# YASKAWA

# FY2017 1<sup>st</sup> Half Financial Results (Ended September 20, 2017)

# FY2017 2<sup>nd</sup> Half and Full-year Forecasts (Ending February 28, 2018)

#### Notes:

- Yaskawa Electric changes its accounting period from March 20 to the last day of Febguary 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)

# 1. FY2017 1H Financial Results

- FY2017 1H Financial Results (Highlights, By Business Segment)
- Sales Breakdown by Business Segment (FY2016 1H → FY2017 1H)
- Sales Breakdown by Destination (FY2016 1H → FY2017 1H)
- Breakdown of Change in Operating Income (FY2016 1H → FY2017 1H)
- Measures for FY2017 2Q

# 2. FY2017 2H Financial Forecasts

- FY2017 Full-year Financial Forecasts (Highlights, By Business Segment)
- Breakdown of Change in Operating Income (FY2016 → FY2017)
- Measures for FY2017 2H

## **3. Reference**

- Change in Accounting Period and its Effects
- Impact of Retroactive Application of Revision in the Division of Business Segments
- Capital Expenditure, R&D Investment, Forex Rates
- Financial Indices
- Net Sales/Operating Income
- Quarterly Sales Trends
- Quarterly Order Trends
- Major Production Bases

#### **Business Overview**



[Core products]

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

etc.



General purpose AC drive

AC servo motor "Σ-7" series



#### 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.



#### 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



PV inverter for photovoltaic power generation

Electrical instrumentation systems for water and sewerage

#### Other

[Core products] • IT-related services

Logistics, etc.

#### YASKAWA © 2017 YASKAWA Electric Corporation

# 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)

	FY2017 1H	FY2016 1H	<u>Chan</u>	<u>ges</u>	FY2017 1H	
	<u>Results</u>	Results	<u>Amounts</u>	<u>%</u>	Forecasts	
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

		FY20	FY2017 1H FY2016 1H		16 1H	Cha	anges	FY20	17 1H
		Results	Income ratio	Results	Income ratio	Amounts	%	Forecasts	Income ratio
Net sa	lles	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	
Opera	ting 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	-
Ordina	ary 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.)

#### **Motion Control**

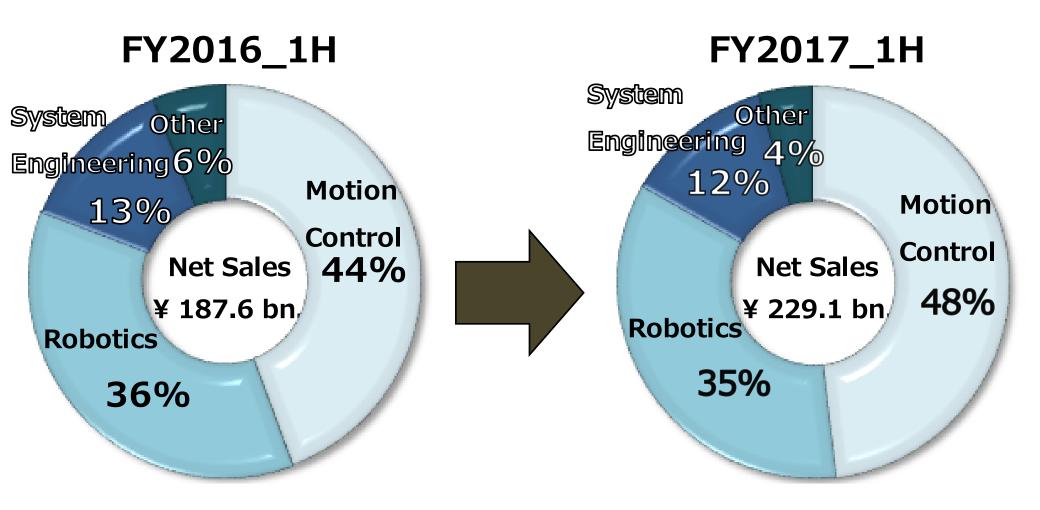
- AC servo sales and operating income grew significantly because of the production automation and strong smartphone-related demand.
- Sales and profitability grew on the back of recoveries in infrastructure investment in China and the U.S. oil- and gas-related demand.

#### **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.

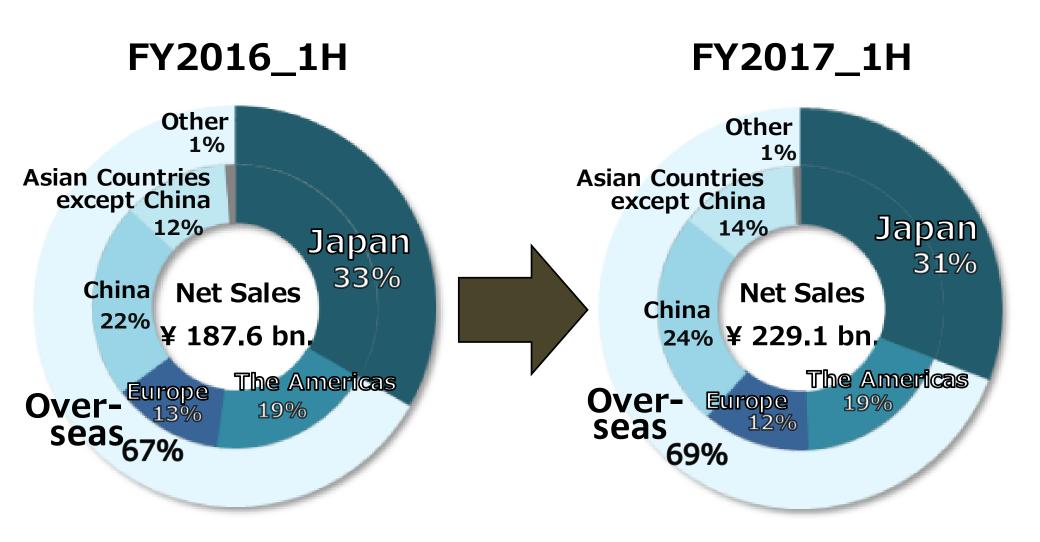


• Sales for all destination areas, especially China and other Asian countries, significantly increased.

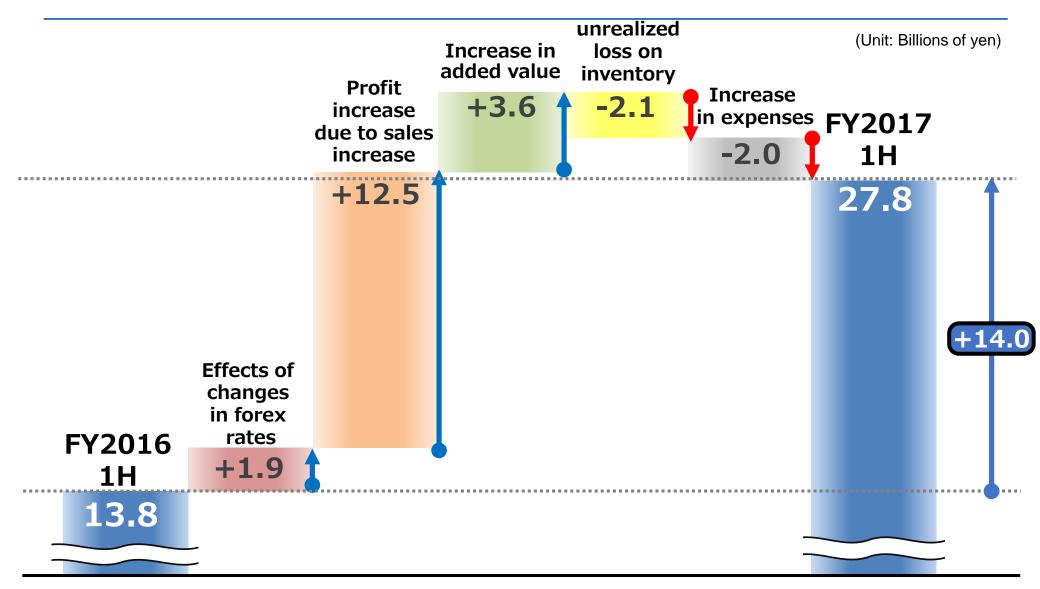
(Billions of yen)

			FY2017	FY2016	Cha	anges
			1H	1H	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.



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



## Measures for FY2017 1H

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)

# ➔ Expanded lineup of AC drive Zero series

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

# Improvement in production capacity

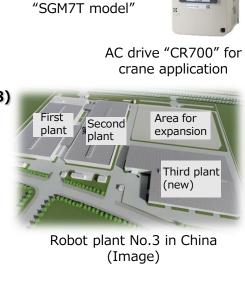
Expansion of robot plant in China (Scheduled September, 2018)

Capacity of robot production : 1,500 units/month\*

\* including the capacity of existing plants

#### 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)

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

Net sales Operating income	FY2017 Forecasts (Reference basis) ¥ 466.0bn. ¥ 57.0bn.	FY2016 Results ¥ 394.9bn. ¥ 30.4bn.	Changes      Amounts    %      +¥ 71.1bn.    +18.0%      +¥ 26.6bn.    +87.4%		FY2017 Previous forecasts (Reference basis) ¥ 445.0bn. ¥ 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

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

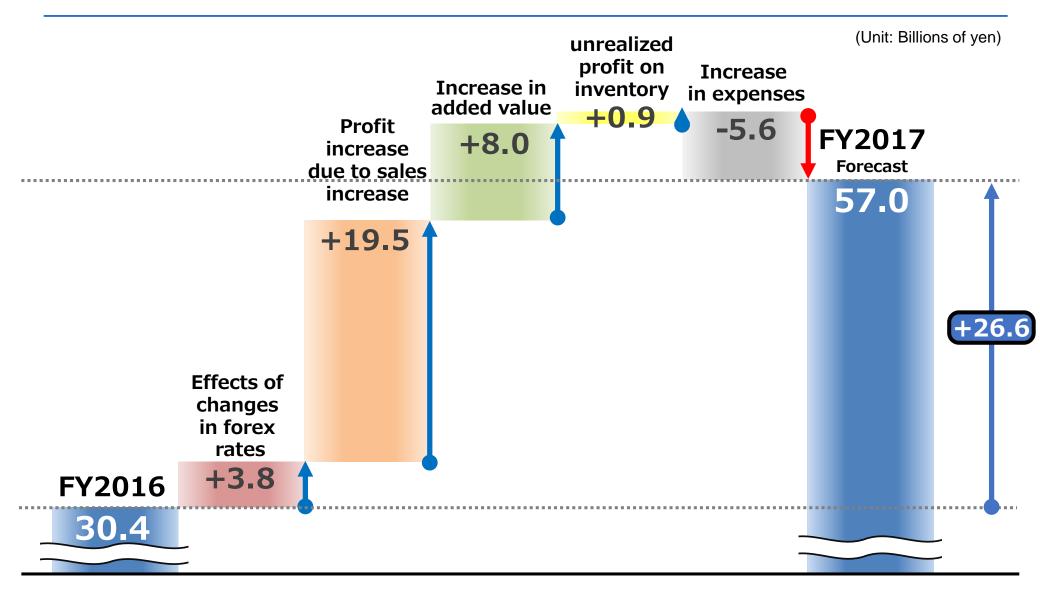
FY2017 FY2016 Changes FY2017 Income Income Previous Income Forecasts Amounts % Results forecasts ratio ratio ratio (Reference basis) (Reference basis) Net sales 466.0 394.9 +71.1+18.0%445.0 Motion Control 213.4 172.0 +41.3(M) +24.0%200.9 (R) Robotics 168.3 140.0 +28.3+20.2%160.0 **(S)** System Engineering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

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

(Billions of yen)

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



- 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 "i<sup>3</sup>-Mechatronics", a new solution concept
    - Rebuild R&D and sales structures for creating new value
    - Enhance R&D of IoT and AI through alliances
- 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



Rendering of

Filling food trays with sandwich

# **3. Reference**

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

		В	efore Chan	ge
FY2	017 Financial Forecasts	1H	2H	Full-year
	(Unit: Billions of yen)		Forecasts	Forecasts
Net	Sales	229.1	236.9	466.0
(M)	Motion Control	110.4	103.0	213.4
(R)	Robotics	80.4	87.8	168.3
(S)	System Engineering	28.2	34.3	62.5
	Other	10.1	11.8	21.9
Oper	ating Income	27.8	29.2	57.0
(M)	Motion Control	21.8	19.6	41.4
(R)	Robotics	8.6	10.2	18.7
(S)	System Engineering	-1.8	0.4	-1.4
	Other	-0.1	-0.2	-0.3
	Elimination or Corporate	-0.7	-0.7	-1.5
Ordinary Income		27.5	29.5	57.0
Profit	attributable to owners of parent	21.1	19.9	41.0

A	After Change							
2H	Full-year	Changes						
Forecasts	Forecasts	changes						
220.9	450.0	-16.0						
99.8	210.2	-3.1						
84.4	164.8	-3.5						
26.0	54.1	-8.4						
10.8	20.9	-1.0						
26.2	54.0	-3.0						
19.1	40.8	-0.5						
9.5	18.0	-0.7						
-1.3	-3.1	-1.7						
-0.3	-0.3	-0.1						
-0.8	-1.5	0.0						
26.5	54.0	-3.0						
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.

			FY2016 (After segment revision)						Changes
	(Unit: Billions of yen)	1Q	2Q	1H	3Q	4Q	2H	Full-Year	Full-Year
Net sal	es	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
Operat	ing 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 (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

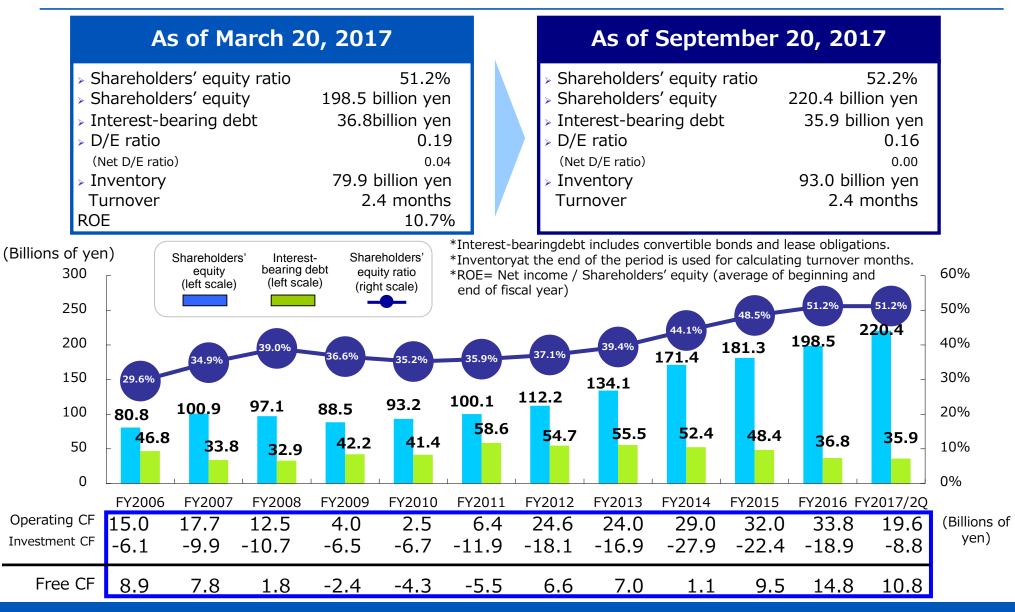
#### ◆Forex rates (Consolidated)

(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	

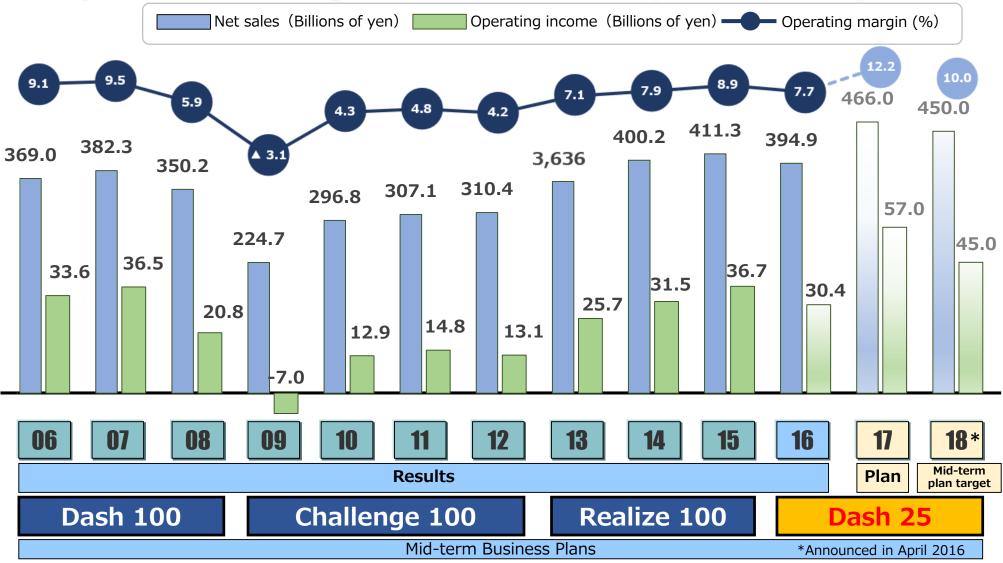
Note: Average rate during the period

## **Financial Indices**



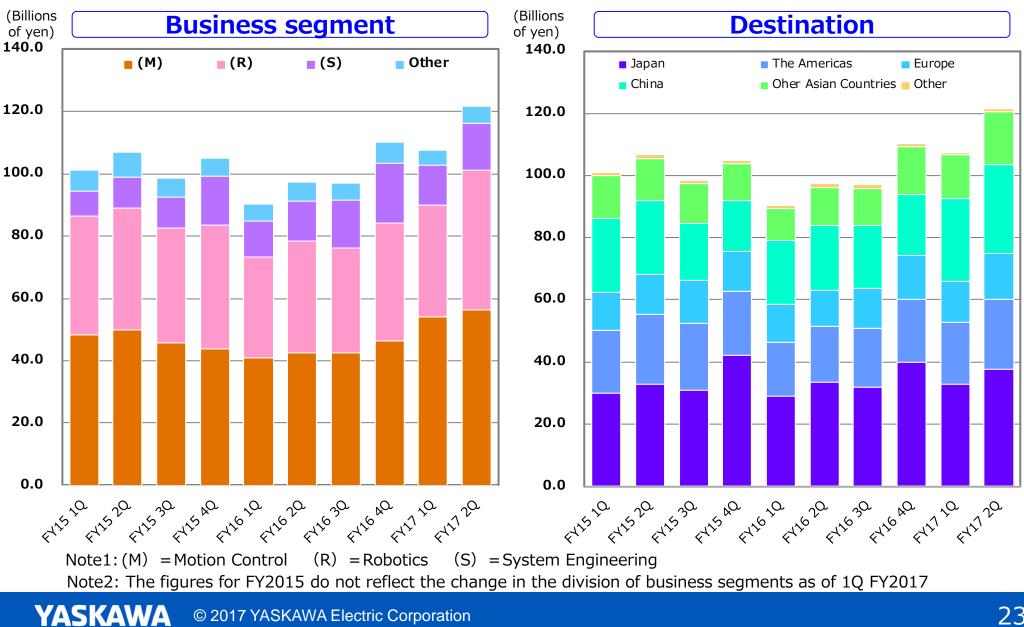
## Net Sales/Operating Income (FY2006-2018 Plan)

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



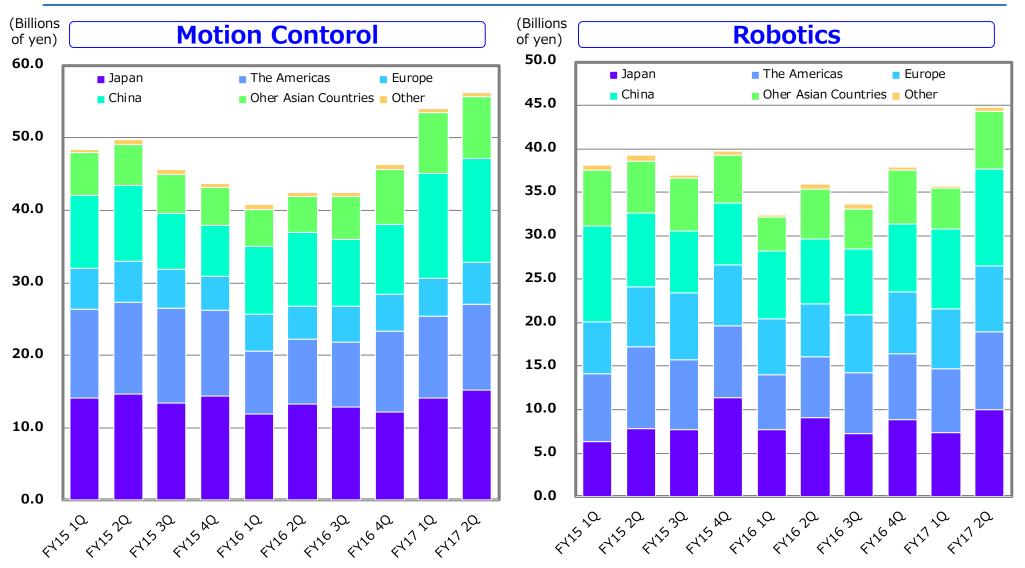
**YASKAWA** © 2017 YASKAWA Electric Corporation

#### Quarterly Sales Trends (1)



© 2017 YASKAWA Electric Corporation

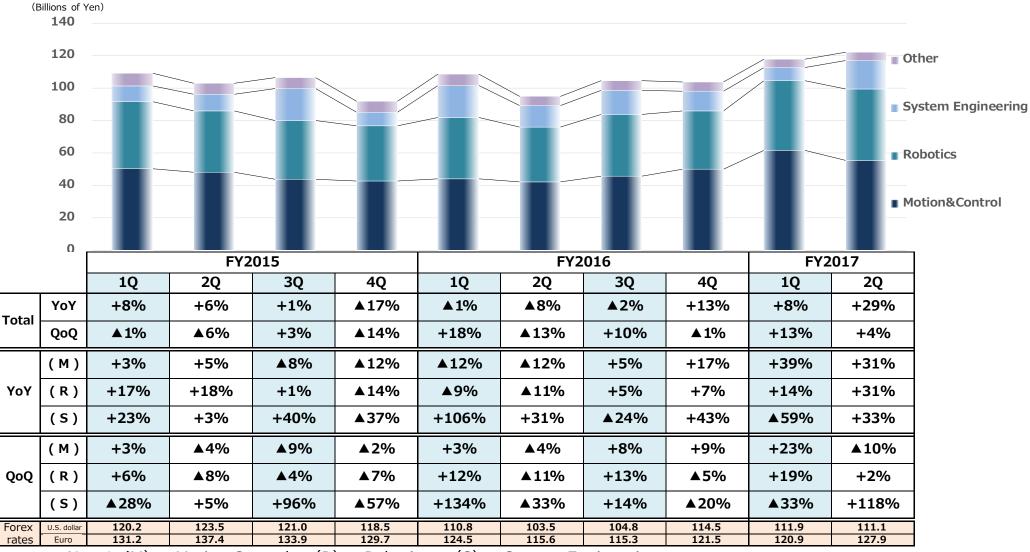
### Quarterly Sales Trends (2)



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

#### YASKAWA © 2017 YASKAWA Electric Corporation

## Quarterly Order Trends



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 © 2017 YASKAWA Electric Corporation

# YASKAWA

YASKAWA © 2017 YASKAWA Electric Corporation