

#### FREUND CORPORATION

# Results of Operations for the Fiscal Year Ended February 28, 2017 (FY2/17) Seventh Medium-term Management Plan



April 14, 2017

(Securities code: 6312)

Note: From the first quarter of the current fiscal year, the Company has modified the English term of the business segment formerly titled "Chemical and Food Business" to "Chemicals Business." The content and Japanese term of the business segment remain the same.

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# I. Financial Summary for FY2/17

# **Financial Highlights**

■ Sales and earnings reached all-time highs due to strong sales of machinery to generic drug manufacturers

	FY2/16	FY2/17		FY2/16 FY2/17		YoY ch	ange
	Results	Results	Initial plan	Amount	%		
Net sales	19,027	21,164	20,000	+2,136	+11.2		
Operating income	1,346	2,041	1,900	+694	+51.6		
Ordinary income	1,394	2,097	1,900	+703	+50.4		
Profit	961	1,064	1,180	+103	+10.7		
Earnings per share (yen)	55.74	61.72	68.43	+5.98	+10.8		
Capital expenditures	266	564	-	+298	+111.9		
Depreciation	321	338	-	+16	+5.1		
R&D expenses	687	640	-	(46)	(6.8)		

<sup>\*</sup>In 2016, consolidated subsidiaries Freund-Vector Corporation and Freund-Turbo Corporation changed the end of their fiscal years from December 31 to the end of February. Consequently, results for the fiscal year that ended on February 28, 2017 include the 14-month period from January 1, 2016 to February 28, 2017 for these two companies.

# **Machinery Business: Overview**

- Orders remain high because of the large volume of capital expenditures in the generic drug industry
- Strong sales of pharmaceutical and industrial machinery
- Significant growth in sales of industrial machinery due to large projects

	Feb. 29	9, 2016	Feb. 28, 2017		
	Amount	YoY change (%)	Amount	YoY change (%)	
Orders received	13,112	+5.7	16,358	+24.8	
Order backlog	7,086	+6.0	8,561	+20.8	
Net sales	13,037	+19.2	14,914	+14.4	
Pharmaceutical machinery	11,444	+15.1	12,441	+8.7	
Industrial machinery	1,593	+59.9	2,473	+55.2	
Operating income	1,189	+7.3	1,750	+47.1	
Yen/dollar rate (+ is yen depreciation)	121.1	+15.3 yen/dollar	109.5	-11.6 yen/dollar	

<sup>\*</sup>In 2016, consolidated subsidiaries Freund-Vector Corporation and Freund-Turbo Corporation changed the end of their fiscal years from December 31 to the end of February. Consequently, results for the fiscal year that ended on February 28, 2017 include the 14-month period from January 1, 2016 to February 28, 2017 for these two companies.

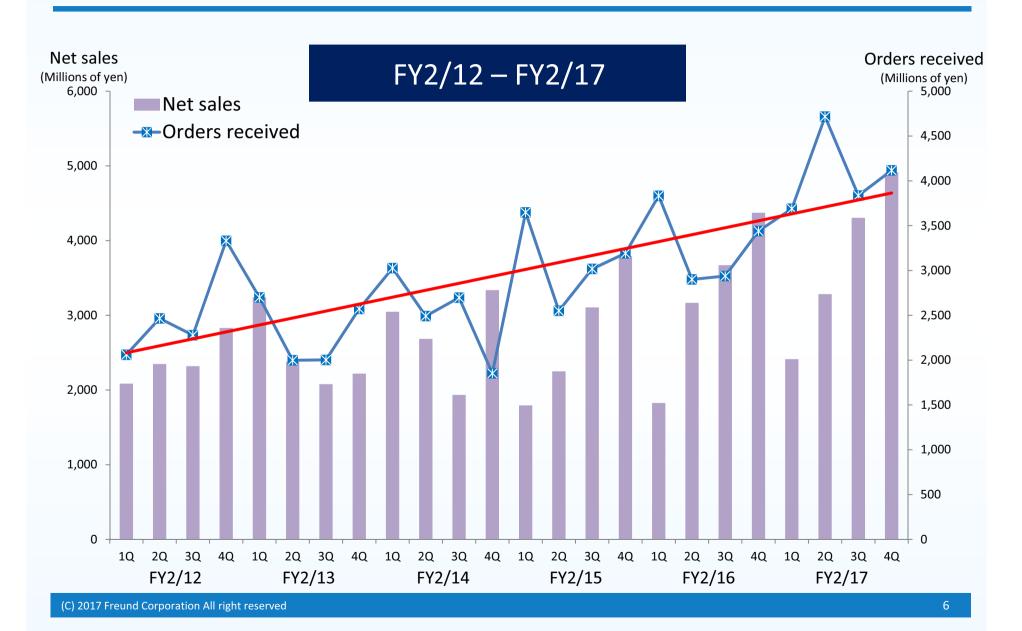
# Machinery Business: Group Company Performance

- Sales growth in Japan and USA
- Started accepting orders for the second-generation tablet printer

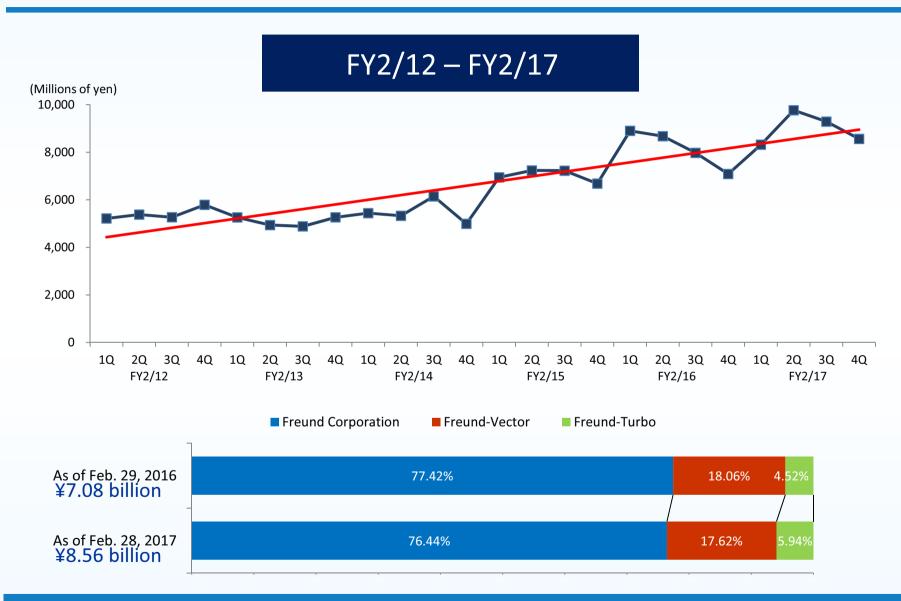
	FY2,	/16	FY2/17	
	Amount	YoY change (%)	Amount	YoY change (%)
Net sales	13,037	+19.2	14,914	+14.4
Freund Corporation	7,784	+13.0	9,446	+21.4
Freund-Vector Corporation	4,686	+20.8	4,727	+0.9
Freund-Turbo Corporation	1,205	+20.5	1,641	+36.2
Operating income	1,189	+7.3	1,750	+47.1
Major subsidiaries				
Freund-Vector Corporation	293	+9.4	388	+32.4
Freund-Turbo Corporation	94	-	79	(16.0)
Sales by geographic region				
Japan	7,668	+15.5	9,459	+23.4
North/South America	3,491	+31.0	3,884	+11.2
Europe/Africa	982	+122.9	867	(11.6)
Middle East/Asia/Oceania	894	(25.3)	702	(21.5)

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# Machinery Business: Orders received



# Machinery Business: Order Backlog



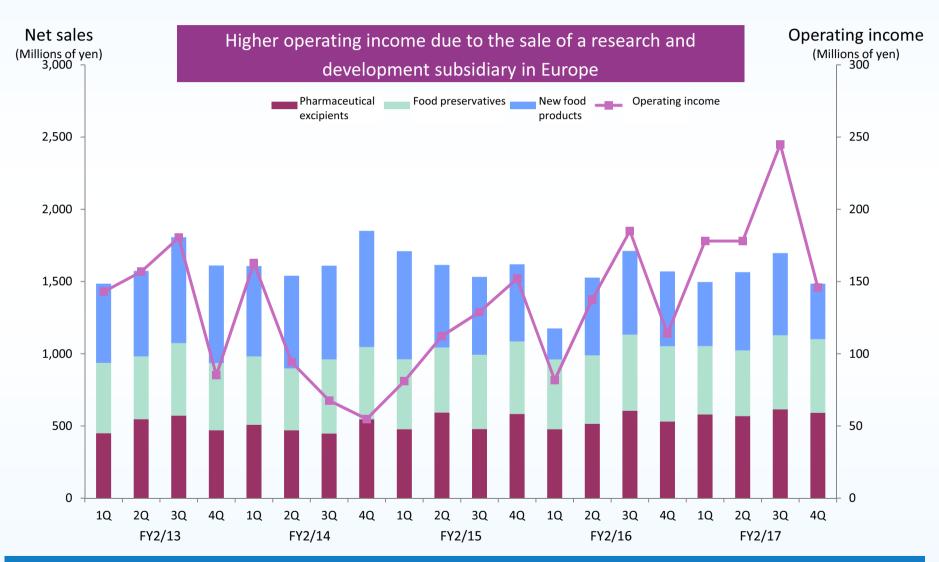
#### Chemicals Business: Overview

- Sales of pharmaceutical excipients to generic drug companies increased. Sales of new food products increased in association with customers' production adjustments
- An improvement in the product mix and a large reduction in R&D expenses were responsible for the increase in operating income
- Sales in the food preservatives category did not meet the targets

	FY2	/16	FY2	/17
	Amount	YoY change (%)	Amount	YoY change (%)
Net sales	5,990	(23.2)	6,249	+4.3
Pharmaceutical excipients	2,132	(0.1)	2,357	+10.6
Food preservatives	2,004	+2.6	1,951	(2.7)
New food products	1,853	(22.6)	1,941	+4.7
(Export sales)*1	78	(50.7)	108	+37.3
Operating income	519	+9.6	748	+44.1

<sup>\*1:</sup> Sales to India, South Korea and Taiwan

#### **Chemicals Business: Trends**



# Summary of Statement of Income

(Millions of yen)

	FY2/16		FY2/16 FY2/17		YoY change	
	Amount	Share (%)	Amount	Share (%)	Amount	%
Net sales	19,027	100.0	21,164	100.0	+2,136	+11.2
Cost of sales	12,921	67.9	14,343	67.8	+1,421	+11.0
Gross profit	6,106	32.1	6,821	32.2	+715	+11.7
SG&A expenses	4,759	25.0	4,779	22.6	+20	+0.4
Operating income	1,346	7.1	2,041	9.6	+694	+51.6
Non-operating income (expenses)	47	0.3	56	0.3	+8	+17.9
Ordinary income	1,394	7.3	2,097	9.9	+703	+50.4
Extraordinary income (losses)	(253)	(1.3)	(313)	(1.5)	(60)	-
Profit before income taxes	1,141	6.0	1,783	8.4	+642	+56.3
Profit	961	5.1	1,064	5.0	+103	+10.7

# Non-operating income (expenses)

- Non-operating income  $\rightarrow 0$
- Non-operating expenses → (8)

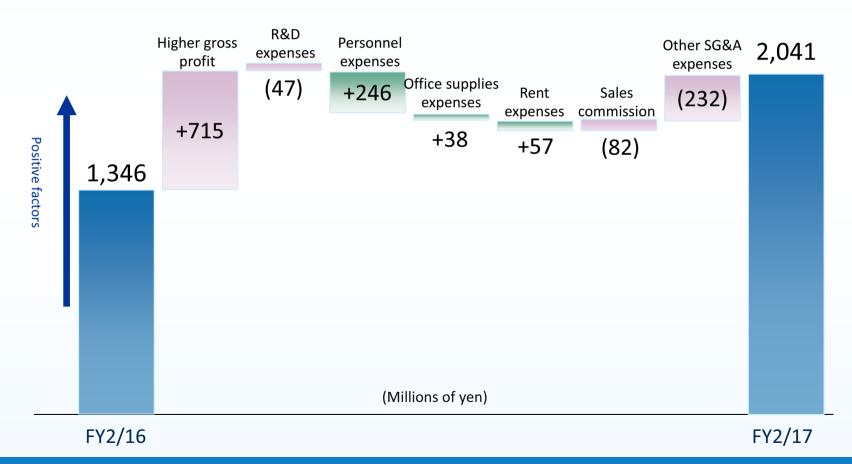
# Extraordinary income (losses)

- Gain on sales of securities
- Gain on sales of non-current assets → 13
- assets → 13
   Directors' retirement benefits → (250)
- Impairment loss on real estate in Hamamatsu → (91)

<sup>\*</sup>In 2016, consolidated subsidiaries Freund-Vector Corporation and Freund-Turbo Corporation changed the end of their fiscal years from December 31 to the end of February. Consequently, results for the fiscal year that ended on February 28, 2017 include the 14-month period from January 1, 2016 to February 28, 2017 for these two companies.

# Change in Operating Income

■ Big increase due to sales growth and end of most tablet printer development expenses



# Summary of Balance Sheet

(Millions of yen)

	Feb. 29, 2016	Feb. 28, 2017	Change
Current assets	13,053	14,938	+1,885
Cash and deposits	4,042	6,982	+2,940
Accounts receivable *1	5,694	4,403	(1,290)
Inventories	2,432	2,765	+333
Non-current assets	4,153	4,162	+9
Property, plant and equipment	3,135	3,234	+99
Intangible assets	182	55	(126)
Investments and other assets	835	872	+36
Total assets	17,206	19,101	+1,894
Current liabilities	5,315	6,592	+1,276
Accounts payable *1	2,580	3,058	+478
Advances received	1,288	1,831	+543
Non-current liabilities	361	323	(38)
Net defined benefit liability	194	201	+7
Negative goodwill	11	-	(11)
Total liabilities	5,677	6,916	+1,238
Total net assets	11,529	12,185	(656)

<sup>\*1:</sup> Includes electronically recorded monetary claims-operating and obligations-operating

#### Inventories

#### +¥333 million

•Merchandise and finished goods +73

•Work in process

+201

Raw materials and supplies

+58

#### Property, plant and equipment

•Machinery, equipment and vehicles +116

#### Intangible assets

•Decrease in goodwill due to changes in accounting standards

s (77)

 Amortization of software (core system)

(47)

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# Summary of Statement of Cash Flows

	FY2/16	FY2/17
Cash flows from operating activities	290	3,605
Profit before income taxes	1,141	1,783
Depreciation	321	338
Decrease (increase) in notes and accounts receivable-trade	(430)	1,243
Decrease (increase) in inventories	(620)	(382)
Increase (decrease) in advances received	45	571
Increase (decrease) in notes and accounts payable-trade	(170)	409
Income taxes paid	(499)	(128)
Cash flows from investing activities	(432)	(351)
Purchase of property, plant and equipment	(304)	(474)
Cash flows from financing activities	(331)	(277)
Repayments of lease obligations	(62)	(61)
Cash dividends paid	(258)	(215)
Net increase (decrease) in cash and cash equivalents	(505)	2,940
Cash and cash equivalents at end of period	4,042	6,982

<sup>\*</sup>In 2016, consolidated subsidiaries Freund-Vector Corporation and Freund-Turbo Corporation changed the end of their fiscal years from December 31 to the end of February. Consequently, results for the fiscal year that ended on February 28, 2017 include the 14-month period from January 1, 2016 to February 28, 2017 for these two companies.

II. Earnings and Dividend Forecasts for FY2/18

# **Earnings Forecasts**

- Machinery: New product introductions are expected to offset a slowdown in the order backlog
- Chemicals: Forecast a decrease in sales of new food products

	FY2/17 FY2/18 YoY ch				FY2/18 YoY change	
	F12/1/	(Forecast)	Amount	%		
Net sales	21,164	21,000	(164)	(0.8)		
Operating income	2,041	2,100	+59	+2.9		
Ordinary income	2,097	2,100	+3	+0.1		
Profit income	1,064	1,400	+336	+31.6		
Earnings per share (yen)	61.72	81.19	+19.47			
Capital expenditure	564	1	-	-		
Depreciation	338	-	-	-		
R&D expenses	640	-	-	-		

# **Segment Forecasts**

- Machinery: Plan to capture orders from generic drug companies in Japan
- Chemicals: Forecast lower sales and high earnings caused by fewer large orders for new food products

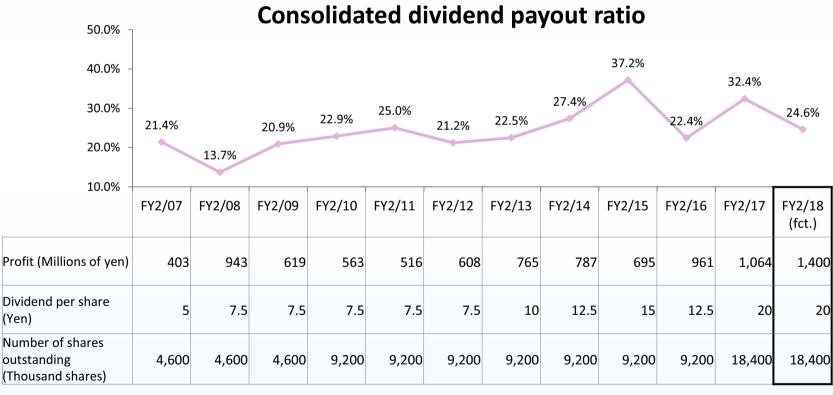
	FY2/17		FY2/18 (Forecast)		YoY change	
	Amount	Share (%)	Amount	Share (%)	Amount	%
Consolidated sales	21,164	100.0	21,000	100.0	(164)	(0.8)
Machinery	14,914	70.5	15,410	73.4	+496	+3.3
Chemicals	6,249	29.5	5,590	26.6	(659)	(10.5)
Segment profit	2,041	100.0	2,100	100.0	+59	+2.9
Machinery	1,750	85.7	NA	-	-	-
Chemicals	748	36.6	NA	1	1	1
Elimination or corporate	(456)	(22.3)	NA	-	-	-
Yen/dollar rate (+ is yen appreciation)	109.5	-	110.0	-	-	-

# Progress Report: Priorities of the Fiscal Year Ending in February 2018

- ➤ Increase sales of TABREX Rev.
- >Strengthen sales activities for generic drug manufacturers
- Expand activities to capture more orders outside Japan
- Increase measures to combine technologies of the Freund Group
- Launch new products and enlarge the product lineup
- Seek more synergies with the industrial machinery business
- >Start operation of a maintenance business

#### **Dividend Forecasts**

- Consolidated dividend payout ratio target is 30%
- Plan to pay a dividend of 20 yen per share by replacing the prior year's 5 yen commemorative dividend with a 5 yen ordinary dividend increase



Note: Freund conducted a 2-for-1 common stock split on June 1, 2009 and March 1, 2016.

The dividends per share for FY2/16 and earlier have been adjusted to reflect the stock split.

# III. Seventh Medium-term Management Plan

# Corporate Philosophy

# **Corporate Philosophy**

# Develop the Future through Creativity

#### Our Vision

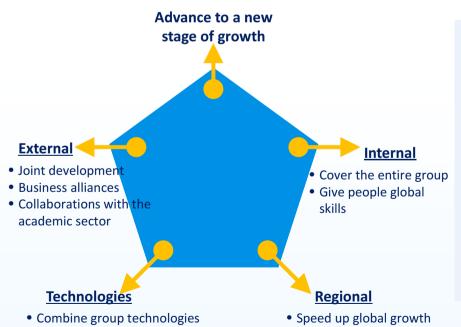
Contributing to better medical care and health for people worldwide and creating and utilizing technologies for fulfilling lives and food safety

# Seventh Medium-term Management Plan

Structured to achieve our vision for the Freund Group five years from now

# One Freund

#### Use "One Freund" for sustained growth



#### Number One (create special forms of value)

Aim to be the leader in all of the group's business sectors

#### Only One (always use the customer's perspective)

Be a company like no other for customers and society

#### Be One (networking)

Solidify the group to create a unified organization

# **Core Strategy and Targets**

#### **Core Strategy**

Create a structure for business operations that can use technologies to meet the true needs of customers and achieve consistent growth in earnings

Create special forms of value

Always use the customer's perspective

Networking

#### Sales and Earnings Targets

Net sales: ¥30.0 billion

Operating income: ¥3.0 billion

Operating income

margin: 10% (FY2/22)

ROE: 8% (FY2/22)

- Further improve profitability of the Machinery and Chemicals businesses (raise the operating margin above 10%)
- Develop new products that can become major contributors to sales alongside current products (real sales growth of 50%)
- Establish a base for a service business that can become the third core business with Machinery and Chemicals
- Significantly alter business processes for the creation of a new management system

#### Goals of the Seventh Medium-term Management Plan

■ The stability and continuity of earnings needs to be improved.

Our vision for the Freund Group <u>five years from now</u>:

# A framework of operations capable of aiming for consistent earnings growth

#### To accomplish this goal, we must

- Use a thorough and accurate understanding of customers' needs to envision how these needs will differ five years from now. We will use this foresight for constantly enacting reforms that are both challenging and well structured.
- Build a foundation that allows basic business operations to produce earnings of at least a certain level on a consistent basis.
- Never limit our attention to current tasks, instead always seeking to create new value and markets by investing in business fields and human resources that can drive growth.

#### Key Themes of the Plan

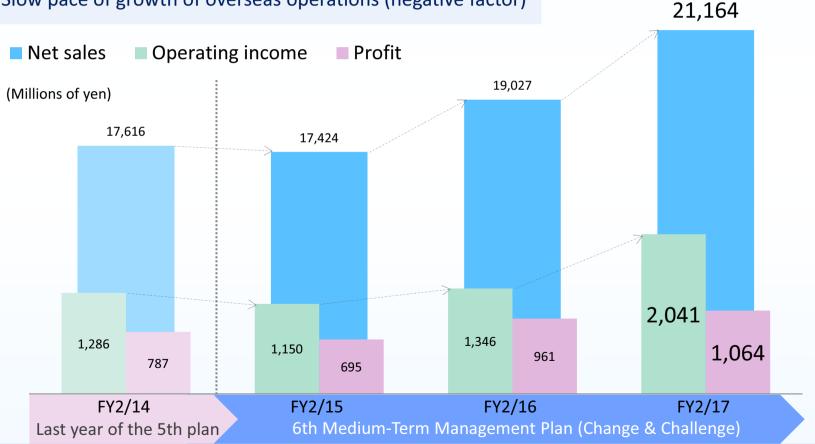
- Reexamine the structure of businesses (fabless operations and other new ideas)
- o Customers' needs
- Training of the next-generation of key personnel
- Investments in promising business sectors
- Redefine the corporate culture

- Maximize synergies
- O Markets and customers five years from now
- Employees' personal development and job satisfaction
- O Win-win relationships with customers and suppliers
- o A global perspective

# Assessment of the Sixth Medium-term Management Plan (Sales and earnings)

- Growth in demand for equipment in Japan's generic drug industry (positive factor)
- Delays in launching new products (negative factor)
- Slow pace of growth of overseas operations (negative factor)
- Net sales: ¥23.0 billion
- Operating income: ¥2.3 billion

(Foreign exchange rate assumptions: 1 USD=¥100)



# Assessment of the Sixth Medium-term Management Plan (Sales and earnings)

■ Sales and operating income rose to all-time highs but performance fell short of the goals because new product launches were slower than planned.

#### Net sales (Millions of yen) \*Before consolidation eliminations

#### Operating income (Millions of yen) \*Before consolidation eliminations

	·-
C	5th Medium-term Management Plan
Segment	FY2/14 (Results)
Machinery	11,004
Freund Corporation	7,081
Freund-Vector Corporation*	3,892
Freund-Turbo Corporation*	782
Chemicals	6,612
Segment total	17,616

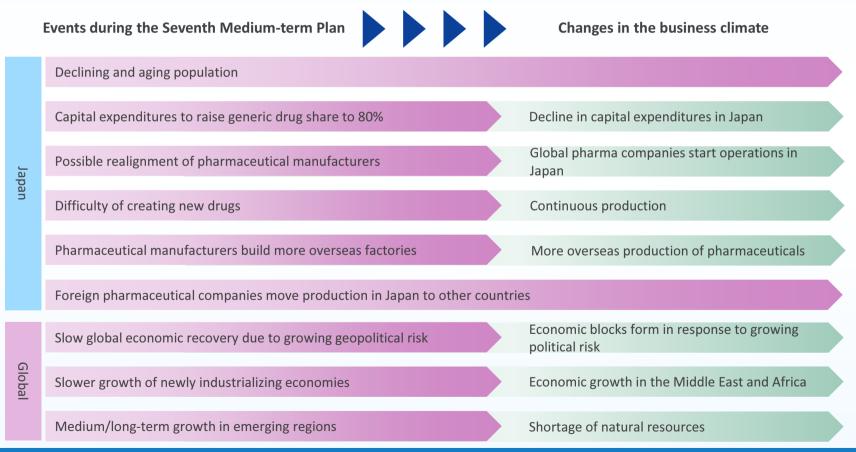
6th Medium-term Management Plan	Targot	Achievement
FY2/17 (Results)	Target	ratio (%)
14,914	14,200	105.0
9,446	9,200	102.7
4,727	5,000	94.5
1,641	-	-
6,249	8,800	60.8
21,164	23,000	92.0

Segment	5th Medium-term Management Plan
	FY2/14 (Results)
Machinery	1,242
Freund Corporation	1,032
Freund-Vector Corporation*	169
Freund-Turbo Corporation*	(8)
Chemicals	379
Segment total	1,621

6th Medium-term Management Plan	Torgot	Achievement
FY2/17 (Results)	Target	ratio (%)
1,750	1,420	123.2
1,245	920	139.5
388	500	77.6
79	-	-
748	880	85.0
2,041	2,300	88.7

#### The Business Climate

■ Prospects for strong demand for machinery are good due to government's 2020 goal for increasing the use of generic drugs. But demand may become weaker after 2020.



#### Primary Goals of the Seventh Medium-term Management Plan

- Overcome challenge posed by changes in capital expenditures by Japanese pharmaceutical companies
- Expand overseas operations
- Use existing technologies for industrial machinery (lithium-ion batteries/new materials)

Sixth Medium-term Management Plan



#### **Seventh Medium-term Management Plan**

#### One for All, All for One

#### **One Freund**

Create a structure for business operations that can use technologies to meet the true needs of customers and achieve consistent growth in earnings

Realization of growth through creativity

Build a framework for growth that is not overly reliant on the growth of markets

Use extensive measures for expansion outside Japan

Use the group's resources effectively to develop products faster and make the product lineup even more competitive

Enlarge and upgrade the product lineup

Build a base for growth by developing new products and launching new businesses

Strategic growth of business operations in key countries (India and China)

Division of activities and information sharing with Freund-Vector Use technologies and other expertise to supply products like no others in the world

Achievement of lean business structure.

Maximize earnings by implementing comprehensive cost reductions

Establish a culture of taking on challenges and develop the skills of employees (leadership skills) Make organizational changes aimed at maximizing business value (Reinforce group solidarity)

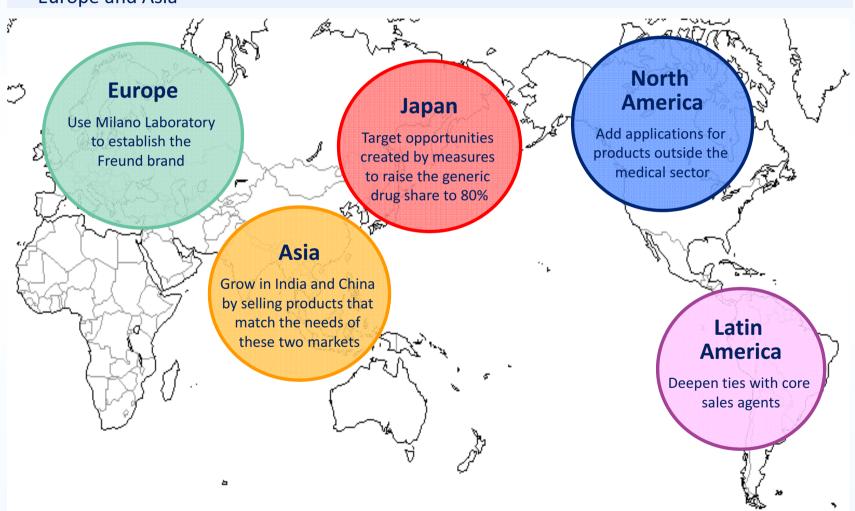
Upgrade technologies and take other actions for cost management and reductions

Clearly define roles and duties of supervisors for the culture reform project and other activities

Implement organizational reforms to maintain the stability of business operations

# **Global Expansion**

■ Use high market shares in Japan and North America to expand coverage to Latin America, Europe and Asia

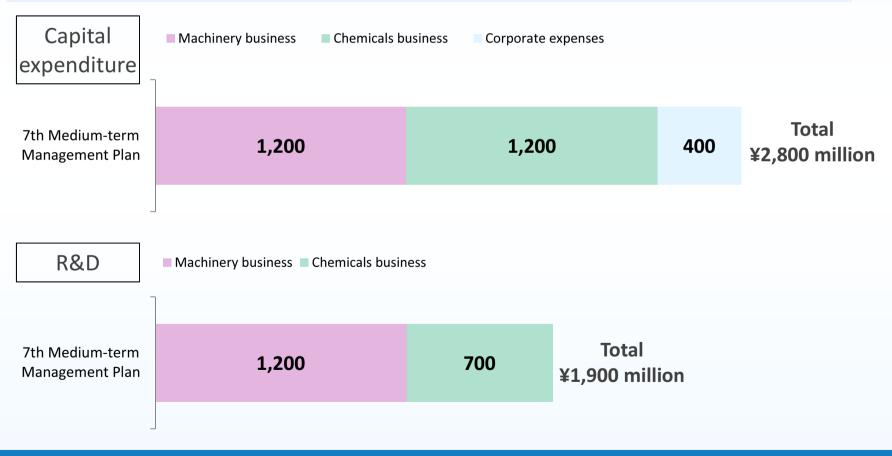


# Projected Five-year Growth of Consolidated Sales and Operating Income



#### **Investment Plan**

- Major capital expenditures:
   Machinery- Milano Laboratory expansion and new overseas laboratories
   Chemicals New and upgraded equipment for producing pharmaceutical excipients
- R&D expenditures: ¥400 million for key technologies and ¥1,500 million for new products



#### A Workforce with the Skills to Drive and Support Growth

- Use recruiting methods that reflect the characteristics of different markets
- Combine on-the-job training with structured training programs

#### Recruiting strategy for new graduates and mid-career professionals

- Behavioral event interview
- Conduct objective interviews rather than focusing on candidates' individual characteristics
- Timely recruiting of people with necessary skills by organizing the recruiting process and building a database
- Strategic career-based recruiting based on a medium-term plan
- Review training program for new graduates so they can quickly do real jobs

#### Strategy for upgrading skills

- Skill upgrading strategy to achieve the level of management required of a company listed on the TSE first section
- Use a well-structured human resources development program centered on management
- Conduct projects for redefining the corporate culture and how people do their jobs

#### **Business Segment Targets**

- Machinery: Offset the decline in demand for current products with new products and expansion into industrial machinery; start full-scale growth outside Japan
- Chemicals: More new products and growth in overseas markets for pharmaceuticals

#### Net sales (Millions of yen) \*Before consolidation eliminations

Segment	6th Medium-term Management Plan
	FY2/17 (Results)
Machinery	14,914
Freund Corporation	9,446
Freund-Vector Corporation*	4,727
Freund-Turbo Corporation*	1,641
Chemicals	6,249
Segment total	21,164

7th Medium-term Management Plan	Five-year avg. growth rate
FY2/22	(CAGR) (%)
21,340	8.32
13,540	6.79
6,600	7.88
2,400	9.95
8,660	11.56
30,000	9.21

#### Operating income (Millions of yen) \*Before consolidation eliminations

Segment	6th Medium-term Management Plan
	FY2/17 (Results)
Machinery	1,750
Freund Corporation	1,245
Freund-Vector Corporation*	388
Freund-Turbo Corporation*	79
Chemicals	748
Segment total	2,041

7th Medium-term Management Plan	Five-year avg. growth rate (CAGR) (%)	
FY2/22		
2,260	9.12	
1,460	10.56	
500	16.23	
300	39.16	
740	11.56	
3,000	9.69	

# Machinery Business: Strategic Goals

- Increase sales of tablet printers
- Launch strategic new products
- Grow in overseas markets
- Use Freund's drug and powder technologies in other business sectors

#### **Pharmaceuticals**

- Increase sales of the TABREX Rev. tablet printer
- Expand operations in India and China
- Start selling continuous production equipment (GF)
- Create ideas for operating leases and other new businesses
- Establish and launch a product lifecycle management business model

#### Manufacturing

- Start selling equipment to manufacturers of lithium-ion batteries
- Create equipment for the development of new materials
- Increase sales of fluid-bed granulation devices for the food industry

# Chemicals Business: Strategic Goals

- Increase production capacity for pharmaceutical excipients and food preservatives
- Target India for excipients and the ASEAN region for food preservatives

#### Pharmaceutical excipients

- Framework for sharing customer info by the machinery and excipients divisions
- Use core technologies to refine drug formulation techniques
- Increase output capacity of facilities at the Hamamatsu office
- Increased commitment to Good Manufacturing Practice for excipients

#### Food preservatives

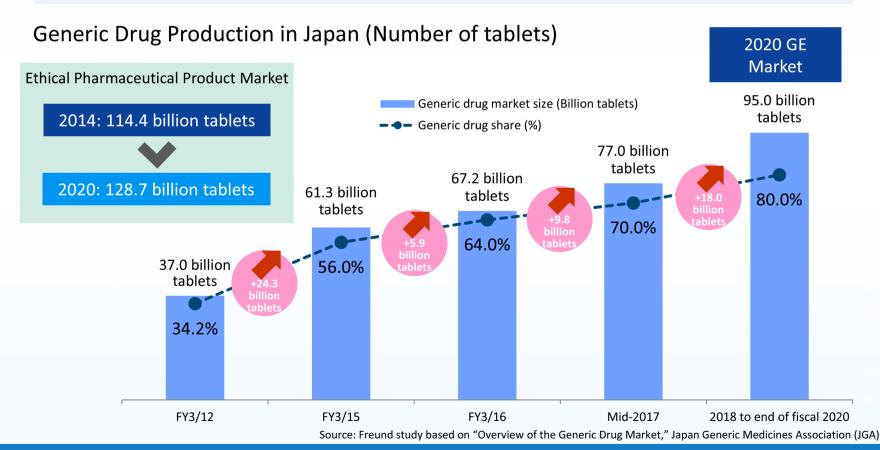
- Overseas growth with support of the Overseas Sales Division
- Start selling products in food sectors other than the confectionery category
- Establish a quality management system
- Start selling oxygenabsorbing products for preserving food
- Cut expenses

#### New food products

 Develop new products by drawing on synergies with the Equipment Division

# Projected Growth of Japan's Generic Drug Market

- Growth in demand for equipment resulting from the growth of generic drug production
- Increase sales of pharmaceutical excipients for generic drugs



# The New TABREX Rev. Tablet Printer

Development period: January 2015 – June 2016

■ Launch: July 1, 2016

■ Start of sales: September 1, 2016

■ First orders: Fourth quarter of FY2/17

Patents: 14 pending and 5 more to be submitted

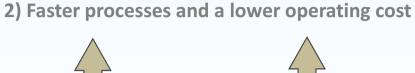


Samples of printed tablets



## The New TABREX Rev. Tablet Printer (How TABREX Rev. Works)

1) Flexibility to match production volume



3) Easy compatibility with different types of tablets



#### Modular format

The modular format allows the number of units to be changed to match production volume. This makes it easy to expand this system to handle future growth in production.

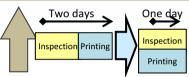


500,000 tablets / hour



Space-saving size
Height: 1,800mm Width: 1,090mm

# No need for additional inspection steps



# Includes external inspection function

Checks for defective tablets prior to printing.

Printing inspection

Tablet supply mechanism

#### Easy maintenance

Printing head is a cartridge, making replacements easy and eliminating the need for cleaning. Purchase only as many heads as needed.



#### Cartridge printing head

Allows replacement with one-touch simplicity.

#### Easy to switch tablet sizes

Can be reset to a different tablet size with only minor adjustments or additional parts.



#### Guideless tablet transport

The circumference of tablets are attached to the edge of the disk to facilitate a guideless pickup.



## Simply link units with single-row transport

Tablets are attached to the edge of the disk in a row and testing and printing operations are executed as tablets are transferred from one disk to the next.

## **Domestic Sales Division**

#### Strategic Objectives

Become the leader in the tablet printer market

- Enact business process reforms (Kaizen)
- Provide value combining machinery, excipient and drug formulation technologies

#### Actions to become more competitive

- Strengthen customer relationships by combining machinery and excipient skills
- Sales activities combining machinery, excipient and drug formulation technologies to differentiate Freund from competitors
- More and better services and even greater speed

#### Increase sales of new products

- Add operating leases and other new business models
- Use customer seminars, private showings and other marketing activities
- New ideas for ways to provide value to customers; clearly define the benefits of new products

#### Better quality and foundation for sales activities

- Use machinery and functional excipient synergies for improving skills of employees
- Use Sales Promotion Office and parts centers to divide sales duties for increase efficiency
- Eliminate waste and raise efficiency by establishing systems for estimates and project management
- Increase information sharing and cooperation among machinery, functional excipients, overseas businesses, and Freund-Vector and Freund-Turbo

#### Identify customers' needs/wants and deepen ties with customers

- Sharing of customer information by machinery and functional excipients sales units
- Organize and analyze customer data

## **Overseas Sales Division**

## **Primary Goals**

- Make overseas business operations a major component of the Freund Group
- Consistently position the Freund Group as one of the world's major global suppliers in its targeted markets

## **Machinery**

- Expand operations in India and China
- Unique products + Standard products + A sound local infrastructure

#### **Priorities**

(1) Stronger local presence Laboratories and services; local procurement

(2) More competitive New product models, overseas test marketing, cooperation with Freund-Vector

(3) Products New model of dry process granulation device

## **Excipients**

- Start overseas excipient sales by using overseas machinery business network and customer research
- Establish business models for products and services
- Build operations to a significant size by creating the required infrastructure and raising awareness of Freund

#### **Priorities**

(1) Strong local presence Use Freund-Vector, operations in Japan, and global laboratories

(2) More competitive Grow by increasing production capacity

(3) Products Excipient processing technology services using Freund's global network

## **Equipment Division**

## Strategic Objectives

- Establish the capability to create products that can be sold worldwide
- Improve profit margins by building a Freund-style fabless business model
- Cut costs by working with partner companies for value analysis and value engineering

## New Equipment Development Department

- Finish development of the TABREX X and add more options
- Use TABREX X core technologies in other products

## Powder Technology Department

 Research for use of Freund technologies to start a lithium-ion battery business

#### Quality Assurance Office

- Convert certification to ISO9001-2015
- Use ISO9001 to improve quality and customer satisfaction

#### **Equipment Procurement Department**

- Cost-cutting activities
- More cooperation with partner companies

## **Product Engineering Department**

- Establish and launch a product lifecycle management business model
- Redefine the fabless business model and determine methods for conducting value analysis/engineering with partner companies

# Freund-Vector Corporation

## **Primary Goals**

- Raise awareness of the Freund Group in other countries and increase market share
- Become a company that can supply added value by developing many new technologies

## Markets/Competition/Challenges

- Highlight competitive technologies (open technology center, extensive PR activities)
- Economic weakness in many countries (Brazil, Turkey and others)
- Dollar's strength makes competing with European companies difficult

#### Strategic Objectives

- Transform from an equipment supplier to a source of added value
- Create businesses that can become core operations in the future (including new product lines)
- Employee training to develop the next generation of leaders
- Develop many new products (machinery, processes)
- More cost reductions; development of lower-priced products

#### **Sales**

- Expand sales territory (Russia and other countries)
- Use social media to increase public awareness of Freund-Vector
- Use more seminars to bring more customers to laboratories

#### **Technologies/Manufacturing**

- Steady output by revising development operations and adding more people
- Reinforce cost-cutting activities (overseas production, consider acquisitions)

#### **Laboratories**

- Improve perception of laboratories by renaming them technical centers
- Be a source of value-added services
- Use more seminars, research papers and other activities to raise awareness of laboratories (technical centers)
- Open more laboratories (technical centers)

#### **New businesses**

• Name a manager exclusively for new businesses to create and implement ideas for new activities

## Chemicals Division

## **Chemicals Sales Department**

- Overseas growth with support of the Overseas Sales Division → Switch from a defensive to an offensive stance
- Target new market sectors → Start selling products in food sectors other than the confectionery category

#### Chemicals Development Department

- Use core technologies to refine drug formulation techniques
- Develop new products by drawing on synergies with the Equipment Division

#### **Chemicals Production Department**

- Rebuild production operations and cut the cost of making products → Determine the cost of making products, reduce complaints, add production lines
- Reinforce quality assurance → Start using a system for food preservative production; strengthen Good Manufacturing Practice compliance for excipients

#### Chemicals Procurement Department

- Maintain the stability and reliability of procurement activities
- Total cost reductions

## **Chemicals Division**

- → Use competitive technologies to establish a presence in more markets
- Establish and execute a suitable employee training plan
- Make capital expenditures based on a plan and confirm the benefits of these expenditures

# **Corporate Administration Division**

## Strategic Objectives

→ Shift to a department consisting of administration professionals

- Restructure business processes
- Build a foundation for growth of the entire Freund Group
- Build a more powerful organizational structure for the group

## Administration & Human Resource Department

- Determine the competencies that define Freund (the types of people who are needed)
- Formulate a Freund human resources development program
- Foster an environment that encourages creativity and maximizes productivity
- Make revisions to personnel systems
- Recruit professionals needed to implement strategies
- Upgrade capabilities of the Administration & Human Resources Department

#### Finance Department / Business Management Office

- Business model visualization = Identify items required for managerial accounting
- Restructure all business processes = Visualization of business activities; establishment of KPI
- Examine functions and operations of the company's IT systems for business activities
- Strategic training of accounting and finance personnel

# **Freund Group Strategies**

#### Strategy for human resources

- Determine the competencies that define Freund (the types of people who are needed)
- Formulate a Freund human resources development program
- Make revisions to personnel systems

## Business process reforms (BP Reform Project)

- Reforms for all business processes
- Exhaustive reexamination of IT systems for business activities

→ Build a base for using the group's business frameworks prior to the development of management systems

## **Environment/Society/Governance**

- Study and conduct CSR activities based on the 10 principles of the United Nations Global Compact Use CSR activities reflecting the values of the 10 principles to contribute to growth in corporate value
- Review internal controls and the use of these controls every year to confirm and improve the effectiveness of the group's internal control system

# The Freund Group Disclosure Policy

#### 1. Basic disclosure policy

Freund positions the transparency of management as an important responsibility in order to be a company that can be a trusted member of society. To maintain this transparency, we always disclose information about the company in a manner that is fair and timely from the standpoint of all stakeholders.

#### 2. Standard for disclosure

Freund discloses information in compliance with the Companies Act, Financial Instruments and Exchange Act, and other applicable laws and regulations. Disclosure also complies with the timely disclosure rules of securities exchanges where the company's stock is traded. In addition, Freund discloses information that is not covered by these laws and regulations and exchange rules in cases where the information is believed to be necessary for investment decisions.

#### 3. Disclosure methods

Freund discloses information by using the Timely Disclosure network (TDnet) of the Tokyo Stock Exchange. To ensure the timeliness and fairness of information announced using TDnet, this information is posted promptly on Freund's website. In addition, press releases and other information are promptly posted on Freund's website and made available in other ways to ensure disclosure fairness and speed. Furthermore, information in Japanese is supplied in English as much as possible to make information available to a large number of stakeholders.

#### 4. Prevention of insider trading

For the prevention of insider trading, Freund's internal rules include provisions concerning basic items that must be observed regarding the proper management of internal information, Freund stock transactions and other matters. There are also activities for ensuring that Freund personnel understand insider trading restrictions and for overseeing stock and other transactions.

#### 5. Silent period

To prevent leaks of information about earnings announcements, as well as to comply with laws and regulations and ensure the fairness of these announcements, Freund has a "silent period" that begins on the day following the end of each fiscal year quarter and ends on the day of the earnings announcement for that quarter. Freund will not reply to any questions concerning results of operations during this period. However, in the event of the possibility that results of operations will differ significantly from the forecast, Freund may disclose this information in accordance with timely disclosure rules.

#### 6. Forward-looking statements

Information disclosed by Freund may contain information about the future other than sales and earnings forecasts, such as information about strategies and business plans. This information is based on the decisions of management by using information that was available at that time. As a result, actual performance may differ significantly from forward-looking statements due to changes in the economy and market conditions and other reasons.

(Established on March 27, 2017)

# **Investor Relations Policy**

The Freund Board of Directors approved the following policy for investor relations activities on March 27, 2017.

#### Policy concerning constructive dialogues with shareholders and other investors

Freund has a strong commitment to conducting constructive dialogues with shareholders and other investors in order to contribute to the company's sustained growth and long-term growth in corporate value. By providing clear explanations of management policies, business operations and the corporate culture, Freund aims to earn the understanding of shareholders and other investors in order to continue to receive their support as "Freund fans."

- Investor relations framework The Corporate Communications Department responsible for investor relations oversees
  dialogues with shareholders and other investors under the direct supervision of the company's president. In addition, the
  president is assisted by a director who is in charge of investor relations.
   To support these dialogues, Freund departments involved with dialogues cooperate, such as by preparing and checking
  disclosure materials and, as needed, sharing information, so that information is disclosed with fairness and speed.
- 2. Stakeholder dialogues Freund holds information meetings about results of operations and other subjects following the end of the second quarter and fiscal year. Small meetings are held after the first and third quarters. Information provided at these meetings is posted on Freund's website. When a medium or long-term management plan is established, the company provides a clear explanation of strategic goals and business plans. In addition, Freund frequently visits institutional investors to explain its goals and performance. Freund also participates in investor forums held by securities companies, holds information meetings for individual investors, and conducts other activities for stakeholder dialogues.
  The FREUND Integrated Report and other IR documents are distributed to shareholders and posted on Freund's website. This publication contains business and financial information as well as about the company's strengths that do not appear in the financial statements. By providing more information about the Freund Group, this publication aims to help the public understand the true corporate value of the group.
- 3. Feedback of shareholder/investor opinions Opinions and other statements by shareholders and other investors at dialogues are passed on to the president, directors and others and the information is shared as needed.
- 4. Management of insider information There are no shareholder/investor dialogues during each silent period, which begins on the day following the end of each fiscal year quarter and ends on the day of the earnings announcement for that quarter. Freund handles insider information strictly in compliance with internal rules concerning the management of internal information and restrictions on transactions by Freund personnel.

# (Supplementary Materials)

- Company Overview
- Segment Information
- Quarterly Performance

# **Company Overview**

Company name : Freund Corporation

●Established : April 1964

Representative : Iwao Fusejima, President & CEO

●Location : 6-25-13 Nishi-shinjuku, Shinjuku-ku, Tokyo, Japan

Paid-in capital : 1,035,600,000 yen (As of February 28, 2017)

•Sales : 21,160 million yen (Fiscal year ended February 2017, consolidated)

Number of employees: 390 (As of February 28, 2017, consolidated)

Business
 Machinery business- Manufacturing and sales of granulation and coating equipment and others

Chemicals business- Manufacturing and sales of pharmaceutical excipients,

food preservatives, and others

Subsidiaries : Freund-Vector Corporation, Freund-Turbo Corporation

# The Freund Group

**Domestic users** 

Sales of machinery

Sales of chemical

products

# Freund Corporation

## **Research and Development Laboratories**

- Research and Development Laboratory (Hamamatsu)
- Marion Laboratory (Iowa, USA)
- Milan Laboratory (Milan, Italy)



Research and Development Laboratory (Hamamatsu)

Using innovative technologies for rapid growth outside Japan

Freund-Vector Corporation

Freund-Turbo Corporation

#### Overseas users

Sales of machinery
Sales of chemical products

# Our "Pen" (Machinery) and "Ink" (Chemicals) Business Model

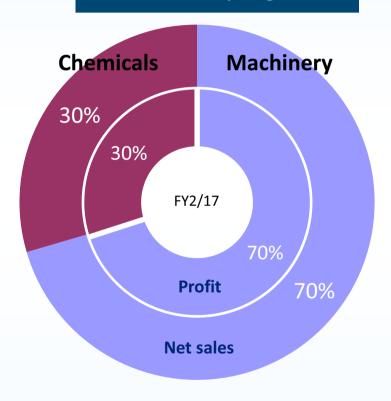
## 1. Machinery Business Segment (Pen)

- Manufacturing and sales of granulation and coating equipment for the pharmaceutical, food, and fine chemical industries.
- For coating equipment, Freund ranks first in Japan and sales growth is accelerating in Asian market and in Freund-Vector's U.S. and European operations. No other company in the world has expertise in both drug formulation technologies and the associated machinery.
- Aiming to increase sales of machinery for industrial applications too by combining granulating and coating technologies with milling and sieving technologies.

## 2. Chemicals Business Segment (Ink)

- Manufacturing and sales of pharmaceutical excipients, food preservatives, nutritional supplements, and others.
- Freund uses Good Manufacturing Practice (GMP) compliant equipment to produce pharmaceutical excipients.
- Food preservatives made by Freund help ensure the safety of food by maintaining the quality of many types of products.
- By using its granulating and coating technologies, Freund has worked with customers to develop and commercialize nutritional supplements and seamless mini-capsules.

Composition of Net Sales and Profit by Segment



Consolidated sales: ¥2
Consolidated operating income: ¥

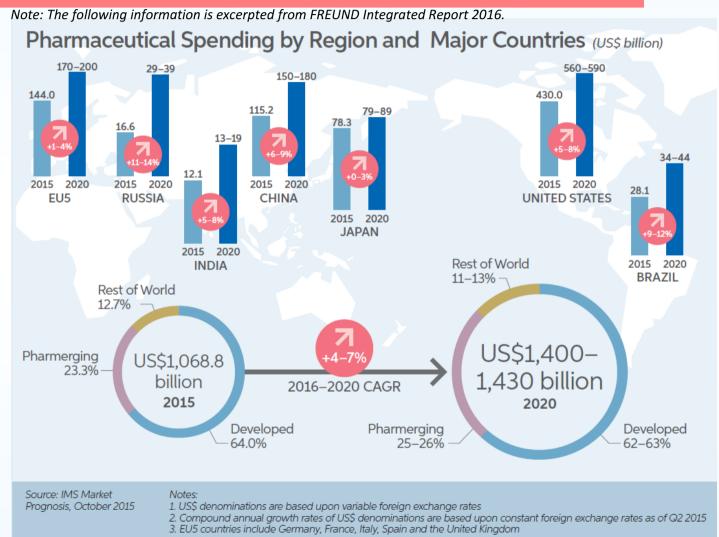
¥21.16 billion ¥2.04 billion

# Strengths of the Freund Group (The Pharmaceutical Business Model)

Note: The following information is excerpted from FREUND Integrated Report 2016. FREUND Group's Business Fields based upon Pharmaceutical Products Manufacturing Processes **FREUND Group Business Fields** Drying/ Grading **Tableting** Tablet Granulating Packing Coating Printing Classifving Using core competences in Equipment and Chemicals Divisions to provide unique products **Grinding/Classifying Equipment Granulating Equipment Coating Equipment Printing Equipment Fine Chemicals Coating Liquids** FREUND CORPORATION FREUND CORPORATION FREUND CORPORATION FREUND CORPORATION Domestic FREUND-TURBO CORPORATION FREUND CORPORATION FREUND CORPORATION Overseas (FREUND-TURBO CORPORATION) FREUND-VECTOR CORPORATION FREUND-VECTOR CORPORATION Strengthen **Enter into** Fortify Non-Pharmaceutical Product Field **Global Operations New Business Fields** 

# Global Pharmaceutical Spending (2016-2020)

## Pharmaceutical markets are growing rapidly in emerging countries



# Machinery Business: Main Products are Granulating and Coating Equipment for Pharmaceutical Companies

- In the machinery business, pharmaceutical machinery is 83% of sales and industrial machinery is 17%
- Granulating and coating equipment for pharmaceutical companies are the core products Start of accepting orders for tablet printers
- Industrial machinery sales are increasing

Sales Composition
(FY2/17)

Industrial machinery
17%

Automated tablet coating device (HICOATER FZ)

83%
Pharmaceutical

Seamless mini-capsule device (SPHEREX®)

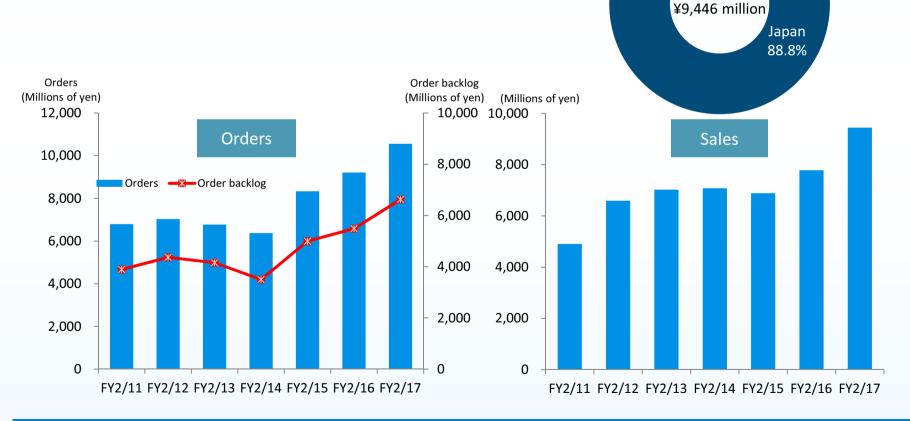


Fluid bed granulation device (FLOW COATER)



# Machinery Business: Freund Corporation

- Pharmaceutical machinery is the main source of growth
- Orders for pharmaceutical machinery are strong in Japan and Asia



Sales by Region

FY2/17

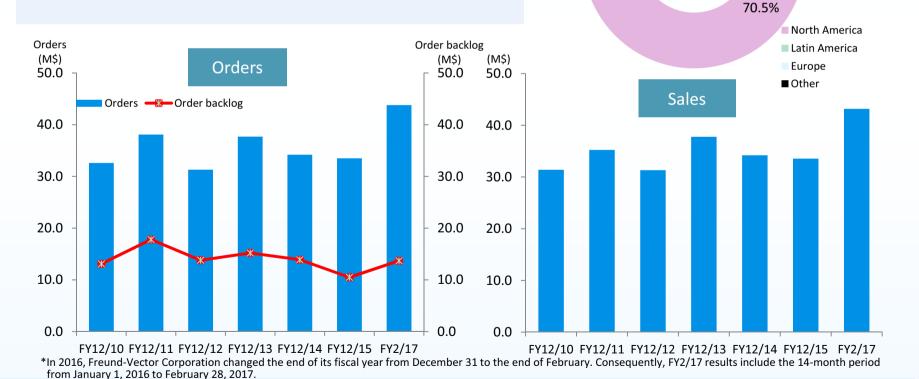
Export

11.2%

# Machinery Business: Freund-Vector Corporation



Received large order in the food sector



Sales by Region

FY2/17 \$43 million

9.3%

8.5%

11.7%

## Chemicals Business: A Growing Product Lineup for the Healthcare Sector

- About one-third of sales is pharmaceutical excipients, food preservatives, nutritional supplements and other products made for other companies
- Sales of pharmaceutical excipients for generic drugs continue to increase

#### Pharmaceutical excipients

- Directly compressible mannitol/lactose
- Spherical granules
- Adsorbent/solidified agents/fluidized agents
- White coloring agents
- Lubricant agents
- Luster agents
- Excipients

#### Food preservatives

- Food excipients
- Food quality preserving agents

#### Nutritional supplements/others

- Seamless mini capsule
- AQ shelax® (aqueous liquid)
- Supplements
- Coenzyme Q10 (40% water-dispersible powder)







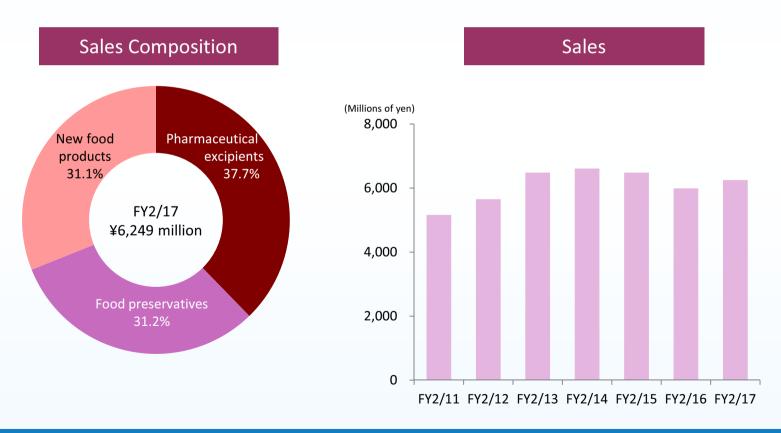






## Chemicals Business: Performance

- Strong sales of pharmaceutical excipients to manufacturers of generic drugs
- For new food products, production increases by users were larger than expected



# **R&D: Creating Innovative Products Over 50 Years**

	Machinery	Chemicals
964	Automatic film coating device	Film coating liquid
965		HPC, HPS
966		Perfiller®-101, Lubriwax®-101
L967		CMEC®
1969	Fluid bed granulation coating device FLOW COATER	
1970	Dry process granulation device ROLLER COMPACTOR	
1971	Automatic sugar/film coating device HICOATER®	
972	-	Food preservative for strawberries Antimold®-101
1975	Centrifugal fluid coating granulation device CF-Granulator	Pharmaceutical excipient Dilactose®
978		Food preservative Antimold®-102
981	Hybrid fluid bed granulation coating device SPIR-A-FLOW®	Pharmaceutical excipient NONPAREIL®-101
1982		Pharmaceutical excipient NONPAREIL®-103
1983	Water activity measurement device	
1987		Multi-functional food preservative Negamold®
1988	Aqueous coating device AQUA COATER®	Nutritional supplement Active Gingko Leaf Extract
1990	Pharmaceutical production process automatic control system Phamatronics®	The state of the s
1991	Seamless mini-capsule device SPHEREX®	Pharmaceutical excipient NONPAREIL®-105
1994	Particle form measurement device Granutronics®	The medical chapters with the same and the s
2000	Centrifugal rolling granulation coating device GRANUREX®	
2001	Rotary-type fluid bed granulation dryer TECTRANSOR®	
2002	Thotally type hald bed grandation dryer recentivities.	Sustained ethanol evaporation food preservative Antimold® Tender
2003		Food coating base AQ shelax®, food additive Perfiller®102
2005	Twin screw drying granulator ROLLER COMPACTOR	1 550 Couring Subscrite Stillett / 1000 additive refiniter 102
-005	Automatic anti-mold detector Antimold® Detector	
2006	Fully automatic coating system for food and nutritional supplements HICOATER FPC	Pharmaceutical excipient NONPAREIL®-108, pharmaceutical excipient Polishing Wax-10!
2000	automatic coating system for food and natificional supplements incompletion	Food additive Polishing Wax-104
2008	Development of chitosan coating technology	1 ood additive 1 onsiming wax-104
2008	Automatic tablet coating device HICOATER FZ	
2009	Fluid bed granulation coating device FLOW COATER Universal	
2009	Powder and granular material transportation container washing device Container Washing	
	Device	
2010	High-speed agitation granulation device GRANUMEIST®	Pharmaceutical excipient Granutol®
2010	Wet/dry process granulator Millmeist	Food additive FOODSGURD®
2012	Tweety ary process granulator infilmreist	Food preservatives Negamold® Natural, Light
2012		Food additives Maltitol Granule®, Isomalt Granule®
2013		Direct compressible lactose Dilactose®F (Fine)
2014	   Tablet printer TABREX®	Directly compressible orally disintegrating tablet Granutol® F (Fine)
	Tablet printer TABREX Rev.	Directly complessible orally distillegrating tablet orallutor 1 (Fille)

# **Quarterly Performance**

(Millions of yen)

	FY2/15			FY2/16				FY2/17				
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Machinery orders	3,648	2,549	3,016	3,192	3,833	2,900	2,938	3,440	3,689	4,716	3,836	4,115
Machinery order backlog	6,945	7,235	7,225	6,682	8,900	8,676	7,976	7,086	8,318	9,765	9,288	8,561
Consolidated sales	3,506	3,865	4,639	5,413	3,002	4,694	5,384	5,945	3,912	4,850	6,004	6,397
Machinery	1,794	2,248	3,105	3,792	1,826	3,166	3,671	4,373	2,413	3,284	4,305	4,911
Chemicals	1,711	1,616	1,533	1,620	1,176	1,528	1,713	1,572	1,498	1,566	1,698	1,486
Consolidated segment profit	(20)	121	483	565	(24)	223	528	619	295	392	753	600
Machinery	47	77	486	496	(9)	161	425	611	220	347	586	595
Chemicals	80	112	128	151	81	137	185	114	178	178	245	146
Elimination or corporate	(149)	(67)	(131)	(83)	(97)	(75)	(82)	(106)	(103)	(133)	78	(141)
Yen/dollar rate	102.8	102.5	102.9	105.8	119.2	120.3	121.0	121.1	115.4	111.7	108.6	109.5

Note: Yen/dollar rates are the averages for calendar year quarters.

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