

FREUND CORPORATION FREUND Report 2022

Fiscal Year Ended February 28 2022 (From March 1, 2021 to February 28, 2022)

Contents

Profile 1
Milestones of FREUND Group 2
Global Network of FREUND Group - 3
Value Creation Cycle of FREUND Group ——— 4
Manufacturing Process for Pharmaceutical Products and FREUND Group's Business Scope — 5
Overview of Business Segments and Relationship with Society6
10-Year Consolidated Financial Data of FREUND Group7
Top Message — 8

Close-Up

Disclaimer

Pharmaceutical Product Field ——	13
Non-Pharmaceutical Product Field ————	15
Sustainable Management Foundation ————	17
Company and Stock Information —	22

Forward looking statement

This Report contains forward looking plans, estimates, strategies, financial results and other statements. Such information is based on the most accurate information available at the time of production of this Report. Therefore, the Company's actual financial results may diverge largely from statements represented in this Report due to the influence of various risks and uncertainties. Influencing factors include the economic environment, competitive pressures, related regulations and laws, changes in product development conditions and fluctuations in foreign exchange rates relating to the Company's businesses. Furthermore, the factors influencing the Company's estimates and other statements are not limited to the above.

Note: The details of this Report are based on the results of the fiscal year ended February 28, 2022(from March 1, 2021 to February 28, 2022). (However, new information available after March 2022 has also been included in this Report.)

Profile

We have grown on the basis of our "Hardware (pharmaceutical product manufacturing equipment, pharmaceutical excipients and other products)" and "Software (drug formulation technologies)" business models. Currently, we have 6 Group companies in Asia, the U.S. and Europe, including Japan. We are expanding our business segment not only to pharmaceutical product field but also to non-pharmaceutical product field. Based on the Group's value of "ONE FREUND," we are promoting business activities aimed at "contributing to better medical care and health for people worldwide" in management vision.

Corporate Philosophy

Develop the Future through Creativity®

Management Vision

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

Values which the FREUND Group holds precious





HISTORY of FREUND

Milestones of FREUND Group

Focusing on film coating technologies for tablets, we were the first in the world to succeed in developing "automated film coating machine" and "film coating liquid." Since our foundation in 1964, FREUND CORPORATION has been on a path as a research and development type company based on granulation/coating technologies under corporate philosophy of "Develop the Future through Creativity_®."



Global Network of FREUND Group

In July 2021, we established the Shanghai FC Center, a technology development research center in China, and are preparing to start operations during FY02/23. As a result, our Group's global network in the pharmaceutical product field now consists of a five-pillar-structure including Japan, the U.S., India, Italy and China. The addition of manufacturing sites in India and Italy to the existing sites in Japan and the U.S. has strengthened the business development in the pharmaceutical emerging regions. For China, a huge pharmaceutical emerging market, we will handle both machinery and chemical products at the Shanghai FC Center to increase awareness of our products. Through these efforts, we will provide better products suited to the market, respond to regional needs for services including maintenance and cultivate high-quality local agents. With the establishment of a five-pillar-structure as a cornerstone, we aim to expand our global market share by pursuing synergies among group companies.

The business domains developed at each site and the functions of each site are as follows.



Shanghai FC Center will start operations during FY02/23

Value Creation Cycle of FREUND Group

We have grown our solid dosage manufacturing equipment business, such as tablets and granules, and pharmaceutical excipient business since founding. We are a unique research and development-oriented group of companies that are involved in both formulation of machines and excipients in the pharmaceutical field, and are the only one of its kind in the world. In recent years, while expanding our fundamental particle processing technologies into non-pharmaceutical product fields such as food and industrial applications, we have added material handling equipment that is used in the ancillary processes for pharmaceutical products to our business domain and are promoting global business activities. Furthermore, we are taking on the challenge of realizing sustained growth based on our management vision by launching our own engineering services with a view to solving problems with existing equipment operating at our clients' manufacturing sites.

Sustainability policy

For FREUND Group, sustainability means aiming for sustained growth of stakeholders, the Group and society, based on our corporate philosophy of "Develop the Future through Creativity_e". We will contribute through the value we provide to our clients in our corporate activities, while taking into consideration issues such as abnormal weather, resource depletion, deforestation, and human rights. We will also strive to contribute to the realization of a long-term sustainable society from an ESG (Environment, Social and Governance) perspective, taking into consideration D&I (Diversity & Inclusion).



Outcome

Providing value to stakeholders

Shareholders/ Investors

Contributing to asset formation, increased visibility in capital markets

Clients

Further cooperation as a good partner and stable supply of reliable products

Employees

Respect for human rights, promoting individual growth and providing a comfortable and safe work environment

End Users

Enjoyment of good medicine and realization of good health and a prosperous life

Society

Contributing to civil society and international society



Business modeling of the machinery business "Pen" and chemical product business "Ink"

Since our inception, we have differentiated ourselves from our competitors in the pharmaceutical field through developing the business model of "Pen" machinery and "Ink" chemical products. Today, we have established ourselves as a leading company in the pharmaceutical manufacturing equipment industry.



Unique value-added creation through the fusion of "hardware" and "software"

In addition to the research and development of "hardware" such as machinery equipment and chemicals, our Group possesses the "software" for particle processing technologies that fusing their superior performance. By integrating "hardware" and "software", we promote unique value-added creation to produce original in-house products, contract processing and technical services. Manufacturing Process for Pharmaceutical Products and FREUND Group's Business Scope Our main products are machinery equipment and chemical products such as excipients, which are used in the process of manufacturing pharmaceutical products (tablets and granules, etc.). FREUND is the only enterprise in the world that conducts both the machinery equipment and chemicals businesses in pharmaceutical related business. Furthermore, in November 2020, the Group's product lineup expanded significantly with Italy's Cos.Mec joining the Group, which material handling equipment that is used in the ancillary processes for pharmaceutical products.



Please see here for product details.



Overview of Business Segments and Relationship with Society

Based on technologies such as granulating, coating, pulverizing, classifying, the FREUND Group is expanding its businesses into the non-pharmaceutical product field including food and other industrial applications in addition to the pharmaceutical product field. The Group is thereby taking on new challenges that can contribute to improving the quality of health and life of people.

Machinery Business Segment Manufacture and sales of granulating and coating equipment for pharmaceutical, food, cosmetic and other products

Characteristics

- Granulating/coating equipment boasting the top share of the world market as well as the Japanese market
- Accelerating deployment of businesses in Asia, as well as Europe and North America via subsidiaries in the U.S. and Italy
- Developing equipment based on drug formulation technologies
- Focusing on sales expansion of equipment for other industrial business fields by integrating granulating/coating and pulverizing/classifying technologies

Chemicals Business Segment

Manufacture and sales of pharmaceutical excipients, food preservatives and health foods

Characteristics

- Pharmaceutical excipients manufactured at GMP* certified facilities
- Food preservatives used to preserve the quality of various foods contributing to food safety
- Commercialization of health foods and seamless mini-capsules jointly developed with client companies using granulating and coating technologies

*GMP: Good Manufacturing Practice

Provision of Value to Society

Improving the quality of medical care by increasing the value addition of pharmaceutical products

Improving drug efficacy through granulating and coating technologies

For over half a century, FREUND CORPORATION has leveraged its core competencies of granulating and coating technologies, along with its products and drug formulation technologies, to increase the value of pharmaceutical products. At the same time, FREUND has conducted manufacturing that enables more people to access high value-added pharmaceutical products, and the Group strives to improve the quality of medical care worldwide.

Contributing to aging society by pursuing "easy to ingest" drugs

Active pharmaceutical ingredients account for only several percent of total volume of drugs, with the remaining portion being excipients that are used to make drugs into sizes that are easy to swallow and for coating of the surface to mask the bitter taste. FREUND is strengthening the development of orally disintegrating tablet (ODT) related products which use a unique drug formulation technology and allows for easier ingestion of drugs by assisting the swallowing process.

Preventing medical mistakes caused by dispensing errors

In the dispensing field, there are incidents of medical mistakes due to patients taking the wrong drugs because they are similar in appearance and name. FREUND prints on drugs to allow for easy identification and contributes to prevention of medical mistakes worldwide. To do so, FREUND developed the industry's first safe drug ingestion concept that involves a new generation tablet imprinting/inspection machine and specialized inks.

> Tablet Imprinting Machine "TABREX Rev."

Provision of Values to Society

Better taste and health; supporting enriched lives of people

Pursuing fresh taste, safety and security

Food preservatives are small pouches placed inside of packaging to protect the flavor and ensure the safety and security of freshly cooked pastries and breads, Japanese confectionaries and other products. FREUND develops food quality prolonging agents based on its "ethanol evaporation" technology which preserves bacteriostatic effects in order to deliver fresh, tasty products as well as safety and security.



Food Preservatives "Antimold"

Maximizing the effect of effective food ingredients with advanced drug formulation technologies

Along with the increased concern for health, demand for supplements and health foods is on the rise. FREUND is contributing to healthy lives together with health support manufacturers by using advanced drug formulation technologies to promote the function of effective food ingredients and enable easier ingestion.



Food Coating Agent "Chitocoat"

Provision of Values to Society

Taking on challenges in new technological fields to support enriched and convenient lives

Creating new markets for the next generation using FREUND's unique pulverizing technologies

The FREUND Group's powder pulverization technology is used to create products in the cosmetic, food and other industries that support peoples' daily lives. For example, this technology is used in make up foundations which many women wear daily. The fine powders manufactured by the Group's equipment help to produce "healthy looking and clean skin."



High Viscosity Wet Grinding Mill and Separator "AQUA TURBO TZ"



Pharmaceutical Excipients "Granutol F(Fine)"

Continuous Granulation and

Drying System

"Granuformer





10-Year Consolidated Financial Data of FREUND Group

										(¥mi
	FY02/13	FY02/14	FY02/15	FY02/16	FY02/17	FY02/18	FY02/19	FY02/20	FY02/21	FY02/22
or the year										
Net sales	16,396	17,616	17,424	19,027	21,164	19,801	18,408	16,772	16,765	17,632
Cost of sales	11,313	12,377	11,978	12,921	14,343	12,985	12,220	11,344	11,126	11,620
Selling, general and administrative expenses	3,612	3,952	4,295	4,759	4,779	4,845	4,964	4,870	4,528	5,030
Operating profit	1,470	1,286	1,150	1,346	2,041	1,971	1,223	558	1,111	98 1
Profit attributable to owners of parent	765	787	695	961	1,064	1,477	843	381	970	543
EBITDA*1	1,717	1,610	1,478	1,687	2,396	2,329	1,575	951	1,584	1,575
Orders received (Machinery)	9,272	10,067	12,407	13,112	16,358	11,513	11,839	10,227	12,386	15,621
Order backlog at end of period (Machinery)	5,263	4,991	6,682	7,086	8,561	5,822	5,428	4,695	6,615	10,574
Capital investment	222	477	545	266	564	524	627	951	637	57 1
Depreciation	232	303	308	321	338	344	344	386	461	570
R&D expenses	435	464	592	687	640	862	832	725	526	580
Cash flows from operating activities	740	1,227	822	290	3,605	594	435	(27)	2,280	701
Cash flows from investing activities	(332)	(423)	(240)	(432)	(351)	(493)	(566)	(852)	(1,726)	(680
Cash flows from financing activities	(164)	(226)	(284)	(331)	(277)	(499)	(921)	(325)	(371)	(427
t end of period										
Total assets	14,971	15,550	17,277	17,206	19,101	19,125	17,465	18,505	20,575	22,273
Net assets	9,315	10,392	11,180	11,529	12,185	13,242	13,250	13,243	13,858	14,354
(Equity)	9,197	10,239	10,987	11,529	12,185	13,242	13,250	13,243	13,858	14,354
er share data*2										
Earnings per share (EPS, ¥)	44.38	45.69	40.36	55.74	61.72	85.69	50.15	22.79	57.96	32.40
Book value per share (BPS, ¥)	533.37	593.76	637.19	668.57	706.62	767.91	791.34	790.94	827.67	857.28
Dividend*3 per share (DPS, ¥)	10.00	12.50	15.00	25.00	20.00	20.00	20.00	20.00	20.00	20.0
ajor indicators										
Operating profit margin (%)	9.0	7.3	6.6	7.1	9.6	10.0	6.6	3.3	6.6	5.0
Return on assets (ROA, %)	5.1	5.1	4.0	5.6	5.6	7.7	4.8	2.1	4.7	2.4
Return on equity (ROE, %)	8.7	8.1	6.6	8.5	9.0	11.6	6.4	2.9	7.2	3.9
Dividend payout ratio (%)	22.5	27.4	37.2	22.4	32.4	23.3	39.9	87.8	34.5	61.0
Equity ratio (%)	61.4	65.8	63.6	67.0	63.8	69.2	75.9	71.6	67.4	64.4

*1. EBITDA = Operating profit + Technical support fee + Interest expenses + Depreciation

*2. The Company carried out a 2-for-1 split of common shares on March 1, 2016. The "per share" calculations are based on the assumption that the stock splits were conducted at the beginning of FY02/12.

*3. Dividend per share includes commemorative dividends of ¥2.50 (for FY02/15) and ¥5.00 (for FY02/17).



Top Message

Develop the Future through Creativity_®

Under our corporate values "ONE FREUND," we will realize new creations that are unique to our Group.

In the fiscal year ended February 28, 2022 (hereinafter "FY02/22"), the turnaround year for the 8th Medium-Term Management Plan (hereinafter the "Plan"), uncertainty in the global market increased further, because of the geographical risks being increasingly complex in addition to the COVID-19 pandemic. Meanwhile, at the FREUND Group, new creations are germinating in various business fields, which will help us realize our management vision of "contributing to the future of medicine and good health of people around the world." We interviewed Iwao Fusejima, President and CEO about the overview of the Group's business activities and future initiatives.

> Iwao Fusejima President and CEO

FREUND

FY02/22: Overview of Business Activities

Japanese economy continued to face strong downward pressure, particularly on personal consumption, due to the intermittent declaration of a state of emergency and priority measures to prevent the spread of the coronavirus. Although various restrictive measures were eased in stages, with the increased people being vaccinated and "living with Coronavirus (COVID-19)" countermeasures being increasingly accepted, the economic recovery was prolonged due to the spread of new mutant strains of the virus as well as the worsened balance of supply and demand for semiconductors and various materials and components.

In the pharmaceutical industry, which is the main user of the Group, the Japanese market is under pressure to respond to the strengthening of measures to control medical cost, such as the implementation of the drug price revision every year, which used to be once every two years, in addition to the increase in R&D expenses. The government has been promoting measures to encourage the generic drug (GE) industry to raise the diffusion of their drugs, but the effects of these measures have run their course and growth is predicted to slow down. In addition, deficiencies in the manufacturing systems of some manufacturers have led to industry-wide demands for the development of systems to assure quality and a stable supply.

In the global economy, behavioral restrictions have eased, especially in developed countries, with the increased number of people being vaccinated. As a result, economic recovery has progressed, but there are signs of re-expansion of the infections in some areas and disruptions in logistics and supply chains are becoming apparent. In addition, the military invasion of Ukraine by Russia since February 2022 and economic sanctions against Russia by various countries have raised concerns about the impact on the global economy. Thus, the future outlook remains uncertain.

Although our orders received were favorable as an entire Group, prolonging lead times became apparent, particularly in the U.S., due to labor shortages and supply chain disruptions.

In addition, FREUND posted extraordinary losses of approx. ¥210 million on a parent basis due to an impairment loss on equipment that is no longer expected to be used and expenses related to a settlement of a copyright infringement case. We deeply apologize to our stakeholders that we fell short of our annual financial forecasts due to these one-off special factors, in addition to changes in the global business environment.

Business Activities in Pharmaceutical Product Field

Overview of Machinery Business

In the Japanese market, we built up orders toward the end of FY02/22 by capturing extraordinary demand for system development by the GE industry. Orders received also piled up in overseas markets, but the negative impact of COVID-19 pandemic became apparent due to significant delays in shipments.

By region, orders received by Freund-Vector in the U.S. and Brazil were strong, resulting in a record-high order backlog at end of period. Cos.Mec of Italy, whose main markets are emerging countries, not only suffered from the negative impact of the Covid-19 pandemic, but also particularly struggled to absorb fixed costs as it possessed its own manufacturing infrastructure. Despite these difficulties, the order backlog at the end of the

period reached a record high.

In FY02/21, Freund-Vector received approx. ¥200 million subsidies from the U.S. Government as COVID-19 countermeasures, which led to an increase in operating profit and other profits below it. In addition, there were special factors such as insurance income of approx. ¥100 million, but excluding these factors, the company's operating profit and ordinary profit were essentially the same level as the FY02/21.

Overview of Chemicals Business

In the Japanese market, the pharmaceutical excipient business performed well and achieved record sales, despite the disruption caused by the inadequate manufacturing system in the GE industry. In overseas markets, we have promoted sales activities in India and orders are beginning to recover. In addition, changes in product mix and progress in cost reductions led to consolidated year-on-year increases in both sales and profits.

Business Activities in Non-Pharmaceutical Product Field

Overview of Machinery Business

Freund-Turbo, which is responsible for the industrial machinery business, made a progress in expanding its product lineup (please refer to "Close-Up" on page 15 for the company's new product development trends). In addition to the conventional chemical and food industries, the company's efforts to meet next-generation needs in the battery and electronic component industries turned out to be successful, and the company enjoyed the record-high order backlogs at the end of the period.

Overview of Chemicals Business

In the food preservatives business, while the souvenir market, one of the major markets for the business, continued to be affected by the COVID-19 pandemic, demand for confectionary products remained brisk at supermarkets and convenience stores. As a result, net sales reached a record high. In addition, cost control was successful and profitability improved (new products were launched in the food preservatives business. For details, please refer to "Close-Up" on page 16).

In the health food business, net sales declined significantly as expected due to the termination of a contract from a large user, but operating profit declined only slightly thanks to a decrease in low margin projects.

Progress and Outlook of the Plan

The effects of the global supply chain disruptions and tight supply-demand balance for semiconductors and various materials in FY02/22 are predicted to continue in FY02/23. In addition, heightened geopolitical risks have further increased the uncertainty of the business environment.

On the other hand, looking at the global trends of the pharmaceutical industry, a series of capital investment for plant expansion is planned in the domestic market over the next several years, mainly by major GE manufacturers. In the global market, the pharmaceutical market is forecast to grow in the future against the backdrop of an aging population in developed countries and population growth and rising medical standards in emerging countries.

Operating Performances by Business Segment



Net Sales by Product Field and Segment Profit Margin

Pharmaceutical Product Field
Industrial Product Field



1.760

9.357

2.8%

FY02/20



Order Backlog



Chemicals Business

Pharmaceutical Excipients
Food Preservatives
Health Foods







Health Foods - Segment Profit Margin

(¥million)



Review of the Second Fiscal Year and Revision of the Plan for the Final Fiscal Year

In the Plan, the Group had projected consolidated net sales of ¥19 billion and operating profit of ¥1.2 billion for FY02/22. Considering the impact of the COVID-19 pandemic, however, the Group revised its forecasts downward to ¥18.5 billion and ¥1.1 billion, respectively, as of April 13, 2021. In addition, the delays of delivery, especially in the U.S. caused a further decline in sales, resulting in ¥17.63 billion for net sales and ¥0.98 billion for operating profit.

In line with its growth strategy of promoting globalization, the Group has expanded into India in 2019 and Italy in 2020, in addition to Japan and the U.S. In 2022, we plan to start base activities in China, and are building a global five-pillar-structure. We would like to make steady progress in building a global management foundation in the current environment where our business environment is favorable thanks to the higher-level of capital investments by GE manufacturers. Although we have not changed our medium-to-long term growth scenario and our outlook for the business environment, we were forced to revise our consolidated financial forecasts for FY02/23, the final year of the Plan, taking into account that the longer lead-time and rising labor costs which became apparent in the U.S. are also likely to be witnessed in other regions of the world. We, thus, lowered our FY02/23 net sales and operating profit forecasts from ¥20.14 billion and ¥1.46 billion to ¥18.5 billion and ¥0.7 billion, respectively.

FY02/23: Overview of Consolidated Financial Forecasts/Forecasts by Business Segment

Consolidated Financial	FY02/22 (Actual)	FY02/23 (Forecasts)	YoY CI	hanges	Financial Forecasts by	FY (Ac	
Forecasts		(¥million)		%	Business Segment		
Net sales	17,632	18,500	+867	+4.9	Consolidated net sales	17	
Operating profit	981	700	-281	-28.7	Machinery Business	11	
Ordinary profit	1,032	720	-312	-30.3	Chemicals Business	5	
Profit attributable to owners of parent	543	450	-93	-17.2	Segment profit		
EPS (¥)	32.46	26.87	-5.59	-17.2	Machinery Business		
Capital investment	571	-	_	—	Chemicals Business		
Depreciation	570	-		_	Adjustments		
R&D expenses	580	-			Exchange rate (¥/US\$)	11	

nancial Forecasts by	FY02/22 (Actual)	FY02/23 (Forecasts)	YoY Changes			
usiness Segment		(¥million)		%		
onsolidated net sales	17,632	18,500	+867	+4.9		
Machinery Business	11,836	12,700	+863	+7.3		
Chemicals Business	5,795	5,800	+4	+0.1		
egment profit	981	700	-281	-28.7		
Machinery Business	623	_	—	—		
Chemicals Business	884	_				
Adjustments	(526)	_				
cchange rate (¥/US\$)	111.49	120.00				

Initiatives by Group Companies for New Creation

In September 2021, we launched the "HICOATER HV," a new automated tablet coater. For the development team, it is almost as important to them as their own children. As a development-oriented manufacturer, we will continue to give birth to new creations like this.

FY02/22 saw a variety of new creations. In the Japanese pharmaceutical product market, we have introduced new value-added services to our machinery equipment operating in the existing market (For details, please refer to "Close-Up" on pages 13-14).

To realize our management vision of "contributing to the future of medical care and health of people throughout the world" we want to operate our business by pursuing product to meet social requirements, and have begun developing products that are friendly to the environment. In terms of building management foundation, the autonomous activities of our employees are taking shape. As a part of these efforts, we have been taking initiatives e.g., by inviting outside management professionals to participate in the activities cultivating next-generation management-level human resources and D&I (Diversity & Inclusion) activities (for details, please refer to "Sustainable Management Foundation" on pages 20-21).

Although we are facing an uncertain business environment which we have never foreseen before, the Group is taking a major step forward in preparation for the next 100 years. We would like to ask all of our stakeholders for their continuous support to our Group.





Innovation in Existing Machinery Equipment

-Toward further labor saving and "visualization"-

In 1964, we were the first in the world to develop and launch an automated film coating machine for pharmaceutical products. Since then, we have consistently provided solutions to achieve labor savings and have become a leading manufacturer of formulation machines. Here, we introduce the features of the two solutions that aim to create new value: the tablet coating PAT^{*1} system "TACT (Tablet Automatic Coating Tool)" for tablets during coating and the data integrity system "Smart DI". The background to the development of these two solutions will also be introduced.



HICOATER®HV

Background of the Development of "TACT"

In 2019, we were in the process of formulating our "8th Medium-Term Management Plan" which started in FY02/21, when the achievement of the "80% Generic Drug (GE) Volume Share Target" due in September 2020 based on a Cabinet decision in 2017 was imminent. Based on the assumption that capital investment by pharmaceutical companies would slow down after the GE80% special demand, the Equipment Development Section was also considering development themes other than development of new products.

In considering new themes, we set our sights on clients who already use our machinery equipment, and focused on developing solutions to solve their problems by improving and upgrading their equipment, with an eye toward innovation in the existing equipment market, and development of a PAT system with automated tablet sampling was initiated.

Conventional automated sampling systems only automate the ejection of a small amount of tablets from the coating machine, but in addition to the automated tablet sampling mechanism, we aimed to complete a fully automated tablet sampling system that would lead to improved quality stability, work efficiency, productivity, and prevention of human error by automating tablet weight measurement and manufacturing end point prediction.

Advantages of "TACT" and Future Development

Initially, with the "HICOATER FZ," the previous model of the new "HICOATER HV^{*}2" released in 2021, in mind, the development members exchanged various ideas, repeated design studies, and conducted a trial production so that a mechanism to collect a part of the coated tablets being manufactured from the machine could be retrofitted.

This was the industry's first challenge, as there was no other equipment that can be retrofitted, and no other equipment that can measure the number and weight of automatically collected tablets, predict the end-point of production, and automatically terminate the process. In addition to being able to design machines as hardware, software development based on a thorough understanding of the manufacturing flow of tablet coating was necessary, and this was a new challenge for us as well. In particular, the end-point prediction is a control that we were able to achieve only because we are in contact with many of our clients.

We focused on products that would make an impact on first-time clients, and at the same time, could be easily installed on existing equipment at a reasonable price. "TACT" is used in the "HICOATER FZ" as well as the "HICOATER HV".

The response from clients has been positive, as we have been able to provide new value, and we plan to brush it up further in the future. In the future, we would like to add control functions based on AI-based operation prediction to further stabilize production and improve quality.



Overview of the "TACT" System Configuration

Background of the Development of "Smart DI"

Traditionally, in the field of pharmaceutical manufacturing and quality control, handwritten records have been used because it is believed that electronic records do not keep a history of record revisions and changes. On the other hand, in recent years, based on the "Guidance on Data Integrity" issued by the United States Food and Drug Administration (FDA), there has been an increasing demand for systems that achieve record integrity through electronic records.

The Japanese pharmaceutical industry faces the challenge of complying with GMP*³ revisions which places a heavy burden on the site of quality control and pre-shipment inspections. In order to solve such client issues, we established a new Control Section in our Technology Development Research Center in 2019 to develop a data integrity system, the "Smart DI," that complies with data integrity guidance and GMP and keeps clear record/data of manufacturing process.

*3 GMP (Good Manufacturing Practice): Standards for manufacturing control and quality control of pharmaceuticals products

Advantages of "Smart DI"

Our equipment is operated using a control panel. This system keeps a log of all data changes and deletions as well as logs of the workers. This makes it possible to prevent fraud on the site and reduce the workload of manufacturing and quality managers. With regard to data integrity, test equipment manufacturers were among the first to take action in the field of quality control, and authorities have since strengthened their audits in this area, with many companies introducing LIMS^{*4} and other systems.

In order to make it easy to introduce our "Smart DI" into production facilities, the system lineup was constructed in three stages, (1) acquisition of operating data and management of data in the control panel, (2) centralized management of data in multiple devices, and (3) creation of a database that enables data retrieval and extraction. Since the required functions can be selectively implemented, we can propose and implement the appropriate version to meet the needs of our clients, from the small start needs of those who want to start by acquiring digital data logs. "Smart DI" is also highly reliable and durable in commercial manufacturing, so it can be equipped in the control systems of existing facilities that combine PLCs^{*5} and touch panels, which are mainly used in Japan.

In the future, in addition to brushing up functions such as "a confirmation screen when outputting acquired data to USB memory" and "outputting data in a form that is easy for clients to review and cannot be tampered with." We will promote various standardization to ensure high quality and propose "visualization" of manufacturing processes with DX and AI in mind.

*4 LIMS (Laboratory Information Management System): A system for managing integrated laboratory information *5 PLC (Programmable Logic Controller): Controller used for equipment control

System Lineup of "Smart DI"



Challenge to Meet New Market Needs with New Technologies

-Staying one step ahead of the market to solve our clients' problems-

The Group's non-pharmaceutical product field includes the industrial machinery business operated by Freund-Turbo, a group company, and the food preservatives and health food businesses operated by the Company. In all of our business segments, we are experiencing various changes in the needs of society and client markets. Here, we introduce the current status of new technology and product development in the business segment areas of machinery equipment and food preservatives as a challenge to meet new market needs.

New Products Development Status of Freund-Turbo

In 2018, Freund-Turbo added the "BALANCE GRAN" high-speed mixing/granulating machine for lithium-ion battery ("LiB") applications and the "FE COATER" coating machine to its product lineup through M&A and business collaboration. Since then, it has been developing new products with an eye not only on LiB but also on markets and applications where demand is expected to grow over the medium- to long-term while distancing itself from the LiB market in China, where it has fallen into price competition.

Until now, we have been focusing on expanding our product lineup to include general chemical and food applications, and will continue to take on the challenge of upgrading the functionality of existing equipment and developing new technologies to explore next-generation applications.

Response to the Evolution of the Lithium Ion Battery Market

In 2021, we developed the "P Series," in which the body of fine powder classifier "TURBO SCREENER" was improved from stainless steel to all resin for powder contact part, with an eye on LiB raw material applications, where metals can easily cause ignition. The "P Series," the industry's first all-resin classifier, is extremely light and easy to handle, and we hope to expand our sales channels not only to LiB but also to the market for raw materials with "zero" contamination, where metal is not preferred.

From 2021 onward, sales of the small-scale "BALANCE GRAN" machine became active in Japan and Europe, and demand for a large-scale machine is expected to expand toward full-scale mass production in the future. Currently, to meet future needs, we are developing a testing machine for a large-scale machine for mass production of the "BALANCE GRAN" with the aim of launching it in the autumn of 2022.

LiB raw materials vary from manufacturer to manufacturer, and in many cases, accumulated data cannot be used. We are accelerating the development of equipment that can respond to a wide variety of requests, as we need to conduct evaluation tests and scale-up to meet the requirements of each client.

External appearance of the "TURBO SCREENER P Series"



Response to the Next-generation Markets such as Multilayer Ceramic Capacitors and Films

In 2021, we developed a model for increased processing volume of the wet grinding mill "AQUA TURBO" for raw material applications such as LiB and multilayer ceramic capacitors (hereinafter "MLCC"). While other companies have increased the diameter of the pulverizing rotor (solid of revolution) in order to increase processing volume, Freund-Turbo has extended the width (length) of the rotor without changing its diameter.

This equipment is expected to be used not only for LiB and MLCC, but also for next generation battery applications using hydrogen storage alloys, etc., according to evaluation test results.

The "FE COATER" series of coating machines, mainly medium- and small-sized machines, has also seen an increase in deliveries for LiB, MLCC, and high-performance films, and is expected to expand into the growing SDGs-related market.



New product and model development handled by Freund-Turbo



Product name	Model name	Development contents	Main applications	Launch	Target markets
Wet grinding mill	AQUA TURBO	L/D (length-to-diameter ratio) of the pulverizing section has been reviewed and changed (model for increased processing volume)	LiB raw material applications, next generation battery applications, MLCC raw material applications, electronic material applications	Summer 2022	Japan/ Europe and the U.S.
Wet disperser	Wet Medialess Dispers Mill	Equipment, dispersants, applications (challenges for new technology without beads)	LiB raw material applications, next generation battery applications, MLCC raw material applications, electronic material applications	Under development	Japan/ Europe and the U.S.
Frozen Pulverization System	ICROS Mill	Freezing and pulverizing system using liquid nitrogen	Food applications, recycling of resins, tires, rubber, etc.	Summer 2022	Japan/Asia
Fine Powder Classifier	TURBO SCREENER P Series	All resinous model for powder contact parts (for "zero" metal contamination)	Raw material applications where metals are not preferred, such as LiB raw materials	Autumn 2021	Japan/ Europe an the U.S.
High-speed mixing/ granulating machine	BALANCE GRAN	Large testing machine 100-150L (for scale-up to large manufacturing machines)	LiB raw material applications	Autumn 2022	Japan/ Europe and the U.S.
High-speed mixing & crushing machine	CIRCLE MIXER	Liquid mixer added to product lineup	General chemical, food and pharmaceutical products applications	Autumn 2021	Japan/Asia

New Initiatives in the Food **Preservatives Business**

Food can be altered by temperature, humidity, light, and microorganisms. Food preservatives (hereinafter "Preservatives") prevent such alterations. We are developing our business segment with a lineup of ethanol evaporation food preservatives which preserves moistness and bacteriostatic effect ("Antimold" series) at the core, ethanol evaporation food preservatives + oxygen absorb type food preservatives with the strongest bacteriostatic effects ("Negamold" series), and oxygen absorb type food preservatives that prevent deterioration due to oxidation and bacteriostatic effects ("Negamold Z" series).

In the future, we will promote the development of new environment friendly products and manufacturing systems, and aim to expand the range of applications to which our technology can be applied, in addition to the currently mainstream confectionery products. In addition, we will strengthen our business segment structure with a view to solving our clients' issues, and build and strengthen relationships of trust as a partner that supports our clients' businesses.

New Product "Antimold Mild FDS" Launched

Amid growing public concern for food safety and security, sanitation management in accordance with HACCP* was institutionalized in June 2021, Even before this institutionalization, we began developing a



new product that can inspect for the presence of preservatives in the final inspection process of food manufacturing, regardless of the packing material or position of the seal, leading to the launch of "Antimold Mild FDS" in October 2021.

To prevent 100% leakage of preservatives, the content of the magnetic material (iron oxide) in the mixture is an important factor. We attempted to develop new technologies, such as the combination of "Antimold Mild FDS" and metal detector M Series (manufactured by Anritsu Corporation) to derive content uniformity that leads to 100% detection.

At food manufacturing sites, the presence or absence of preservatives is checked prior to product shipment by visual or image inspection, or by conventional metal detectors, but this is labor-

intensive and inspection errors have become a problem. The combination technology of preservatives and detectors reduces the risk of defective shipments and resulting recalls for clients involved in food production, while at the same time saving the need for human operation at the factories, so we have received feedback from clients who have introduced the system that it has led to improvements in their manufacturing sites.

*HACCP (Hazard Analysis and Critical Control Point): A method of sanitation management in which food business segment operators themselves identify hazardous factors (hazards) such as food poisoning contamination and foreign material contamination, and then control particularly important processes to eliminate or reduce these hazardous factors in the entire process from receiving raw materials to shipping products.

Corporate Governance

The Group's basic policy and objective of corporate governance is to continuously enhance corporate value by increasing corporate transparency, ensuring legal compliance, fairness, and independence from the perspective of all stakeholders, including shareholders, investors, and users.

For more detailed information, please refer to the "Corporate Governance" section of our website.

https://www.freund.co.jp/english/company/governance.html

Basic Policy

Based on the corporate philosophy of "Develop the Future through Creativity_®," the Company is engaged in business activities to realize its management vision of "contributing to the future of medical care and health of people throughout the world, and creating and fostering technologies for fulfilling lives and food safety." Through fair and appropriate competition, we aim to provide products and services that are useful to our clients and increase our corporate value through the process of pursuing reasonable profits.

Overview of the Corporate Governance Structure

The Company has a Board of Directors, Audit & Supervisory Board, and accounting auditors. The Executive Officers execute business operations, while the Board of Directors sets management policies and targets for the entire Group and supervises the management and business operations of each group company. The Board of Directors consists of five members (two of whom are External Directors) with diverse experience, knowledge and expertise, and in principle meets once a month. Three external auditors (one of whom is a full-time auditor) also participate in the Board of Directors meetings to ensure appropriate and prompt decision-making and to further strengthen the supervisory function. Auditors work closely with the Internal Audit Office, which reports directly to the President and CEO, and the accounting auditors to enhance the effectiveness of audits.

Corporate Governance Structure (As of May 31, 2022)



Basic Approach to Internal Control and Outline of the Structure

The Company identifies the internal control function as "a framework for management to control operational execution divisions." The Board of Directors assumes responsibility in designing basic scheme of internal controls for the group companies, and in supervising maintenance, operation and assessment of internal controls based on the Companies Act and other relevant laws as well as the Company's articles of incorporation and other internal rules.

To fulfill its corporate social responsibility, which is the basis of our corporate philosophy of "Develop the Future through Creativity_®," we are working to instill compliance and establish a risk management system, and have established the Compliance and Risk Management Committee and the Internal Control Committee, which comprehensively manages internal controls.

Introduction of Board Members

Honorary Chairman and Directors



Yasutoyo Fusejima Honorary Chairman

Iwao Fusejima President and CEO



Masao Wakai Managing Director



Toshiaki Honda Director



Ryuji Nakatake









Ryuji Nakatake was appointed as external director as he was deemed to have more than adequate ability to oversee the management based on his superior insight regarding management in general.

Reason for Appointment

Hisashi Tanaka was

director as he was

contribute to

strengthening

appointed as external

deemed to be able to

management oversight and corporate

governance by having

abundant experience

insight as a manager.

and wide-ranging

Sakae Hirano Full-time Audit & Supervisory Board Member



Kazunari Hamada External Audit &

Audit & Supervisory Board Members



appointed as full-time audit & supervisory board member as he was deemed to have more than adequate ability to oversee the management based on his knowledge of finance and accounting as well as superior insight regarding management in general.

Reason for Appointment

Sakae Hirano was



attorney from an objective standpoint as a legal expert.

Reason for Appointment

Sayoko Izumoto was appointed as external audit & supervisory board member as she was deemed to satisfy this role by leveraging on her long experience as a certified public accountant and on her vast insight regarding finance and accounting.

Sayoko Izumoto External Audit & Supervisory Board Member





Supervisory Board Member

Skill Matrix

				Advisory Committee					Fields expected to cov	er			
Current Position/ Reappointment	Name	Tenure	Attendance at Board of Directors and Audit & Supervisory Board	Nominating and Remuneration Committee	Corporate Management/ Top Management Experience	Marketing/ Sales	Finance/ Accounting	IT/ Security	Human Resources/ Labor/ Human Resources Relations	Legal/	Global Experience	Manufacturing/ Development/ Research and Development	ESG/ Sustainability
Reappointed	Iwao Fusejima	14 years	13 times/13 times	Members of the Nominating and Remuneration Committee	٠	•					•		
Reappointed	Masao Wakai	2 years	13 times/13 times		٠		٠		٠	٠	٠		٠
Reappointed	Toshiaki Honda	1 year	10 times/10 times			•					•	•	•
Reappointed	Ryuji Nakatake	7 years	13 times/13 times	Members of the Nominating and Remuneration Committee	٠				٠				
Reappointed	Hisashi Tanaka	1 year	10 times/10 times	Chairman of the Nominating and Remuneration Committee	٠			•	•	٠	٠	•	
Current position	Sakae Hirano	3 years	Board of Directors: 13 times/13 times Audit & Supervisory Board: 14 times/14 times		٠		•			٠	•		•
Current position	Sayoko Izumoto	5 years	Board of Directors: 13 times/13 times Audit & Supervisory Board: 14 times/14 times	Observer of the Nomination and Remuneration Committee			٠	•		•			
Current position	Kazunari Hamada	1 year	Board of Directors: 10 times/10 times Audit & Supervisory Board: 11 times/11 times							•	•		

Risk Management

The Group perceives risks as latent factors in its corporate business activities that could lead to deterioration in its social credibility or to damages in its corporate value. The Group is exposed to various potential risks as listed below, and its financial results may unexpectedly be influenced in the event that any of these risks occur. The Group maintains a policy to acknowledge the possibility of such occurrences, and prevent the occurrence of these risks to the best of its ability, while also responding quickly and adequately in the case that they do occur. It should be noted that not all risks are cited here. Furthermore, factors related to the future mentioned here represent those recognized as of the end of FY02/22.

For details of each risk item, please refer to the "Corporate Governance/Risk Management" section of our website.

https://www.freund.co.jp/english/company/governance.html

Business Risks

8 Public Regulations-Related Risk

Industry Trend Risk
Human Resources Risk
Pricing Competition Risk
Foreign Exchange Fluctuation Risk
Client Company Credibility Risk
Natural Disaster Risk
Business Partner Relationship Risk
Impairment Risk for Non-Current Assets
Collaborative Alliances with Strategic Partnership Risk
Overseas Business Operational Risk
Intellectual Property Risk
Information Leakage Risk
COVID-19 Related Risk

Risks to Be Watched Closely in the Future

In FY02/22, various risks emerged, including the risk of prolonged global spread of COVID-19 and supply chain disruptions due to the pandemic and other disasters. Furthermore, geopolitical risks are increasing, such as trade frictions between the U.S. and China and Russia's military invasion of Ukraine. The Group is aware of the following risks that should be watched closely in the future.

Industry Trend Risk

In Japan, in addition to the ongoing reduction in drug prices, quality and stable supply issues that have arisen in the generic drug industry have triggered a movement to reorganize the pharmaceutical industry. In the midst of these developments, the Group is increasing its presence in overseas markets and accelerating global expansion in the pharmaceutical product field through such measures as the M&A of Cos.Mec in Italy in November 2020 and the establishment of the Shanghai FC Center in July 2021, while promoting machinery and chemical businesses related to non-pharmaceutical product fields, such as the chemical, food, and battery industries, and expanding its geographical and business areas.

Overseas Business Operational Risk

Trends in financials and healthcare policies around the world affect the management of pharmaceutical companies. Pharmaceutical companies in the U.S. and other developed countries are taking cost-cutting measures, such as transferring manufacturing to lower-cost emerging countries. The Group's priority countries and regions for business expansion are emerging countries such as India, China, and Southeast Asia, where populations and incomes are expected to grow, and we are required to manage risks related to business expansion in these countries and regions. To this end, the Group is strengthening its understanding of conditions by country/region, drafting strategies, and monitoring individual transactions.

Initiatives for Human Resource Development through Revitalization of Corporate Culture Let's Take on Innovation

"Companies reach a turning point every 30 to 50 years. In order for a company to overcome a period of change, everyone must act with the awareness that they are responsible for innovation," says Mr. Toshio Asano, an advisor to the Company. What Mr. Asano reconfirmed in training scene for our employees was that each of the training participants recognized the need to revitalize the corporate culture. We spoke with him about the training outline and his expectations for the future of our company.



After serving as General Manager of the Life Science Research Laboratory at Asahi Chemical Industry Co., Ltd. (now Asahi Kasei Corp.), President and CEO of Asahi Kasei Pharma Corporation and President and CEO of Asahi Kasei Corp., he was appointed as Chairman of the Japanese Foundation for Cancer Research in June 2021. Since 2020, he has served as an advisor to the Company, supporting the development of human resource through employee training and other programs.

Mr. Toshio Asano Advisor to FREUND CORPORATION

Relationship with FREUND CORPORATION

During my time at Asahi Kasei Pharma Corporation, I had business contacts with FREUND CORPORATION (hereinafter "the Company",) which I thought was a very good company with a high market share in a niche industry and a solid work ethic.

Several years ago, I had the opportunity to meet President Iwao Fusejima. I was resonated with his word saying "We have been in business for 50 years and are now at a turning point. We want to change our corporate culture for the better so that both the company and our employees can continue to grow."

Technology is an important business foundation for the Company as a manufacturer, and the foundation is carried out by "people." I accepted the position of advisor because I found it rewarding to help revitalize a corporate culture based on "people" at a time of change in the Company.

Awareness of Challenges and Innovation

My training session which started with Executive Officers, is now expanding the target to heads of each department. The Company's corporate philosophy is "Develop the Future through Creativity_®." This philosophy advocates the need for innovation. We have been constantly innovating and growing until now, but if we do not continue to do so, we will never be able to pave the way for the future. In our training, we strongly ask this question first.

In order to pave the way for the future... What I keep saying in my training is, "We can innovate. However, in order to do so, each of you must be responsible for innovation." Innovation is to spread quality products and services far and wide. To achieve this, all divisions, including Research and Development, Manufacturing, Sales, and

Administrative Division, must act in unison. That is why I use the term, "taking on innovation." I believe that the accumulation of innovation by each individual creates innovation in the company, which in turn leads to the company's growth.

During the training, all participants are asked to submit a paper on the theme, "the company's issues and my future." Then, after one year, we follow up on it. Rather than ending with a single training session, we incorporate a process for participants to check for themselves how they have solved the issues they have identified and whether they have become a kind of person who can solve them.

A "Little Courage" and a "Benevolent Spirit"

The first step in taking on innovation at your respective positions and implementing it is to "have a little courage" to voice your opinions to your subordinates, colleagues and bosses. I believe that is the type of personnel that the Company is looking for.

My motto is "benevolence." In Japanese, the character for "benevolence" is written as "two people." Human cannot do anything alone. At the same time, you are not alone when you are really in trouble. There will be someone to help you. Innovation requires cooperation with colleagues with a "benevolent spirit."

We are a company with tremendous potential. Through the training, we found that we have strengths as a solution-oriented company with a strong client focus. And all employees, including the President, share a common awareness of the issues. I am confident that we will continue to grow sustainably as a company that "Develops the Future through Creativity_®" by each of us acting on our own innovations and "contributing to the future of medicine and good health of people around the world," as stated in our management vision.

Diversity Initiatives Toward "ONE FREUND" -Current Status of D&I Activities-

Diversity in our D&I (Diversity & Inclusion) activities includes not only superficial attributes such as age, gender, race, religion, and taste and preferences, but also deeper attributes such as individuality, talent, way of thinking and values. Furthermore, we aim to enhance our corporate value by growing and revitalizing our employees and organization through "inclusion," in which we tolerate and accept the inner diversity that is difficult to see on the surface, relate to each other as equals, recognize each person's differences and make full use of 100% of each person's abilities. Here we will introduce the current status of our D&I activities.

Start of D&I Activities

Initially, we intended to reform the way women work, but an External Audit & Supervisory Board Member suggested that we should consider our activities from a broader perspective, and in March 2020, D&I activities were launched with a focus on companywide work style reforms and educational activities to promote individual awareness and behavioral change.

The start of the D&I activities was not smooth, as the purpose and policy of "why D&I activities are necessary in our company" were not well recognized or understood. In addition, during the COVID-19 pandemic, the inability of promotion members from Tokyo, Osaka and Hamamatsu to get together for face-to-face discussions caused a lack of impetus and other major obstacles to the activities.

Changes in D&I Activities and Future Initiatives

At the end of 2021, the promotion members finally got together and held a workshop to fully discuss and understand the current status and issues of the entire organization, and to formulate a vision and medium- to long-term goals.

A consensus was reached after reporting to management that D&I activities will be promoted in phases from 2022 onward.

In the first phase, we will work to create the foundation for diversity with the vision of an "organization that can speak up and think." In this way, we aim to create a seamless organization in which each individual can proactively voice his or her opinion and understand and respect each other.

Although our D&I activities have just begun, we will continue to promote awareness



and culture reforms in phases to allow diversity to flourish. In this way, we aim to realize a true "ONE FREUND" and create new corporate value through the sustained growth of our Group.

D&I promotion members







Hamamatsu Plant/Hamamatsu Technology Development Research Center

Company and Stock Information (As of February 28, 2022)

Company Name	FREUND CORPORATION
Established	April 22, 1964
Capital Stock	¥1,035,600,000
Employees	476 (Consolidated)
Head Office Location	FREUND Bldg. 6-25-13, Nishishinjuku, Shinjuku-ku, Tokyo
Website	https://www.freund.co.jp/english/
Stock Listing	TSE Standard (securities code 6312)
Fiscal Year	From March 1 to the last day of February next year
Annual General Shareholders' Meeting	Held in May of every year
Shareholder Registry Administrator	Mitsubishi UFJ Trust and Banking Corporation
Total Number of Shares Issued:	18,400,000 shares
Total Number of Shareholders	15,586

Major Shareholders (Top Ten)	Shares owned (thousand shares)	Ownership ratio (%)
K. K. Fusejima Yokosha	1,648	9.84
Yasutoyo Fusejima	1,230	7.35
MUFG Bank, Ltd.	836	4.99
Sumitomo Mitsui Banking Corporation	744	4.44
PERSHING-DIV. OF DLJ SECS.CORP.	715	4.27
Okawara Mfg. Co., Ltd.	673	4.02
The Master Trust Bank of Japan, Ltd. (Trust Account)	620	3.71
Freund Employee Shareholding Circle	411	2.46
The Shizuoka Bank, Ltd.	368	2.20
Meiji Yasuda Life Insurance Company	360	2.15

The Company has 1,655,000 shares (9.00%) of treasury shares. Shareholding percentage stakes are calculated after excluding 1,655,000 shares of treasury shares.



NOTE: Treasury shares are included in the category of "Individuals, Others"

Trends of Share Price, Trading Volume and TOPIX



NOTE:

Share prices and trading volumes prior to the stock split shown in the chart have been adjusted to reflect the stock split. FREUND CORPORATION and TOPIX prices have been adjusted to show relative valuations on March 1, 2019 as 100.

FREUND CORPORATION

FREUND Bldg. 6-25-13 Nishi-Shinjuku, Shinjuku-ku, Tokyo, 160-0023

Please contact with us for any inquiry at the E-mail address on the right.

Corporate Planning Department, Corporate Planning Division

Phone: +81-3-6890-0767 Fax: +81-3-6890-0870 E-mail: ir@freund.co.jp URL: https://www.freund.co.jp/english/



