

# Financial Results Briefing for FY2018 Second Quarter

1

The 95th 2Q period (Apr. 1, 2018-Sept. 30, 2018)

Nov 14, 2018

- 1. Company Profile**
- 2. Financial Results for FY2018 2Q**
- 3. Forecast for FY2018**
- 4. Schrader Valve Business Status**
- 5. Medium-Term Management Plan (FY2018-FY2020)**

Caution in handling this document

Future forecasts, including this document, were judged according to the current information. Actual financial results might be considerably different from the forecast mentioned here depending on the Japanese or international economic situation, business trends related to our company, and any risk or indefinite factors involved in fluctuation of exchange rates.



**PACIFIC INDUSTRIAL CO., LTD.**

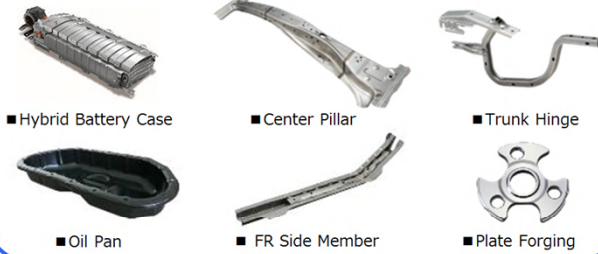
- 1 . Company Profile**
- 2 . Financial Results for FY2018 2Q**
- 3 . Forecast for FY2018**
- 4 . Schrader Valve Business Status**
- 5 . Medium-Term Management Plan (FY2018-FY2020)**

# 1-1 Main Business at Our Company

3

## Stamping/Molding Business

### Stamping Products



### Molding Products



## Valve Business

### Tire Valve Products



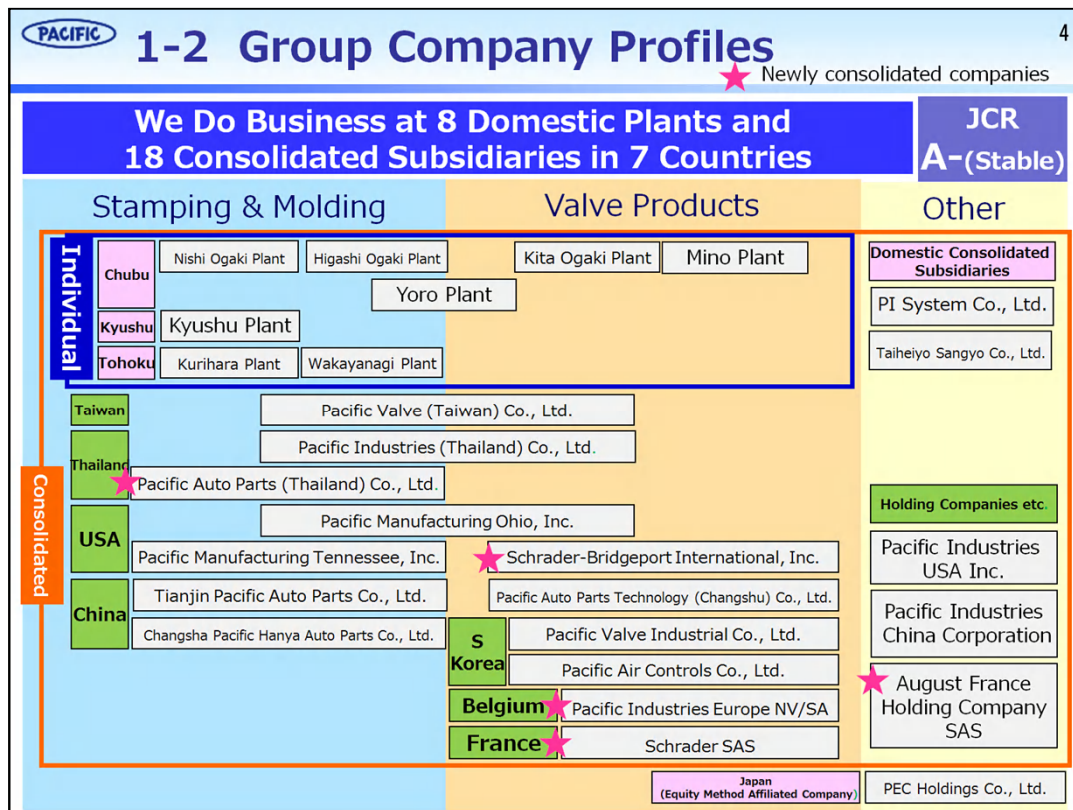
### TPMS Products



## <Our main business>

We sell stamping, molding, valve, and TPMS products.

In the tire valve market, our corporation's founding enterprise, we are a specialized manufacturer with the world's top market share.



## Our history

- In 1930 Started business in valve core nationalization
- In 1962 Listed in the Second Section of the Tokyo Stock Exchange.
- In 1970 Listed in the First Section of the Tokyo Stock Exchange.

## Division Structure... "Stamping and Molding", "Valves", "Other"

### Stamping and Molding

Accounts for about 70% of total sales.

Primarily working with Toyota group, but also Mitsubishi, Honda, and Suzuki.

Based in Taiwan, the US, China, and Thailand.

### Valves Business

Accounts for about 30% of total sales

Based in Taiwan, the US, China, South Korea, Thailand, and Belgium.

### Newly Consolidated Subsidiaries

We have added a sales company in Belgium, and a stamping business company in Thailand since this term.

Schrader, acquired in August, 2018, will be consolidated from the second quarter.



# 1-3 Corporate Governance

## Corporate structure policies and operation status

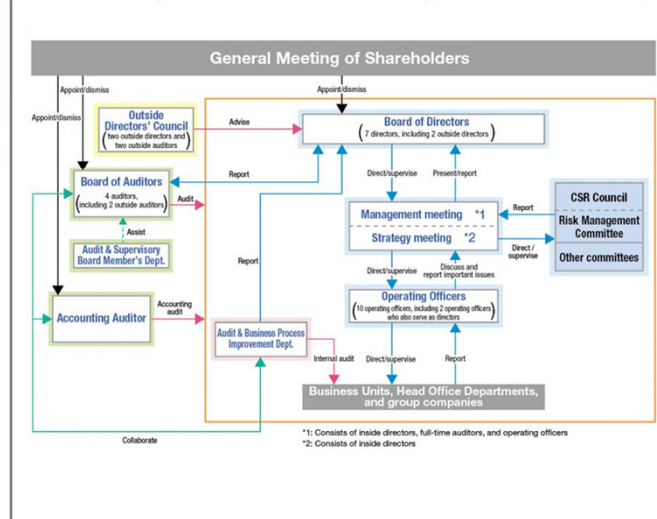
### ■ Basic Policy for the Internal Control System

• Established a structure to ensure the appropriateness of business (resolved by the Board of Directors)

### ■ Outline of Operating Status

- (1) Compliance Program
- (2) Risk Control
- (3) Management Control for Group Companies
- (4) Effective Auditors

### <Corporate Governance System Chart>



### <Corporate Governance>

We will conduct company management based on the stockholders' perspective and try to construct and maintain a clear corporate governance system.

For the "Corporate governance code", our basic policy is to follow all 73 items.

We will disclose a revised company policy at the end of November due to a revision of the "Corporate governance code",

- 1 . Company Profile**
- 2 . Financial Results for FY2018 2Q**
- 3 . Forecast for FY2018**
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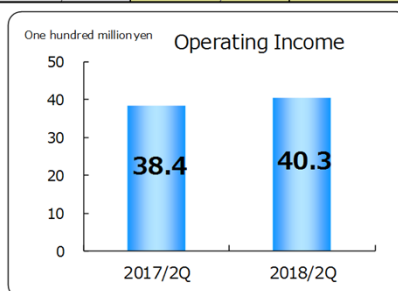
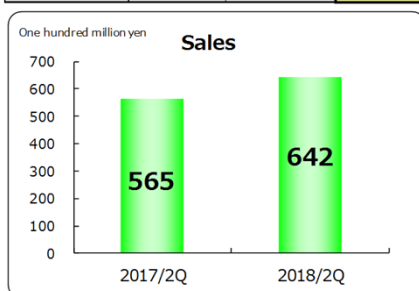
## 2-1 2 Q Consolidated Results

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Sales, Operating Income, Net income for 2Q was Record High

(Million yen %)

	Last 2Q	2Q				Year-on-year rate		2Q Year-to-Date
		4/26 Last Forecast	Results	Last forecast rate				
				Gain&Loss	%change	Gain&Loss	%change	
Sales	56,528	61,000	64,285	3,285	+ 5.4	7,757	+ 13.7	2nd consecutive terms increase in sales Record High
Operating Income	3,846 6.8%	4,000 6.6%	4,039 6.3%	39	+ 1.0	192	+ 5.0	Profit increased for the first time in 2 terms
Ordinary Income	4,744 8.4%	4,500 7.4%	5,169 8.0%	669	+ 14.9	424	+ 8.9	2nd consecutive terms increase in profit Record High
2Q Net Income	3,405 6.0%	3,400 5.6%	3,898 6.1%	498	+ 14.6	493	+ 14.5	2nd consecutive terms increase in profit Record High



### <Consolidated Financial Results >

Automobile production volume remained strong in Japan, Europe & America, and China

#### Sales

Consolidated sales were ¥64.2 billion, an increase of 13.7% from the previous term due to acquisition of new sales.

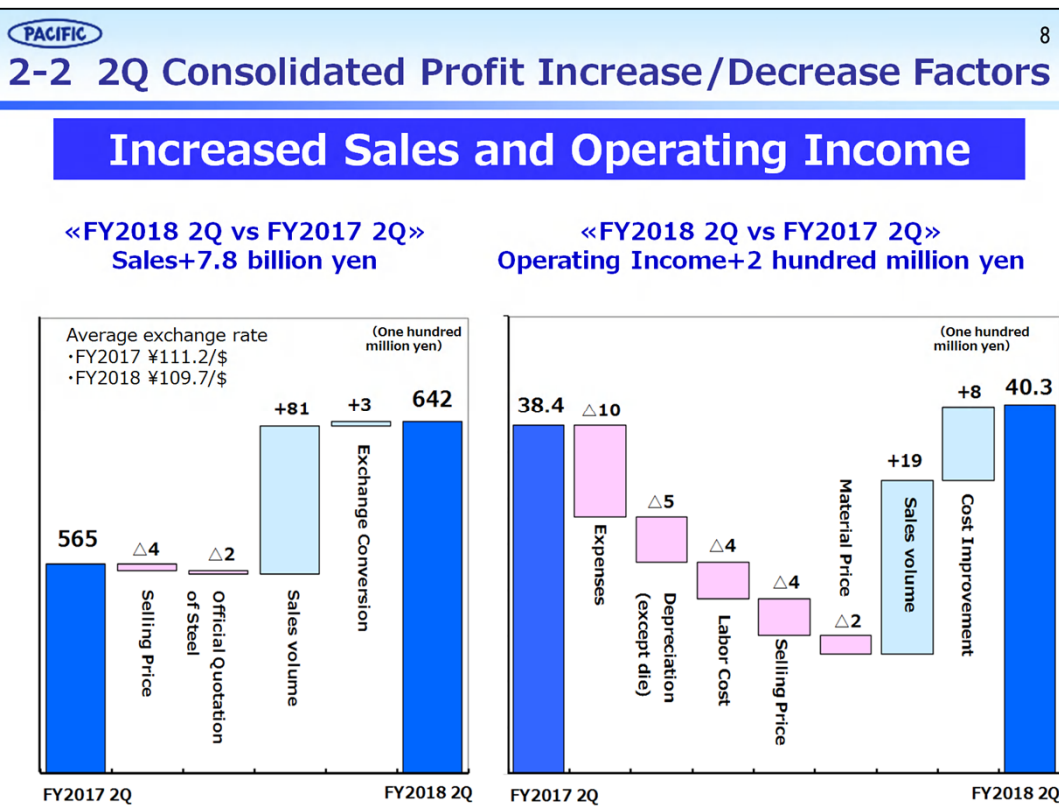
#### Profit

Profit increased due to the increase in depreciation by strategic capital investment, business acquisition costs, and increase in sales.

By business acquisition, profit/loss of U.S Schrader business for one month is included in the profit/loss for the second quarter; however its influence is minor.

As for the announced value on 26th April, net sales increased by 3.2 billion yen due to an increase in physical quantity due to changes in vehicle composition and exchange rates becoming less expensive than anticipated.

Profit increased due to sales volume and exchange gains.



### <Causes of Fluctuation in Consolidated Sales & Income>

**2Q Sales** ...The main causes of increase and decrease are the following.

#### Negative Factors

Decrease in selling price ▲¥ 0.4 billion

#### Positive Factors

Increase in sales volume to ¥ 8.1 billion; ¥5billion is included as new products such as ultra high-tensile components

**2Q Operating Income**...The main causes of increase and decrease are the following.

#### Negative Factors

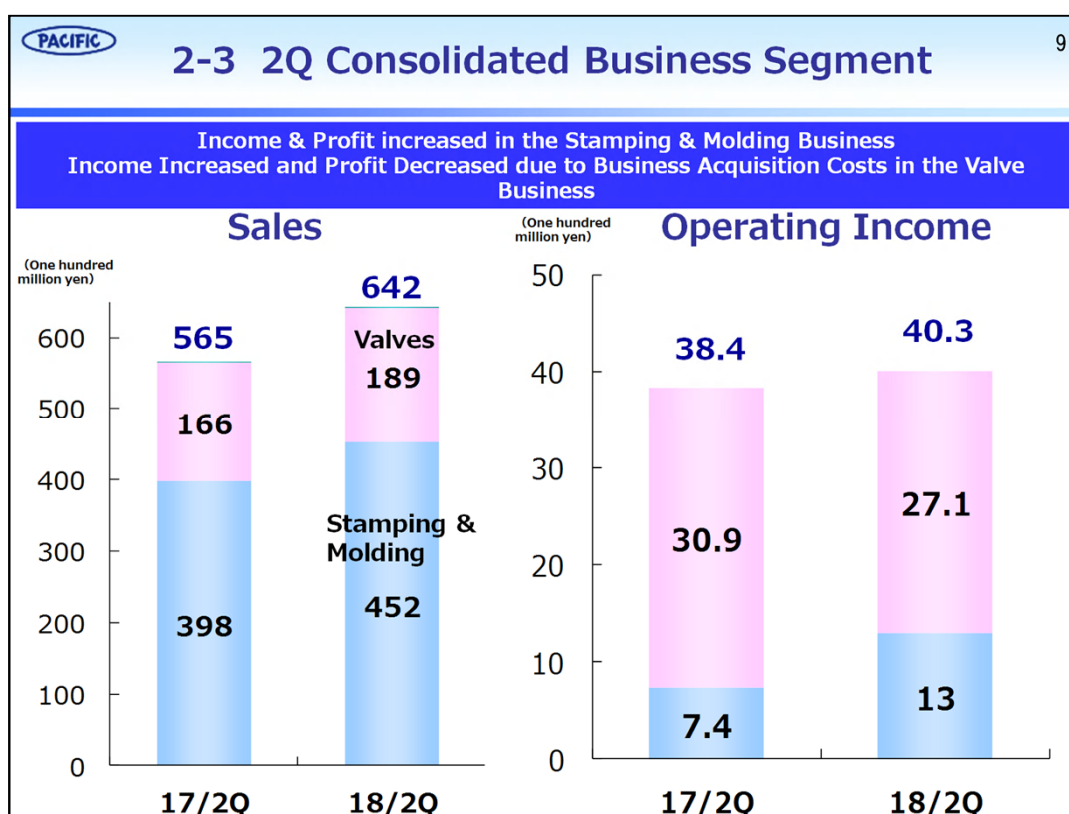
Increase in costs ▲¥1billion (including acquisition costs ▲¥0.5 billion)

Increase in depreciation cost ▲¥0.5billion, increase in labor costs ▲¥0.4 billion

Decrease in selling price ▲¥0.4 billion

#### Positive Factors

Increase in sales volume ¥1.9 billion, cost improvement ¥0.8 billion



## <2Q Consolidated Business Segment>

### Stamping & Molding Business

Major customers' automobile production volume remained unchanged from the previous fiscal year in Japan, the United States, and China.

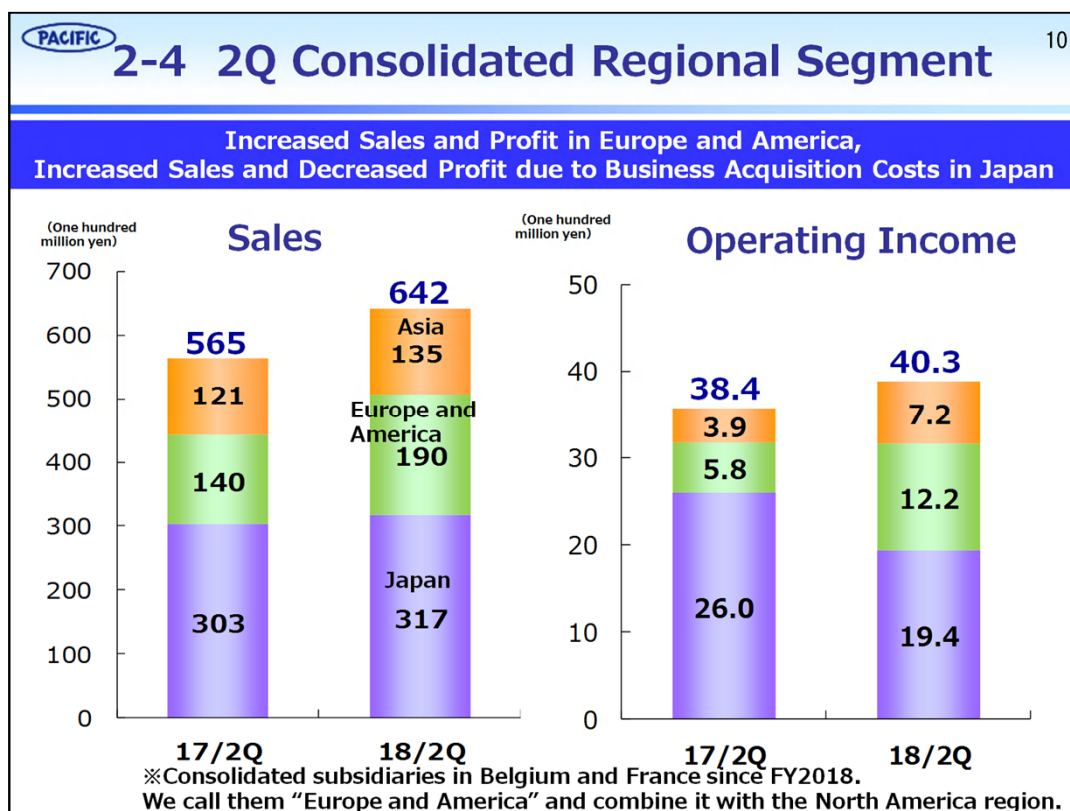
**Sales:** Sales of new products contributed to a rise of 13.6% year on year to ¥45.2 billion.

**Operating Income:** Despite an increase in variable expenses due to increased sales and an increase in depreciation and amortization expenses, operating income increased 74.6% to 1.3 billion yen due to an increase in sales volume and other factors.

### Valve Business

**Sales:** Sales rose 13.9% to ¥ 18.9 billion due to an increase in sales volume due to business acquisition.

**Operating Income:** Despite an increase in sales volume and cost improvement, operating income declined 12.3% to ¥2.7 billion due to the increase in expenses resulting from business acquisition.



## <2Q Consolidated Regional Segment>

### Japan

Sales was ¥31.7 billion, a 4.6% increase.

Operating Income was ¥1.9 billion, a 25.1% decrease in profit due to increased costs of business acquisition.

### Europe and America

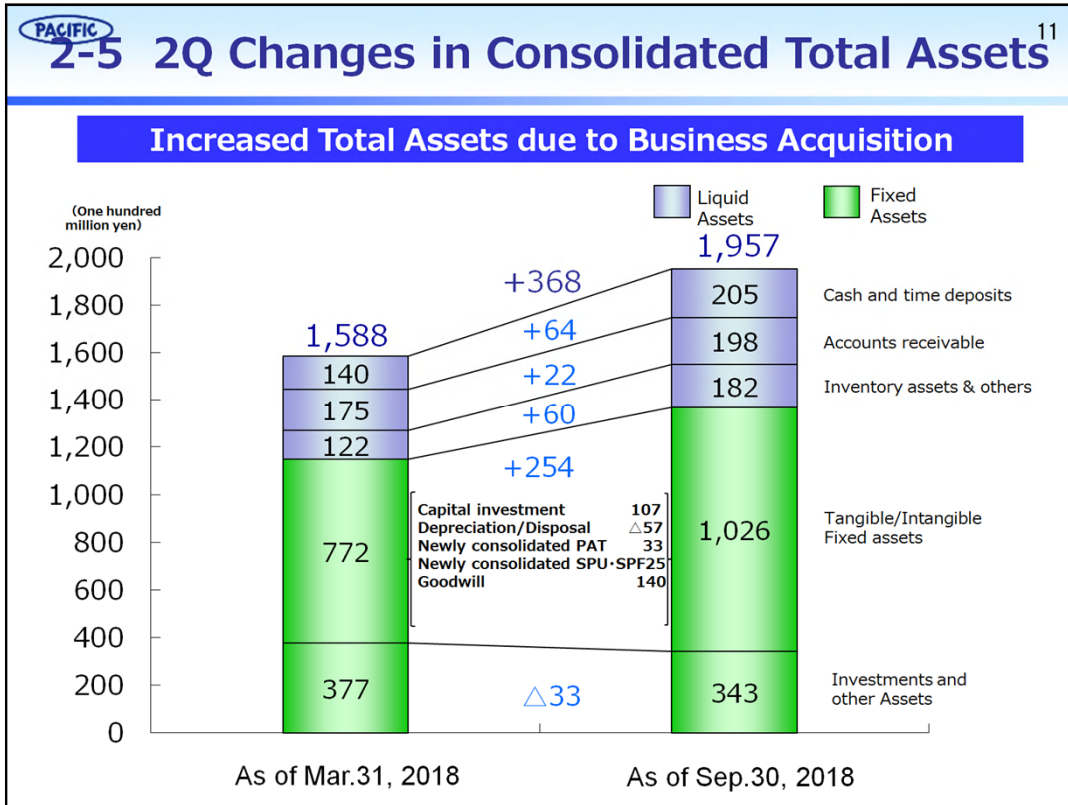
Sales was ¥19 billion, a 35.3% increase due to starting mass-production of new models, and an increase in sales volume after our business acquisition, etc.

Operating Income was ¥1.2 billion, a 109.1% increase in profit due to the increase in sales volume, etc.

### Asia

Sales was ¥13.5 billion, an 11.4% increase.

Operating Income was ¥0.7 billion, an 84.4% increase due to the increase in sales volume, etc.



### <Consolidated Total Assets>

#### Total assets at the end of the second quarter

Was ¥195.7 billion; increased by ¥36.8 billion from the end of the previous term.

#### Main Increase Factors

Due to a ¥11.4 billion increase in tangible assets via high level capital investment, in addition to ¥14 billion in goodwill generated by business acquisitions.

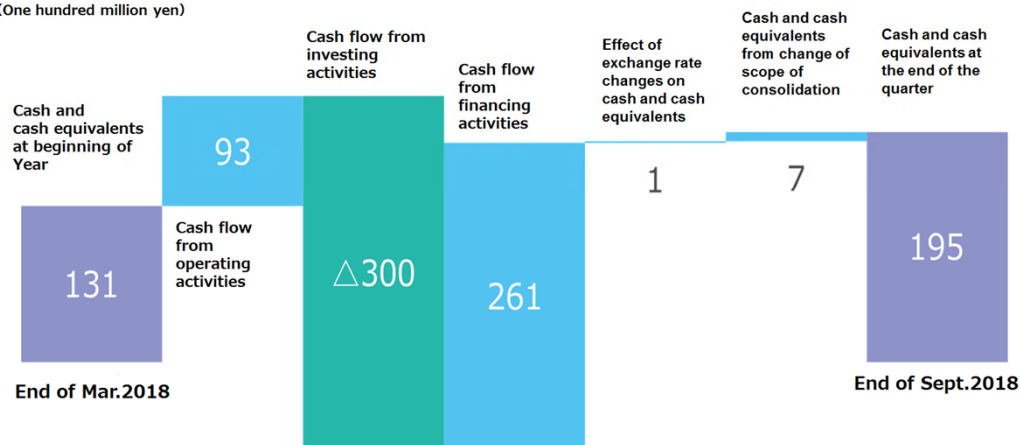
The amount of goodwill is provisional.



## 2-6 Consolidated Cash Flow

Free cash flow amounted to ▲20.6 billion yen

(One hundred million yen)



※Interest-bearing debt amounted to 57.9 billion yen  
 (Increased by 27.3 billion yen from 30.5 billion yen at the end of March 2018,  
 borrowing related to the SCHRADER business is 20.2 billion yen)

### <Consolidated Cash Flow>

Operating activity gained ¥9.3 billion in cash.

Due to equipment investment and SCHRADER business acquisition, capital investment activities resulted in expense of ¥ 30 billion, so financial activity gained ¥ 26.1 billion.

Free cash flow amounted to 20.6 billion yen.

Interest-bearing debt increased by 27.3 billion to 57.9 billion yen.

## 2-7 Returns for Stockholders

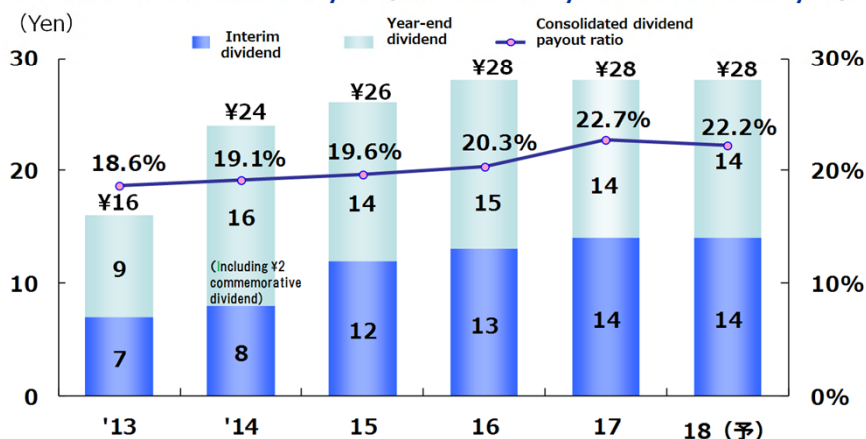
**Dividend will be same as last FY**

### ■ Annual Dividend

FY2017

Annual: 28yen (Mid-term: 14yen Term end: 14yen)

FY2018 Forecast Annual: 28yen (Mid-term: 14yen Term end: 14yen)



### <Returns for Stockholders>

As for dividends, we have positioned return of profits to shareholders as an important management issue. Based on continuing stable dividends, we comprehensively judge performance and payout ratio, and pay dividends on surplus.

In the first half we decided on an ordinary dividend of 14 yen, as planned initially. This is equal to the interim dividend of last fiscal year.

We plan to pay an annual dividend of 28 yen, the same as last year, and a payout ratio of 22.2%.

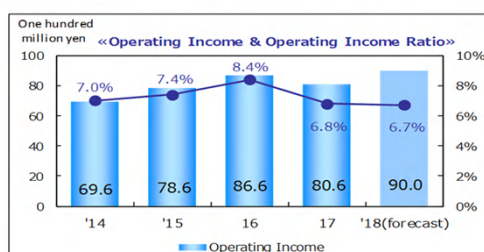
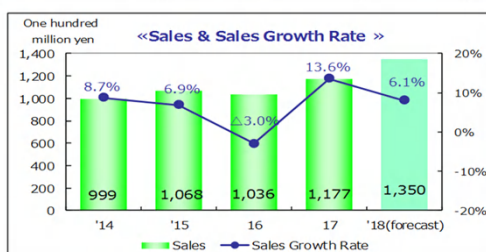
In the future, we will aim for a dividend payout ratio of 30%.

- 1 . Company Profile**
- 2 . Financial Results for FY2018 2Q**
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## 3-1 Full FY Consolidated Financial Forecast

### Change in full-year forecast (Sales and profit are record highs)

	'2016	'2017	'2018 (4/26 Forecast)	'2018 (Forecast this time)	Last forecast rate		[Million yen] Year-on-Year		Full FY (Forecast)
					Gain&Loss	%change	Gain&Loss	%change	
Sales	103,669	117,758	125,000	135,000	10,000	8.0%	17,242	14.6%	2nd consecutive terms increase in sales RecordHigh
Operating Income	8,662	8,063	8,800	9,000	200	2.3%	937	11.6%	Profit increased for the first time in 2 terms RecordHigh
Ordinary Income	9,957	9,485	9,800	10,500	700	7.1%	1,015	10.7%	Profit increased for the first time in 2 terms RecordHigh
Current Net Income	7,524	7,393	7,200	7,600	400	5.6%	207	2.8%	Profit increased for the first time in 2 terms RecordHigh
Sales Operating Income Ratio	8.4%	6.8%	7.0%	6.7%	△0.3%		△0.1%		
R O E	9.7%	8.5%	7.7%	8.0%	0.3%		△0.5%		
R O A (Operating Income base)	6.4%	5.4%	5.3%	5.0%	△0.3%		△0.4%		
Net Assets per Share (Yen)	1,404	1,508	1,603	1,627	24	1.5%	119	7.3%	



## <Consolidated Financial Forecast>

### Sales

Forecasted ¥135 billion, an increase in income of 14.6% from the previous term due to the effect of sales expansion and business acquisition.

### Current Net Income

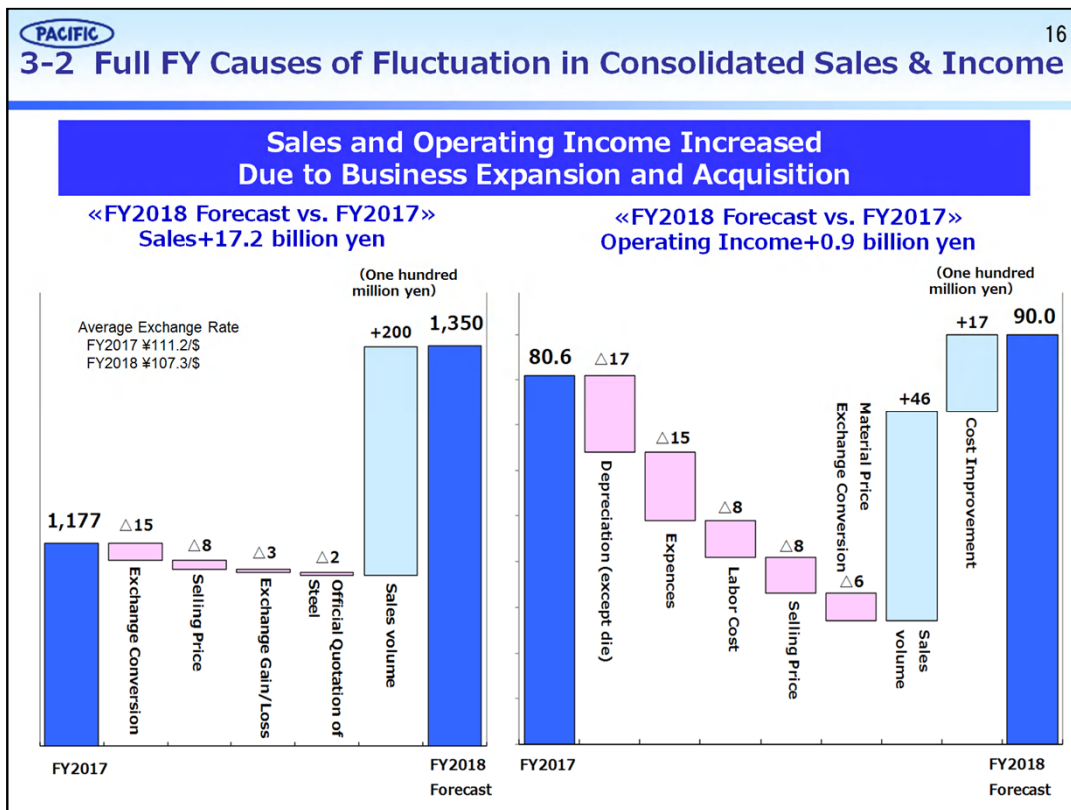
Due to tax adjustments from US tax cuts in the previous fiscal year, the increase in profit margin decreased and we forecast ¥7.6 billion, a 2.8% increase in profit.

As a result of the acquisition of the Schrader business, we are consolidating the full-year profit of the US for seven months of the US business and four months of the French business, and we anticipate net sales of about ¥7 billion and operating income of about ¥1 billion.

### ROE・ROA

ROE declined from 8.5% to 8.0% due to the increase in shareholder equity.

ROA based on operating income is expected to decline from 5.4% to 5.0% as total assets increased due to acquisitions and upfront investments.



### <Causes of Fluctuation in Consolidated Sales & Income (Forecast)>

**FY2018 Sales**...The main causes of change are the following:

**Negative Factors** ...The impact on exchange conversion for overseas sales and decrease in selling price

**Positive Factors** ...Increase in sales volume

**FY2018 Operating Income**...The main causes of change are the following:

#### **Negative Factors**

Increase in depreciation of ¥1.7 billion (including ¥0.6 billion in goodwill depreciation)

Increase in expenses to ¥1.5 billion, and a decrease in sales price of ¥0.8 billion

Increase in labor cost ¥0.8 billion

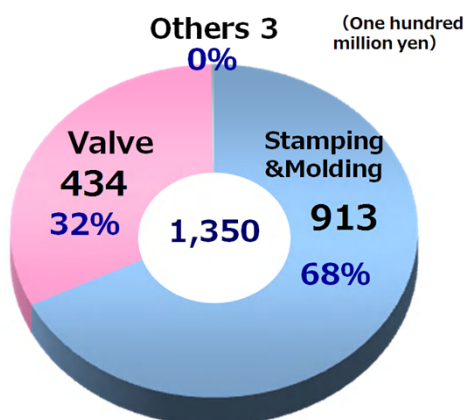
**Positive Factors** ... Increase in sales volume to ¥4.6 billion, cost improvement of ¥1.7 billion

Second half exchange rate assumption ¥105/\$

Exchange sensitivity Annual ¥0.1 billion per ¥1

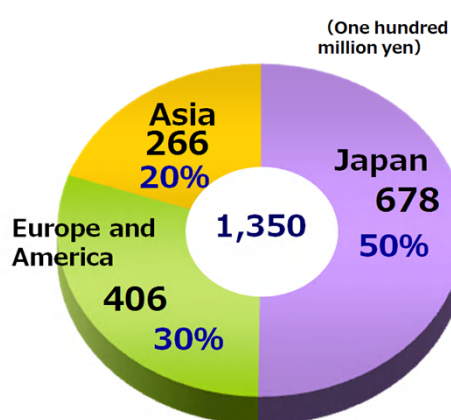
### 3-3 Consolidated Segments Forecast for FY2018

#### Sales by Business



【Stamping & Molding】 Stamping & molding products for automobiles  
 【Valve】 Tire valves, air conditioning valves, TPMS  
 【Others】 Information, services

#### Sales by Region



【Japan】 3 bases in Ogaki, Kyushu, and Tohoku  
 【Europe and America】 U.S. France, Belgium  
 【Asia】 Taiwan, S. Korea, Thailand, China

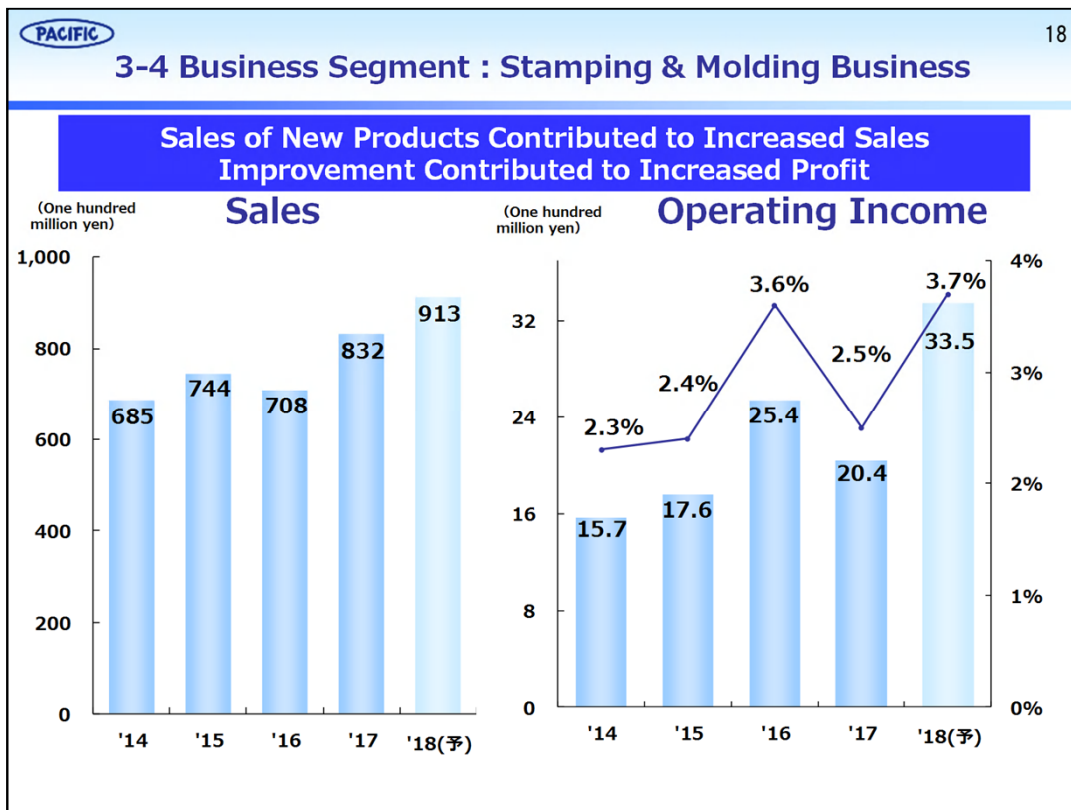
### <FY2018 Sales Forecast by Segment>

#### Business Divisions

Stamping & Molding: ¥91.3 billion; 70% of the total  
 Valve Business: ¥43.4 billion; 30% of the total

#### By Region

Japan ¥67.8 billion; 50% of the total  
 Europe and America ¥40.6 billion; 30% of the total  
 Asia ¥26.6 billion; 20% of the total



## <Business Segment: Stamping & Molding Business >

### Sales

#### •FY2018 Forecast

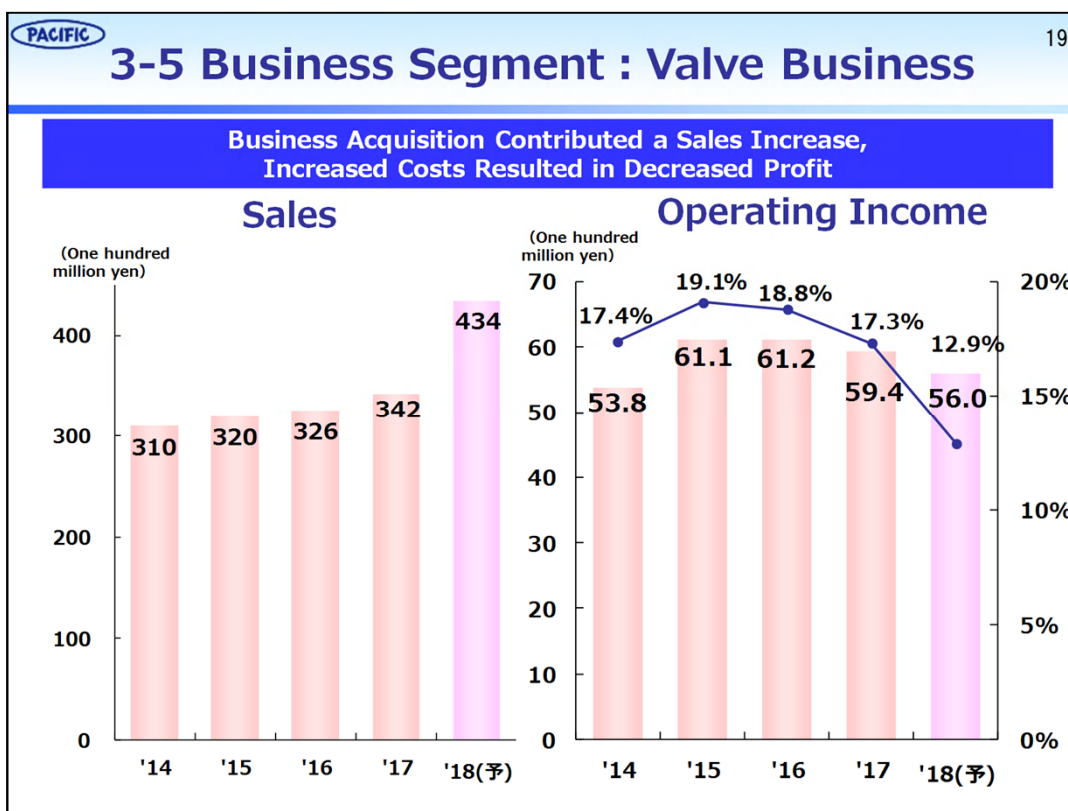
Sales are expected to be ¥91.3 billion, a 9.7% increase in sales from the previous term.

### Operating Income

#### •FY2018 Forecast

Operating income is expected to be ¥3.3 billion, an increase of 63.7% from the previous term, due to increased sales volume and cost improvement, though there are increases in variable expenses due to increased sales and depreciation expenses, etc.





#### <Business Segment: Valve business>

##### Sales

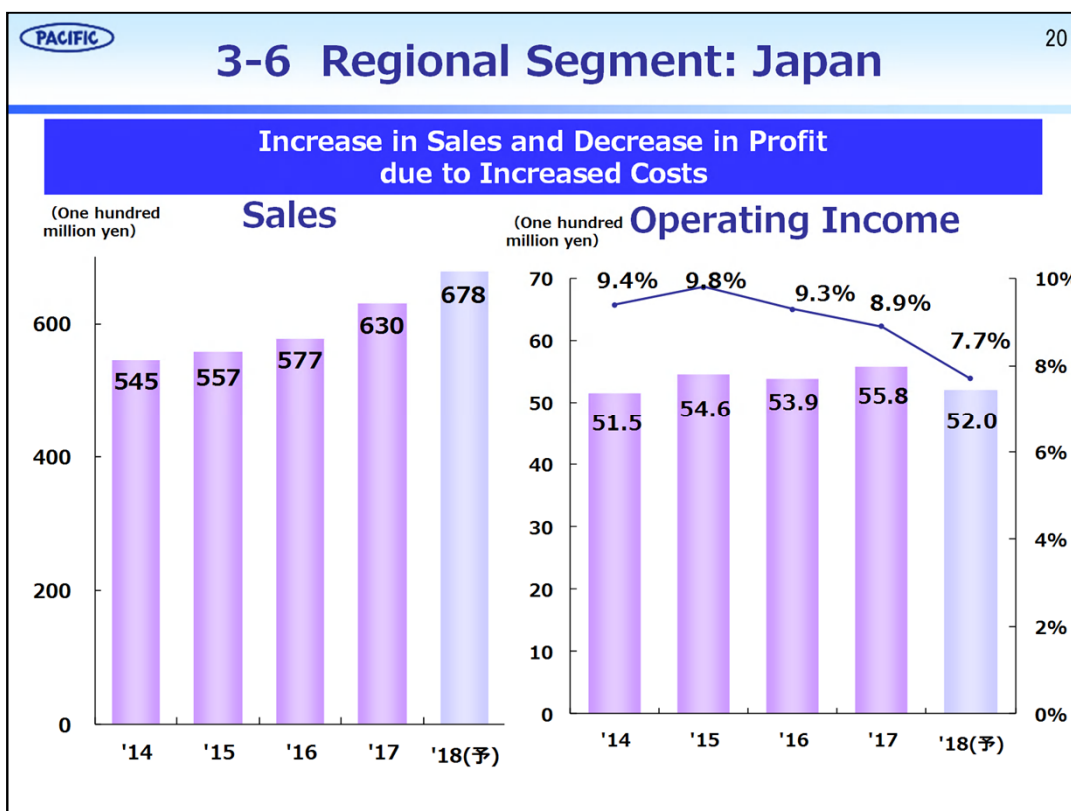
###### •FY2018 Forecast

Sales are expected to be ¥43.4 billion, a 26.6% increase from the previous term due to an increase in sales volume after the acquisition.

##### Operating Income

###### •FY2018 Forecast

Operating income is expected to be ¥5.6 billion, a 5.8% decrease in profit from the previous term due to the impact of acquisition costs, etc.



#### <Regional Segment: Japan >

##### Sales

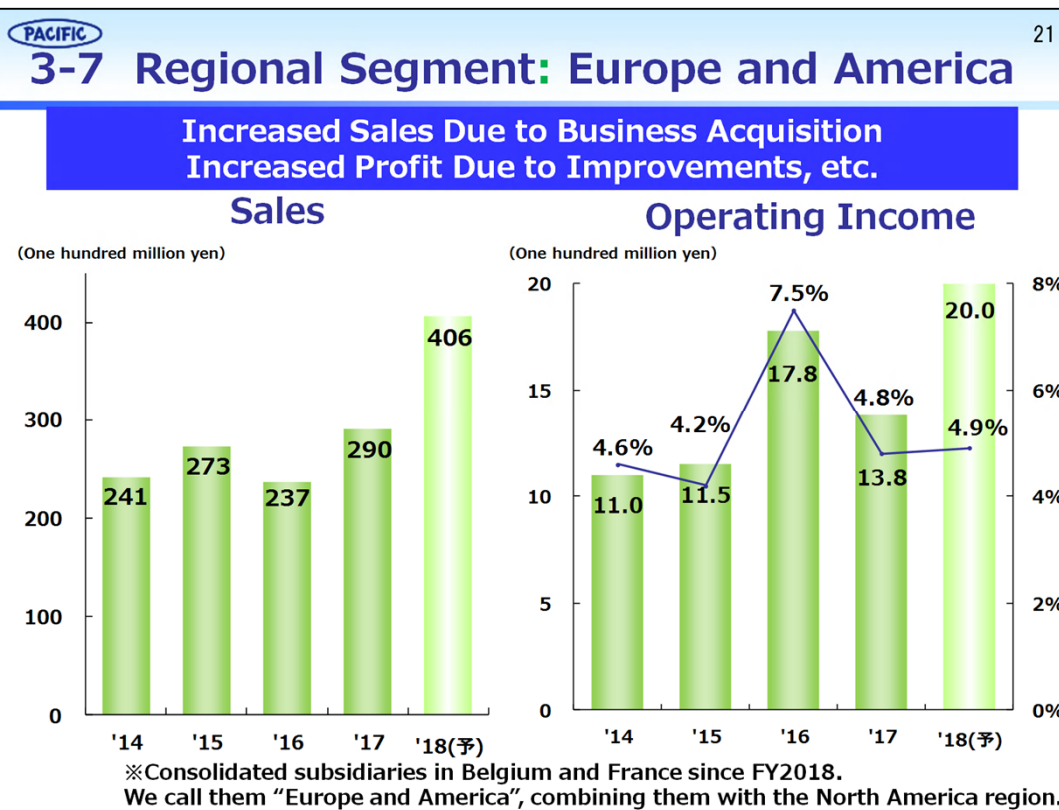
##### •FY2018 Forecast

Sales are expected to be ¥67.8 billion, a 7.5% increase in sales year on year due to an increase mainly in sales of stamping and molding products.

##### Operating Income

##### •FY2018 Forecast

Ordinary income is expected to be ¥5.2 billion, a 7% decrease in profit due to the impact of business acquisition costs, though there was an increase in sales volume and cost improvement.



## <Regional Segment: Europe and America >

### Sales

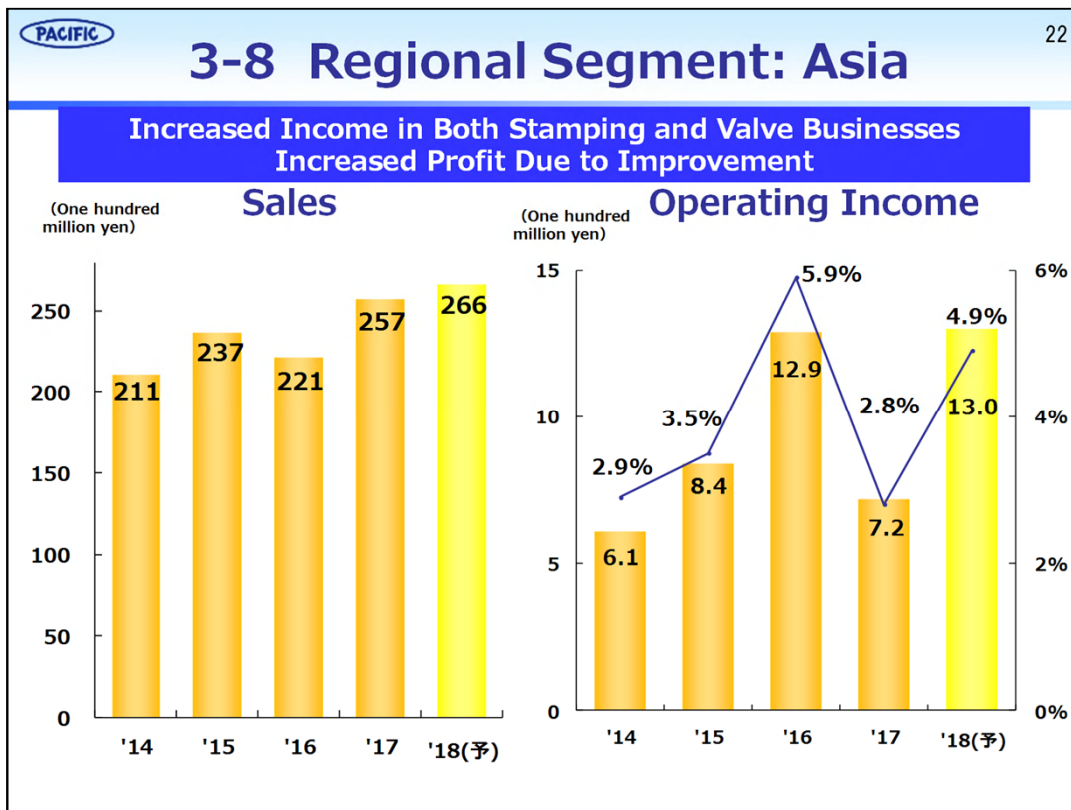
#### •FY2018 Forecast

Sales are expected to be ¥40.6 billion, a 40% increase year on year due to an increase in ultra high-tensile components sales in the U.S., and to an increase in sales volume after acquisition.

### Operating Income

#### •FY2018 Forecast

Operating income is expected to be ¥2 billion, a 44.5% increase in profit due to an increase in sales volume after acquisition and cost improvement.



### <Regional Segment : Asia >

#### Sales

##### •FY 2018 Forecast

Sales are expected to be ¥26.6 billion, a 3.5% increase in sales year on year due to an increase in sales of stamping and TPMS products in China.

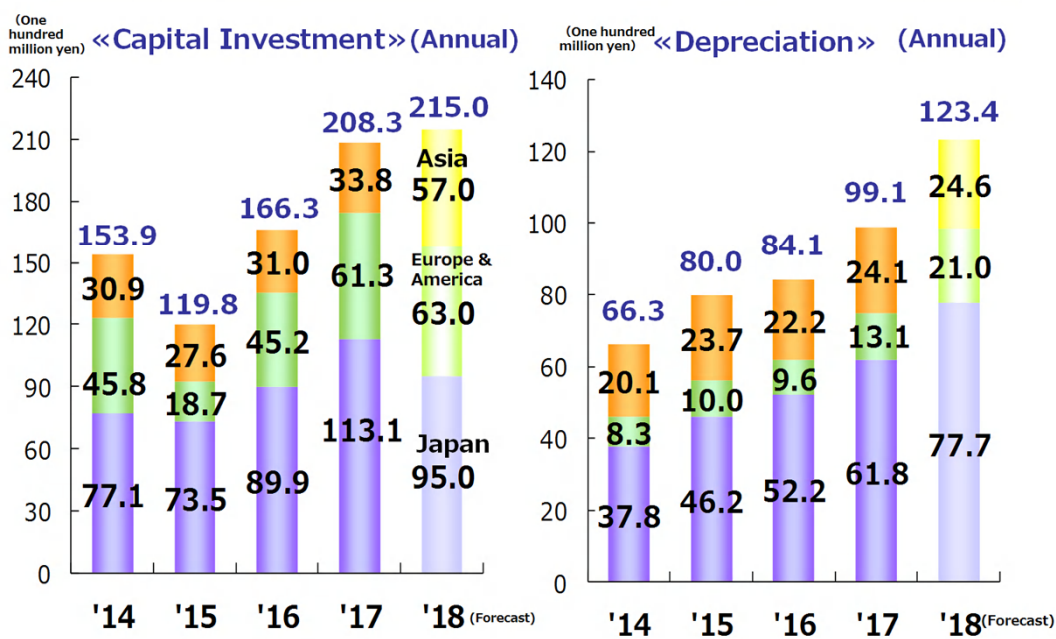
#### Operating Income

##### •FY2018 Forecast

Operating income is expected to be ¥1.3 billion, a 79.1% increase in profit due to an increase in sales volume and cost improvement.

### 3-9 Consolidated Capital Investment/Depreciation

#### Increased Depreciation Due to Strategic Capital Investment



#### <Capital Investment and Depreciation>

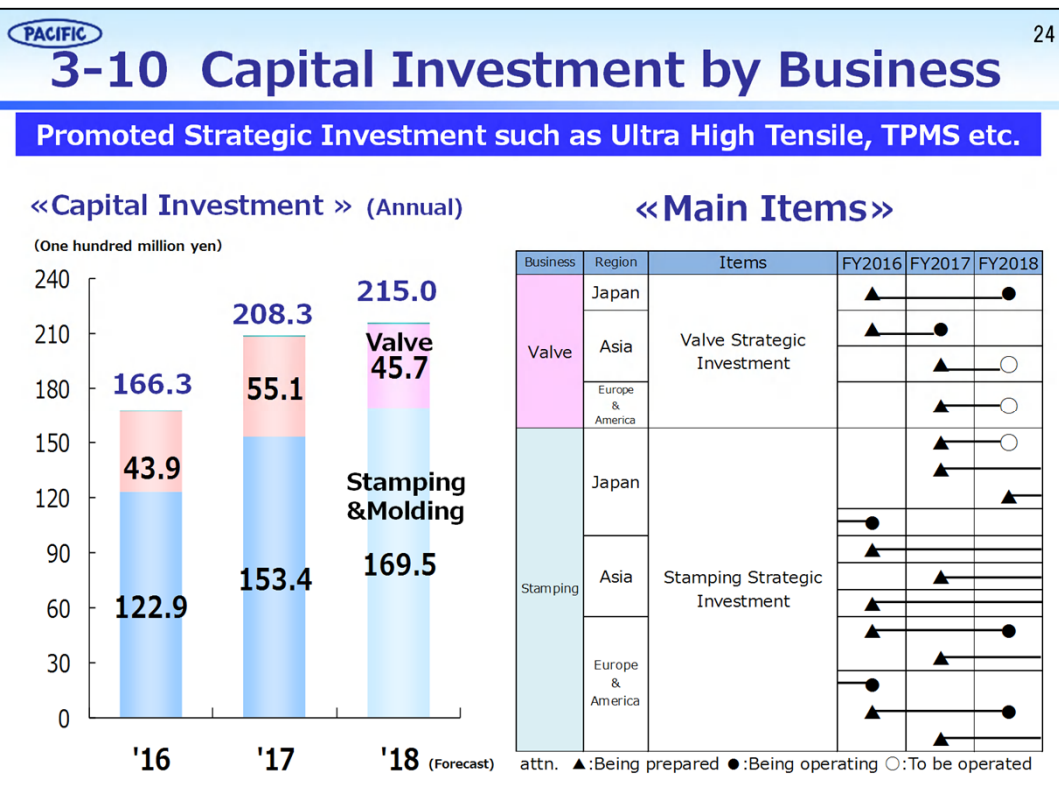
##### Capital Investment

Planning to invest more than ¥20 billion in 2018 as well.

##### Depreciation

Increased due to high level capital investment

FY2018 forecast ¥12.3 billion



### <Capital Investment by Business>

- Main capital investment from FY2016 to FY2018

#### Stamping Business

We have 9 cold press equipment units corresponding to ultra high tensile, and 4 hot stamp equipment units in Japan, Asia, and North America.

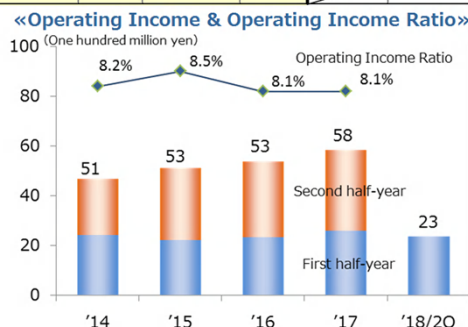
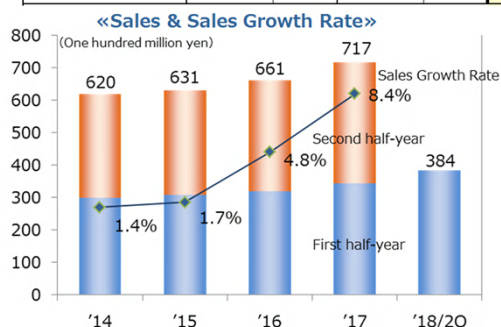
#### Valve Business

We are enhancing forging equipment in Japan, expanding the aluminum die-casting business in South Korea, and strengthening a new type of TPMS line in China and North America.

### 3-11 <Reference> Individual Financial Results

#### Sales, Ordinary Income, and 2Q Net Income were Record Highs

	Previous 2Q		FY2017 (Previous term)		2Q		Year-on-year rate		2Q Year-to-Date
	(Results)	Sales ratio	(Results)	Sales ratio	(Results)	Sales ratio	Gain&Loss	%change	
Sales	34,293	100%	71,715	100%	38,473	100%	4,180	12.2%	2nd consecutive term increase in sales Record High
Operating Income	2,574	7.5%	5,835	8.1%	2,370	6.2%	△ 203	△ 7.9%	Profit decreased for the first time in 4 terms
Ordinary Income	3,485	10.2%	7,210	10.1%	3,784	9.8%	298	8.6%	2nd consecutive terms increase in profit Record High
2Q (Current) Net Income	2,543	7.4%	5,284	7.4%	2,869	7.5%	326	12.8%	2nd consecutive terms increase in profit Record High
2Q (Current) Net Income per Share	¥42.37	-	¥87.64	-	¥47.26	-	¥4.89	-	



### <<Reference>> Individual Financial Results and Forecast>

#### Sales

##### • 2Q Results

Sales were ¥38.4 billion, a 12.2% increase year on year due to an increase in sales of stamping and molding products.

#### Income

##### • 2Q Results




Operating income was ¥2.3 billion, ordinary income was ¥3.7 billion, and quarterly net income was ¥2.8 billion. Net sales, ordinary income, and net income for the quarter were the highest ever.



- 1 . Company Profile
- 2 . Financial Results for FY2018 2Q
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## 4-1 Acquisition of Schrader Valve Business

### Acquired 100% of the U.S. and France's Stock

	U.S. (Altavista)	France (Pontarlier)
Brand		
Company Name	Schrader-Bridgeport International, Inc.	August France Holding Company SAS Schrader SAS (including UK branch)
Location	Altavista, Virginia	Pontarlier, Bourgogne region
Number of employees	200 employees	400 employees
Production item	Tire valve, Valve core, Valve for car air conditioning, Valve for industrial machineries	Tire valve, Valve core, Snap-in/Clamp-in valve for TPMS
Map		
History	<ul style="list-style-type: none"> <li>• 100% stock acquisition of 3 companies were decided in a board of directors meeting on May 22, 2018.</li> <li>• Stock was acquired on Aug 31, 2018.</li> </ul>	

### <Acquisition of Schrader Valve Business>

As of August 31, 2018, we acquired 100% of the shares of SCHRADER-BRIDGEPORT INTERNATIONAL, INC. in the United States and France's AUGUST FRANCE HOLDING COMPANY SAS and its subsidiary SCHRADER SAS.

Plants are in Altavista, Virginia in the U.S, and Pontarlier, the Burgundy region of France near the Swiss border.

Regarding the valve products produced by the two companies, we have started selling them under the "SCHRADER-PACIFIC" brand.



### <Business Acquisition Goals and Strategic Significance>

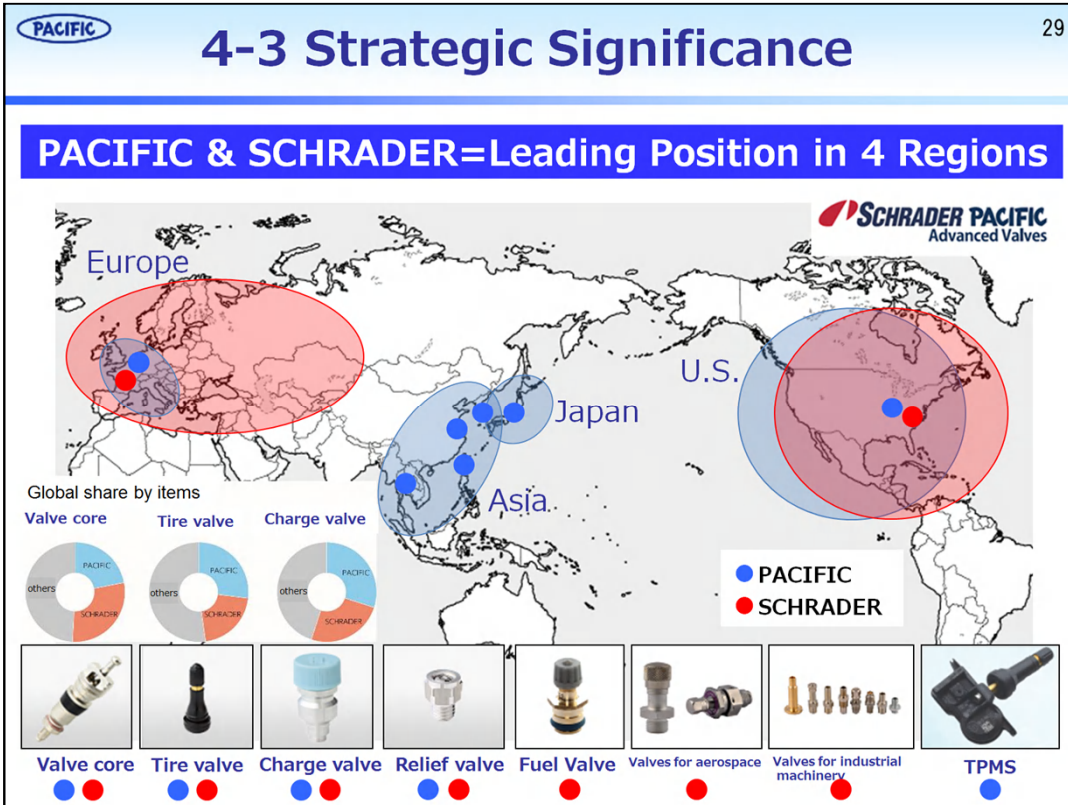
Our action plan, in the mid-term management plan, holds up the creation of synergy by strategic M&A.

We decided that it is necessary to speed up and integrate our business through business acquisition, and secure growth and cost competitiveness by refining our valve business, which is our founding enterprise.

We welcomed the new SCHRADER brand to our PACIFIC brand, and will strive to obtain the leading position in the industry.

Also, it enabled us to do business in markets and bases in four global regions: Japan, the U.S., Europe, and Asia.

We are convinced that along with the stamping & molding business, we will make great strides towards the goal of "Aiming to be a Top-Class GLOCAL Manufacturer of Technology Components", which will lead to improved corporate value and strengthened business foundation.



### <Strategic Significance>

By integrating the PACIFIC brand, with superiority in Japan and Asian markets, and the strong SCHRADER brand in Europe and U.S. markets, we have prepared a system to develop and produce with customers and markets in the 4 regions worldwide.

Combining PACIFIC and SCHRADER, our world market share in valve core, tire valves, and charge valves will be 50%. Our company will lead the market as an unwavering top manufacturer.

In terms of product lineup, in addition to the valves for conventional tire valves, valve cores, and car air conditioners, valves for fuel systems, aircraft, industrial machinery, etc., are added, and a wide range of products can be offered in the valve business.

## 4-4 Image of Operation Promotion

**SCHRADER & PACIFIC grow together**



### <Image of Operation Promotion>

Let us explain our activities for “SCHRADER” and “PACIFIC” to grow together.

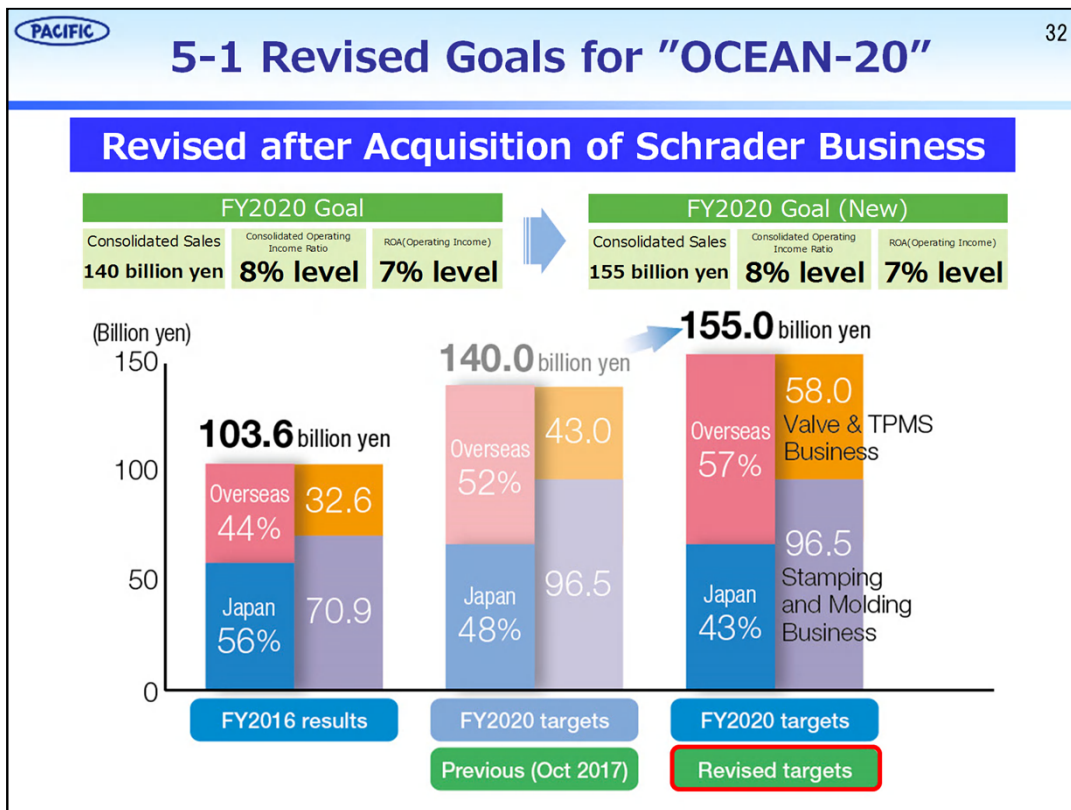
For sales, we promote sales expansion by utilizing newly acquired product lineups and each sales channel.

For development, we will integrate the technologies of both companies, improve product development capabilities such as joint development, and promote speedy supply of products that meet our customer needs.

For production, we share product know-how and quality control know-how, adopt each others’ good points, improve productivity, and work to strengthen cost competitiveness.

PACIFIC and SCHRADER will create synergy quickly and strive to improve our company value under “ONE PACIFIC”.

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- 2 . Financial Results for FY2018 2Q**
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### <OCEAN-20 Revision>

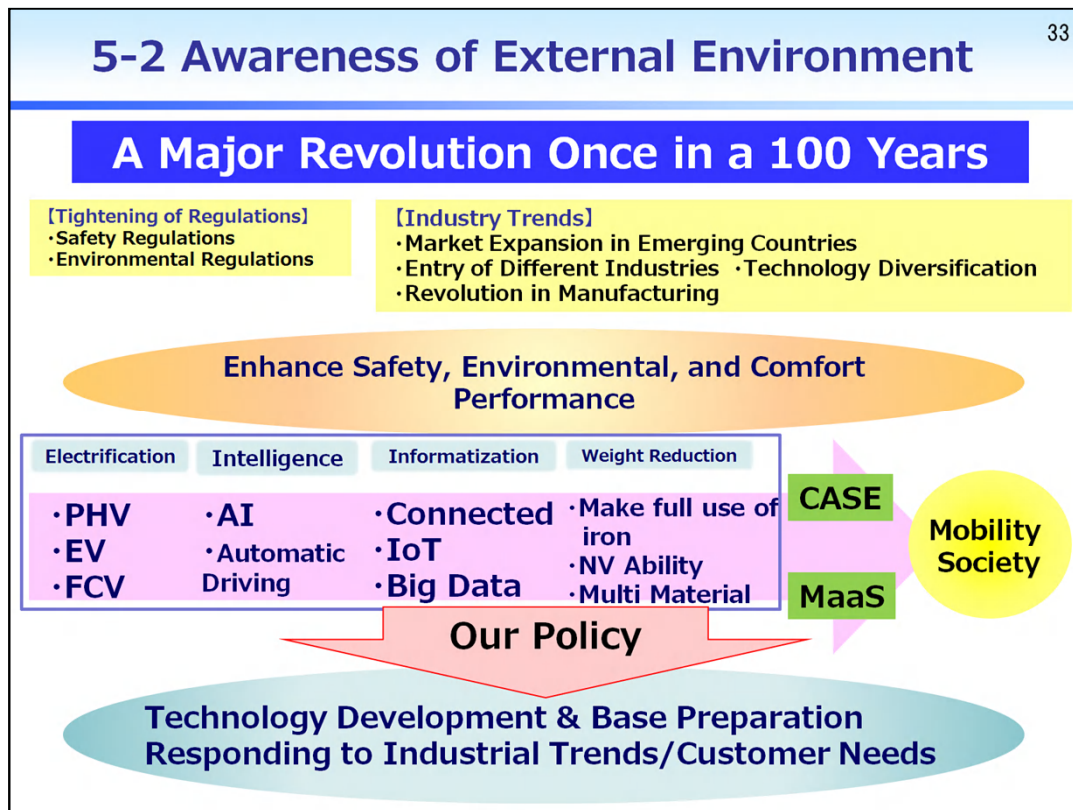
With SCHRADER business acquisition, we revised our goals for FY2020.

We aim for consolidated sales of ¥155 billion, a ¥15 billion increase in the valve business against the previous plan.

For operating income ratio, we will maintain the 8% range as in the past, despite the burden of "goodwill charges" related to business acquisition.

We also aim for an ROA based on operating income in the 7% range as our conventional goal.



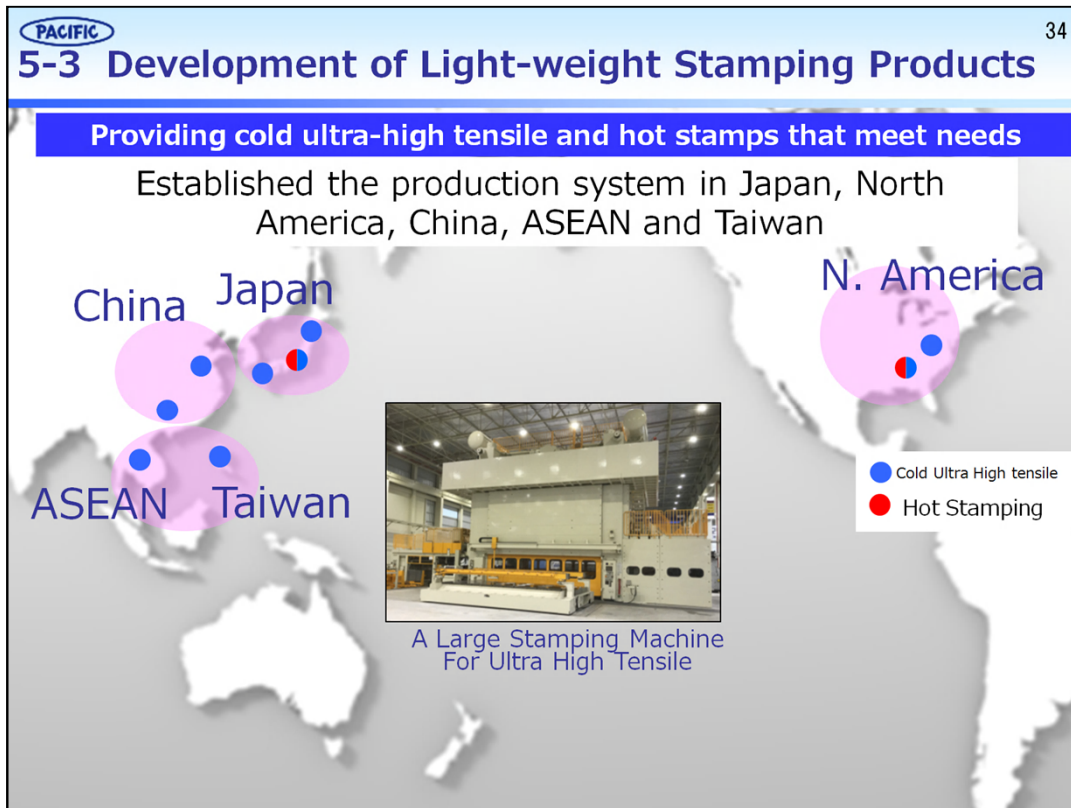


### <The environment surrounding our company>

In the automobile industry, we are in the midst of a major revolution that occurs only once every 100 years due to evolving globalization and various paradigm shifts, such as the expansion of emerging markets, acceleration of overseas production transfers, transition to next generation cars, and entry from connected IoT, AI, and other industries.

Safety and environmental regulations, among others, further improvement of safety performance, environmental performance, and comfort performance are required. Interconnectivity between people and cars will progress with electricization, intelligence, and informationization. Furthermore, demand for weight reduction, which is quickly becoming a core requirement for good car production, continues to accelerate.

We will work on "OCEAN-20" to meet our customers' needs and these industry trends.



#### <Development of Light-weight Stamping Products>

Our stamping products have deepened our technology to meet the need for weight reduction and collision safety improvement indispensable for next-generation automobiles.

In particular, we are sticking to the cold press method, establishing technology to mold ultra high tensile materials, and adoption of 1180Mpa steel materials is expanding. In addition, we are making technologies in hand for hot stamps that mold steel materials by heating them at high temperatures.

In accordance with the adoption of the expanding ultra high tensile, we will deploy large-class stamping machines both in Japan and overseas, and will develop the supply system.

Overseas, we have 2 bases in North America, 2 bases in China, 1 base in Taiwan, and we have established a new stamping subsidiary in Thailand.

Plant construction was completed last year and we are going to start deploying facilities starting operation in 2019. We aim to expand orders in the expanding ASEAN market.

We are also in the process of deploying large-class stamping machines at existing bases in Taiwan and are scheduled to start operation in 2019.

## New materials and new methods improved function and weight reduction

## ■ NV performance No. 1 through deeper soundproofing / vibration isolation technology

- Expanding adoption of engine covers and insulators by improving the NV performance (※) of urethane foam products
- Contributing to lower noise and improved comfort
- Cost reduction and weight saving

All urethane  
Engine cover

## ■ Working on resin film and decorating technology

- Weight reduction and recyclability (material recycling) realized by resin film decoration technology instead of plating
- Development of decorative variations to meet diverse needs

Wheel center ornament  
using film technology

(※) NV performance: Reducing Noise Vibration

## &lt;Offering Comfortable, High Environmental Performance Plastic Molding Products&gt;

In our plastic molding business, we are offering sound/vibration-proofing products, such as all urethane engine covers and insulators for engines, focusing on urethane products that make use of the flexibility in shape, and focusing on technology development to improve NV performance.

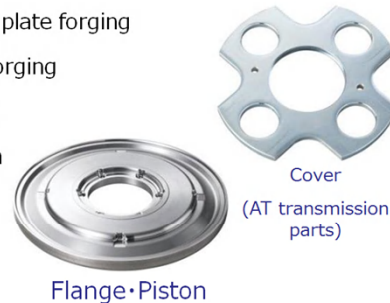
We believe that the need for quietness and comfort continues to be high, including strengthening of outside vehicle noise regulations and sound insulation due to progress in EV conversion. We will promote material development and production technology development for urethane foam, further enhance soundproofing and vibration isolation performance, and achieve No.1 performance.

Regarding our work on decorating technology with resin film, we have realized weight reduction and recyclability by film transfer technology with a high degree of freedom of design as an environmentally friendly technology to replace plating. We have received great praise from customers. We will continue to develop decorative variations to meet diverse needs in the future.

## 5-5 Diversified Technologies in Forge Stamping and DC Business

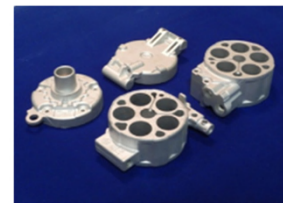
### Forge Stamping Composite technology to increase strength and weight

- Realized "Strengthening strength" and "weight saving" by plate forging technology that combines sheet metal forming and cold forging
- Expanded to adopt to new transmission components, etc.
- Expanded the Yoro plant and expanded production system with Ohio base in the U.S.



### Die Casting (DC): Expanded order items in S. Korea Base

- Built an integrated manufacturing system for compressor parts for car air conditioners
- Expanded items to electric compressor parts and electric power steering parts



Compressor components for car air conditioners

## <Diversified Technologies in Forge Stamping and DC Business >

### Forge Stamping Business

We offer thin, lightweight products that were impossible by conventional methods such as sintering and forging, by using plate forming technology combining sheet metal forming productivity and high precision cold forging.

Products are adopted in new-type automatic transmission parts, etc., and the range of application is expanding. Domestically, we will expand the Yoro plant in Gifu Prefecture and promote production expansion and customer diversification with the base in Ohio in the U.S.

### Aluminum Die Casting Business

At the South Korea subsidiary, we have established an integrated production line that spans from die casting to cutting processing to meet our customers' needs.

We will expand the number of order items and offer products of high quality, such as electric compressors, components for electric power steering, etc.

## 5-6 Expansion of TPMS Products that Contribute to Safety and the Environment

## Development of New Products and Increased Capacity in China

## ■ Evolution of TPMS (Development of type E)

- Developed and started mass production of new TPMS transmitters
- Minimized transmitter size and weight
- Valve parts are detachable and exchangeable



TPMS type E

## ■ Legislated in China

- 100% adoption in new cars from Jan 2019
- 100% adoption in existing cars from Jan 2020

## ■ Strengthened production in Japan, the U.S., and China

- We enhanced production capacity, along with production/sales of new types and the start of legislation in China

## ■ Legislation trends in each region

Region	Start of Legislation
N.America	Oct.2015
Europe	Nov.2012
S.Korea	Jan.2013
Taiwan	Nov. 2014
Russia	Jan.2016
GCC	2017 Model
China	Jan.2019
Japan	Undecided

## &lt;Expansion of TPMS Products that Contribute to Safety and the Environment&gt;

We have been mass producing TPMS transmitters since 1999. Since then, we have met our customers' needs and developed more reliable products. As an exclusive TPMS transmitter manufacturer, in addition to our convention clamp-in type, we also offer easily attachable snap-in models.

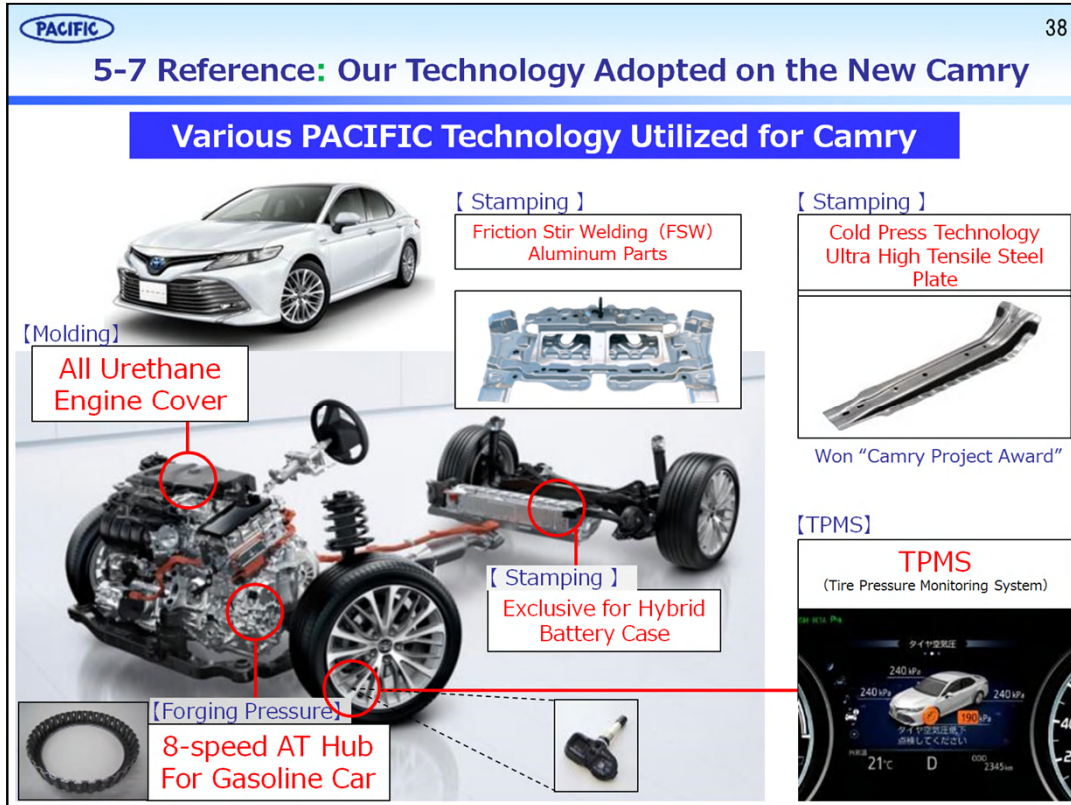
One of our strengths as the only manufacturer of transmitters in Japan is our ability to offer high quality products in an integrated production system that spans from design and R&D to full production.

We have recently developed the E-type transmitter, which is a small and light-weight TPMS, and have begun mass production. To achieve further functional improvement and design variations, we will continue to advance weight reduction and size minimization for future model generations.

In China, legislation mandating TPMS installation on vehicles has officially passed and will be effective from January, 2019.

In production and sales, we have established a global system to comply with the flow of legal regulations in various countries around the world. We will increase production capacity, along with China legislation and the launch of production and sales of new types in Japan, the U.S., and China.





## <Our Technology Adopted on the New Camry>

Our various products and technology have been adopted on the new Camry launched last July. As an achievement of OCEAN-20, our technology and products will be globally adopted on new types of cars following the Camry.

### Lightweight Stamping products

Ultra high tensile material components, aluminum components

### Plastic Products

All Urethane Engine Cover for which sound/vibration proofing was improved

### TPMS Products

All are adopted as standard on all cars in Japan, not only in North America.

### Forging Pressure Products

They are adopted on 8th speed AT for gasoline-powered vehicles.



### <Medium-Term Management Plan "OCEAN-20">

We have been striving to be a top-class GLOCAL manufacturer of technology components by refining technology, and preparing and expanding production bases.

We will promote five "Shinka" with the key phrases of "Technology & Overseas", "Manufacturing is about Developing People", and "CSR & Environment Preservation".



### <Aim for a 100-year Corporation>

Our company will celebrate 100 years of business in 2030.

As a suitable company, we will strive to improve safety, quality and productivity, and offer new technologies and new products that meet the needs of our customers with GLOCAL employees' sharing of the same sense of values.

We will promote activities with good governance and plan a sustainable management strategy.

It is our employees who support further business growth and raise our corporate value. We respect diverse ways of thinking and the lives of diverse human resources. We will promote continuous development of the next generation human resources to nurture high workplace skills under our faith in "Manufacturing is about Developing People".

We would like to make better relations with our stakeholders in pursuit of creating new value for the future and improving the quality of corporate management in order to continue to be a company trusted and expected by society and to continue to exist as a company necessary for society.