1.8	-2.4	-4.3	-5.5	6.6	7.0	1.1	9.5	14.8	10.8

Net Sales/Operating Income (FY2006-2018 Plan)

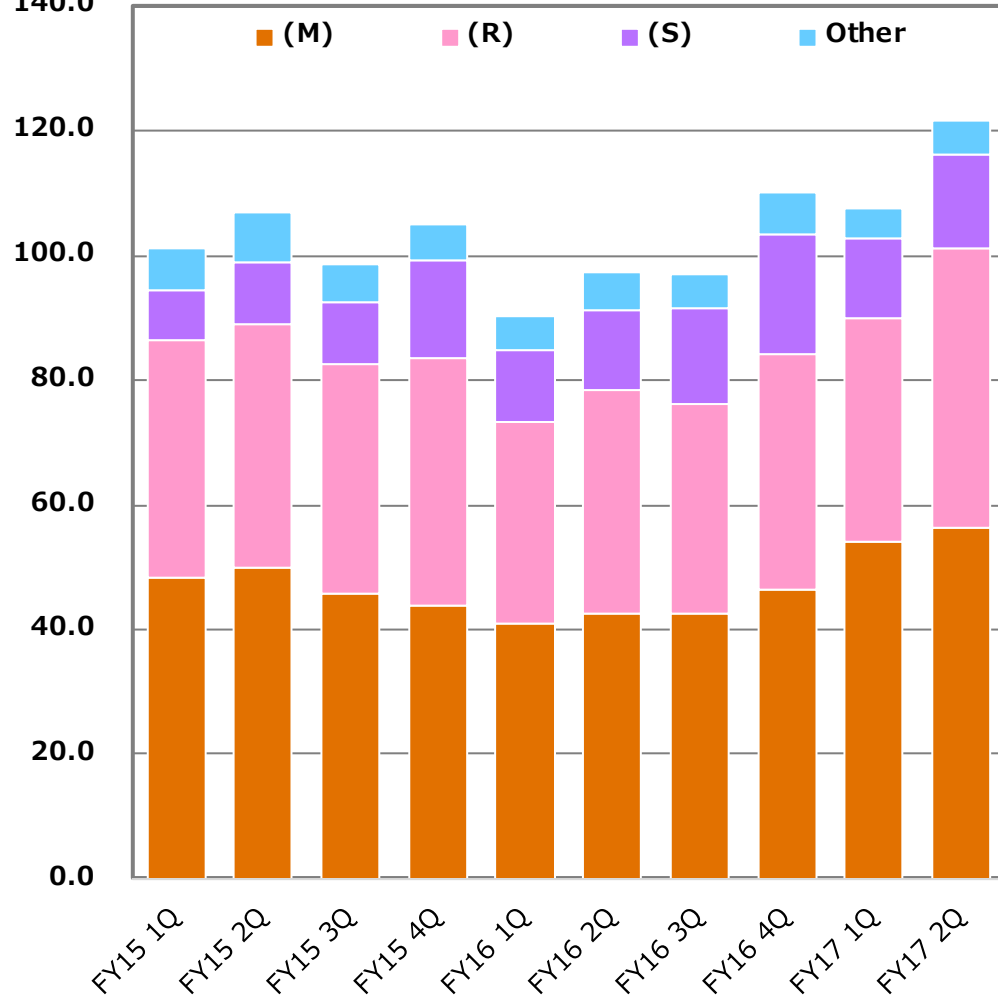
- Projected to achieve targets of mid-term business plan, Dash 25, a year ahead



Quarterly Sales Trends (1)

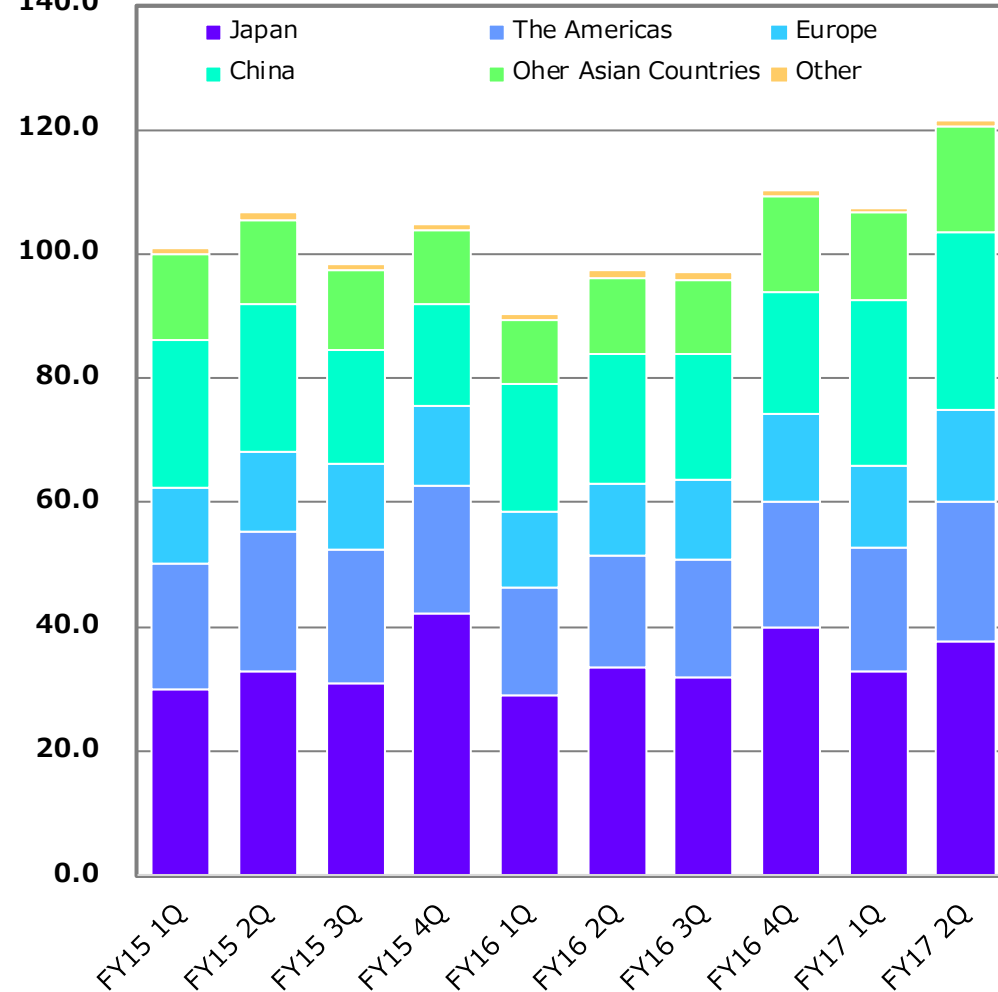
(Billions of yen)
140.0

Business segment



(Billions of yen)
140.0

Destination



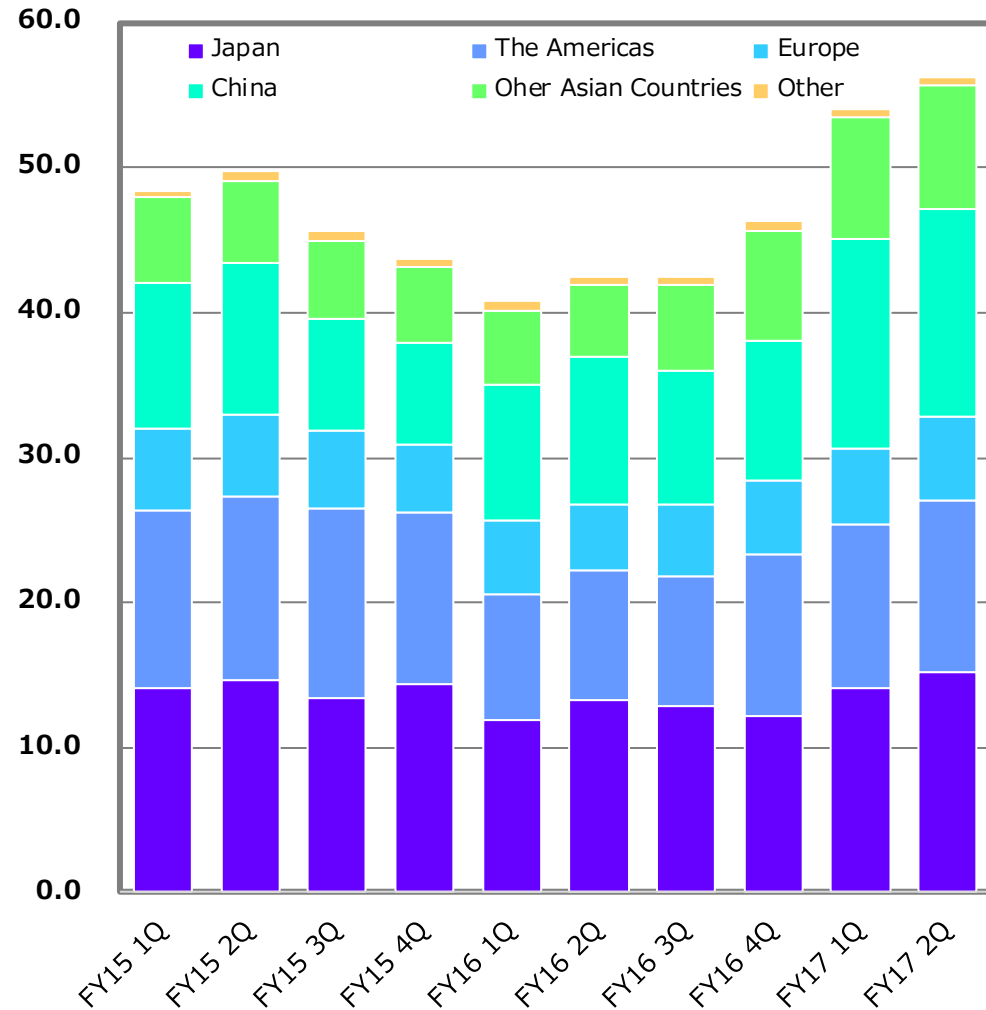
Note1: (M) = Motion Control (R) = Robotics (S) = System Engineering

Note2: The figures for FY2015 do not reflect the change in the division of business segments as of 1Q FY2017

Quarterly Sales Trends (2)

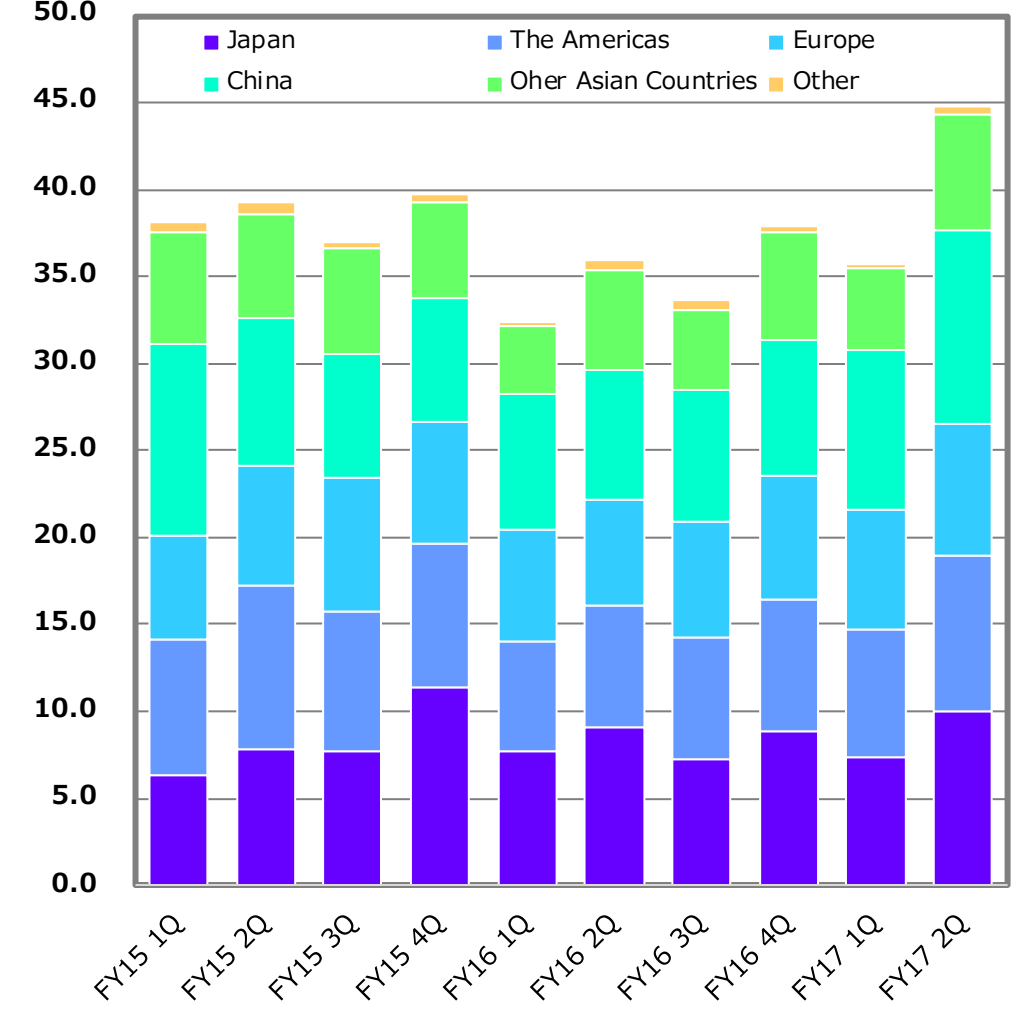
(Billions of yen)

Motion Control



(Billions of yen)

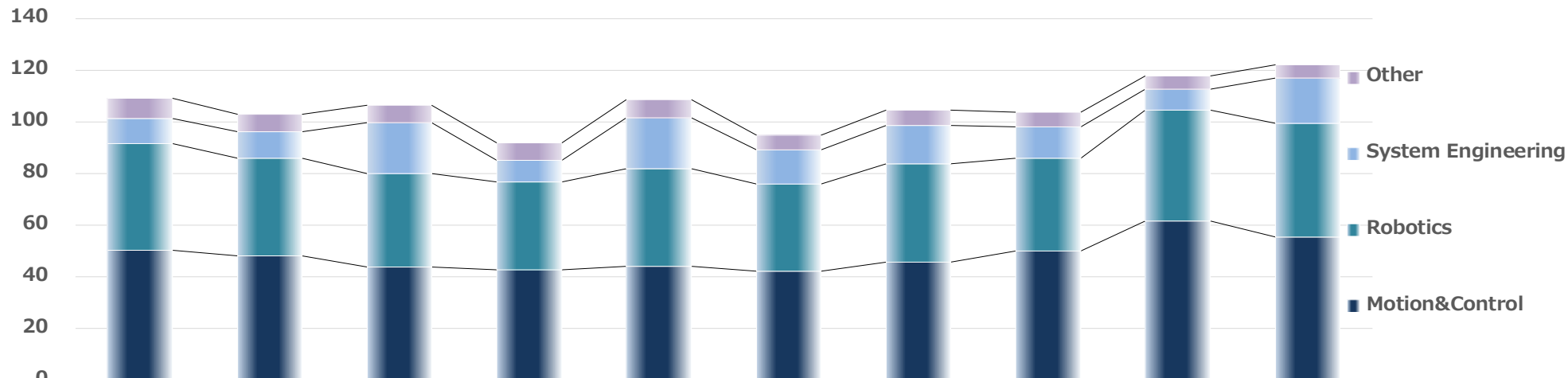
Robotics



Note: The figures for FY2015 do not reflect the change in the division of business segments as of 1Q FY2017

Quarterly Order Trends

(Billions of Yen)

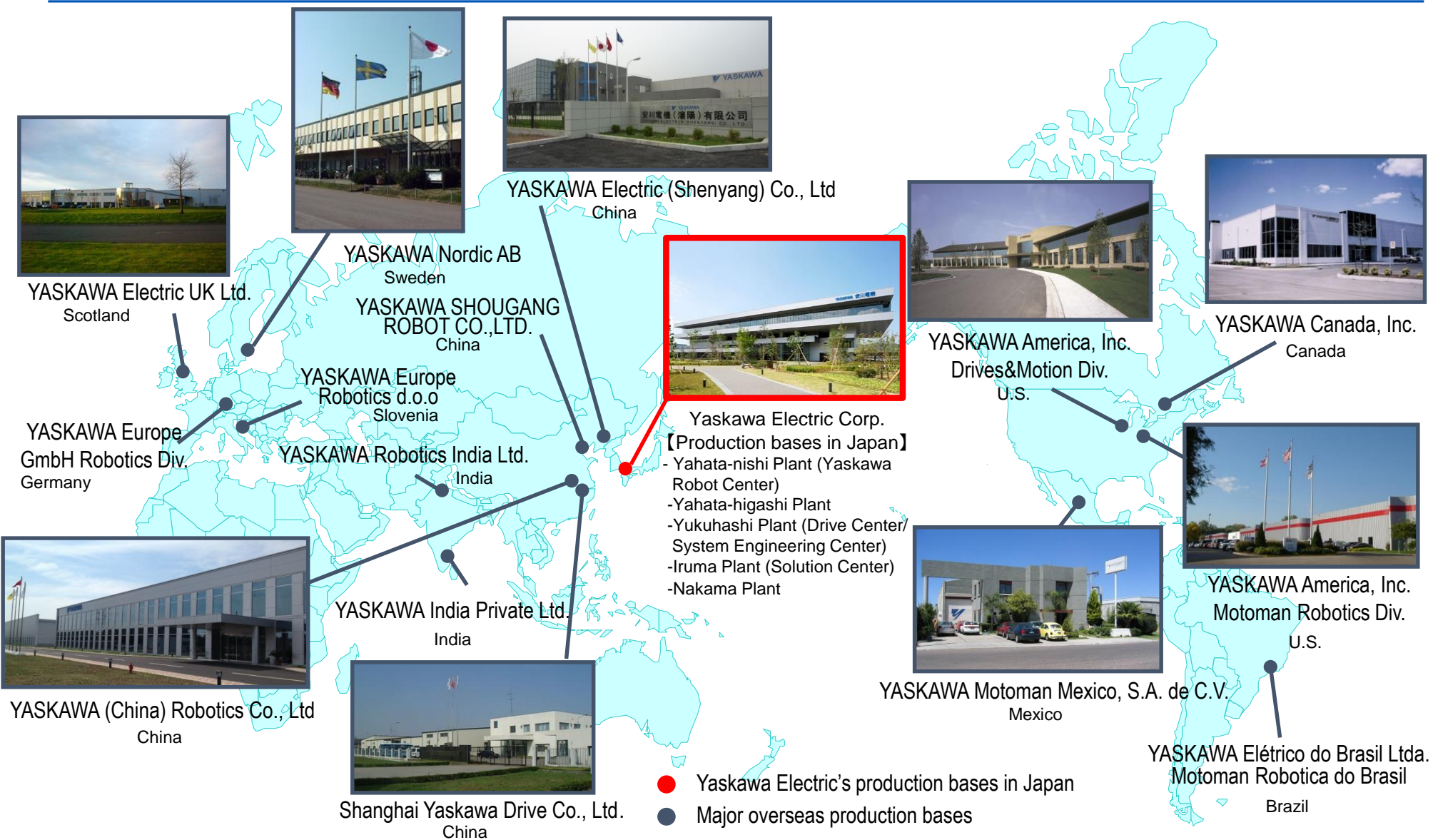


		FY2015				FY2016				FY2017	
		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q
Total	YoY	+8%	+6%	+1%	▲17%	▲1%	▲8%	▲2%	+13%	+8%	+29%
	QoQ	▲1%	▲6%	+3%	▲14%	+18%	▲13%	+10%	▲1%	+13%	+4%
YoY	(M)	+3%	+5%	▲8%	▲12%	▲12%	▲12%	+5%	+17%	+39%	+31%
	(R)	+17%	+18%	+1%	▲14%	▲9%	▲11%	+5%	+7%	+14%	+31%
	(S)	+23%	+3%	+40%	▲37%	+106%	+31%	▲24%	+43%	▲59%	+33%
QoQ	(M)	+3%	▲4%	▲9%	▲2%	+3%	▲4%	+8%	+9%	+23%	▲10%
	(R)	+6%	▲8%	▲4%	▲7%	+12%	▲11%	+13%	▲5%	+19%	+2%
	(S)	▲28%	+5%	+96%	▲57%	+134%	▲33%	+14%	▲20%	▲33%	+118%
Forex rates	U.S. dollar	120.2	123.5	121.0	118.5	110.8	103.5	104.8	114.5	111.9	111.1
	Euro	131.2	137.4	133.9	129.7	124.5	115.6	115.3	121.5	120.9	127.9

Note1: (M) = Motion Control (R) = Robotics (S) = System Engineering

Note2: The figures for FY2015 do not reflect the change in the division of business segments as of 1Q FY2017

Major Production Bases



YASKAWA