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FY2022-2024

Medium-Term Business Plan

(Plan 22)

Powdertech Co., Ltd.

Company's Business Overview

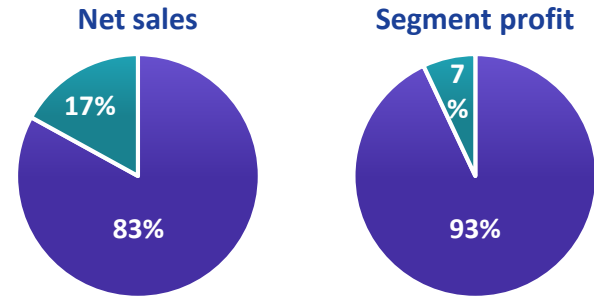
Powdertech began as Japan's first iron powder manufacturer.

After developing a variety of applications for iron powder, our business evolved into an iron powder business that produced iron powder for disposable pocket warmers and oxygen absorbers that keep food fresh to protect food safety and reduce food waste.

Our current mainstay product, carriers for electrophotography, also originated from the development of applications for iron powder. We later changed the material to ferrite, developing environmentally friendly (EF) carriers that are free of heavy metals and that have since become the world standard.

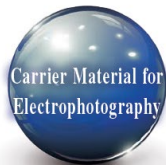
Today, we are taking on the challenge of adapting and extending the basic technologies we have cultivated and devising new applications. Our spherical fine ferrite powders are unique in the world, and we have launched mass production of this material as one that will help to realize a society of the future.

Business Composition (Net sales and segment profit)



■ Functional Materials Business
■ Iron Powder Business

Functional Materials Business

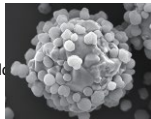


Technologies fostered through the manufacture of iron powders are used in the manufacture of ferrite carrier materials for electrophotography. We develop, manufacture, and sell various carrier materials that meet customer needs.



EF small ferrite carrier materials with long operating life

Heavy metal free, environmentally friendly (EF) ferrite carrier materials enjoy a good reputation, especially in color applications such as office printers and production printing, for their use as a powersaving, high-resolution, and long life developing agent.



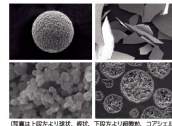
More than 200 types of carrier products

Carrier materials need to be matched with the machines and toners with which they are used, and are therefore customized to each customer's requirements.



Five techniques supporting our ferrite technology

Physical properties, such as particle size, shape and surface design, as well as magnetic and electrical characteristics, are customized using our "composition design," "granulation," "sintering," "classification," and "resin coating and surface reforming" techniques. We develop and propose particles with new functions and properties.



Iron Powder Business



"Environmentally friendly"
"Sponge iron"



Preserving the freshness and quality of food with "WonderKeep®"



Long-established manufacturing technologies

Since we started R&D and manufacture of iron powders in 1952, we have continued developing new applications as a pioneer iron powder company.



- Iron powder for pocket warmer
- Iron powder for shot blasting
- Iron powder for chemical reduction
- Iron powder for powder metallurgy

Iron powder products



Meeting various customer needs

Since its release in 1986, we have manufactured the product under thorough quality control to meet various customer needs and ensure that it is used safely.



WonderKeep®

WonderKeep® relies on the oxygen absorption effect produced during oxidation of iron powder to eliminate almost all of the oxygen in a sealed food package (0.1% or less), thus helping to maintain freshness and prevent discoloration of food.



Company Philosophy

Through technology contribute to a more prosperous society



Always be sincere



Have a thorough challenging and pioneering spirit



Swiftly address needs of society

Company Vision

Pursuing an “Essential Company” That Provides Solutions to Social Problems through Its Unique Technologies and Is Needed by Society

Unique Technologies

Produce materials that do not yet exist in the world with our unique processes

Solutions to Social Problems

Contribute with our materials to a sustainable society and a new-normal society

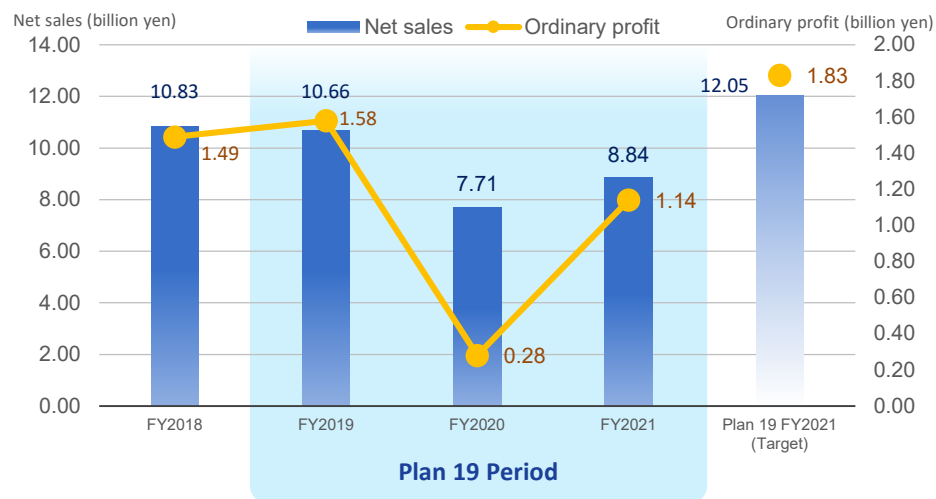
Essential Company

An essential company that will support a future society (with its original materials)

Plan 19 (FY2019-2021) in Review

Impacted by the COVID-19 pandemic since FY2020, sales fell in all business divisions, leading to a major decrease in profit. Thanks to cost-curbing efforts and the bottoming-out of demand, business is recovering, but is still below pre-COVID levels. As a result, net sales, ordinary profit, and ROE all fell short of the Plan 19 targets.

		(billion yen)			
		FY2018	FY2019	FY2020	FY2021
Functional Materials	Net sales	8.59	8.58	6.12	7.36
	Segment profit	1.80	1.90	0.59	1.44
Iron Powder	Net sales	2.24	2.08	1.58	1.48
	Segment profit	0.15	0.12	0.07	0.11
Whole Company	Net sales	10.83	10.66	7.71	8.84
	Ordinary profit	1.49	1.58	0.28	1.14



Note: Operating profit based on segment information is used for segment profit in this table.

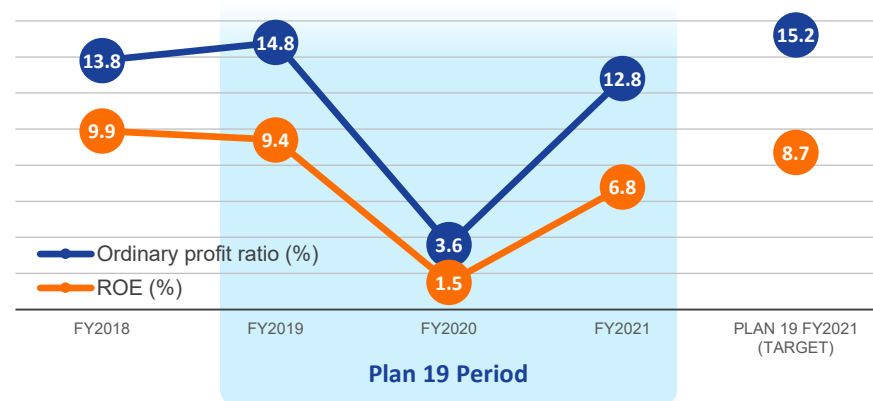
Functional Materials Business

In the carriers for electrophotography business, office operations have not fully recovered due to the impact of the prolonged pandemic, and as work-from-home and the shift to paperless operations have become more entrenched, sales volumes, while bottoming out, have not reached pre-COVID levels.

Meanwhile, profit is on a recovery trend with a steady launch of new types of carriers and improvements in process capabilities, including cost reductions.

Iron Powder Business

The iron powder/oxygen absorber business was stagnant overall due to a decline in demand for disposable pocket warmers in warmer winters and a downturn in demand in the souvenir segment due to movement restrictions and the disappearance of consumption by inbound tourists during the pandemic.



Outcomes

Strengthened earnings power of existing businesses and made growth investments for new business

Functional Materials Business

- Solidified the trust held in Powdertech by multiple users as a partner in business
- Launched many new carriers for installation in customers' new models
- Established production capabilities for fine ferrite powder (completed the construction of mass-production lines and a new plant)
- Captured multiple new applications and new customers
- Promoted cost reductions and strengthened supply chain

Iron Powder Business

- Reduced oxygen absorber costs and established production capabilities
- Promoted digital transformation (DX) of sales operations

Whole Company

- Selected by Ministry of Economy, Trade and Industry as one of Global Niche Top Companies Selection 100 in FY2020
- Transferred to the Standard Market on the Tokyo Stock Exchange
- Strengthened corporate governance (introduced executive officer system, increased the number of independent outside directors), revised personnel system (extended retirement age, etc.)
- Started the construction of employee recreation facility (scheduled for completion in Dec. 2022)
- Promoted capital investment for environmental measures (safety, energy-saving, regional environment measures, etc.)

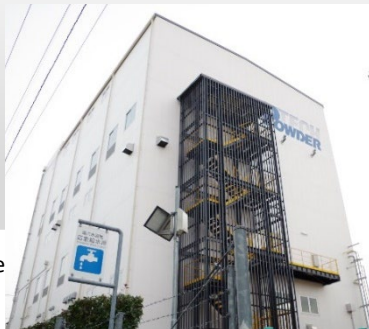
Challenges

Realize profit contribution by new businesses

Maintain and strengthen earnings power of existing businesses

Promote ESG-oriented management

New fine ferrite powder plant



Global Niche Top Companies Selection 100



Employee recreation facility (artist's rendering)



External Environment

1 Increased uncertainty

- Geopolitical risks: Democracy vs Authoritarianism
- Inflation concerns: Rising energy costs
- Supply chain disruptions
- Resources and technologies becoming economic security issues

2 Moves toward new-normal society accelerated by COVID-19

- Changes in communication methods
- Paperless operations, remote work

3 Moves toward sustainable society with its importance recognized due to environmental issues

- Decarbonization
- ESG-oriented management

Material Issues

Maintain and improve core profit businesses

Continue to create new businesses

Develop sustainable environment

Strengthen head office functions

Basic Plan Policy

Maintain and strengthen profitability of existing businesses

Realize profit contribution by new businesses

Continue to nurture new businesses

Strengthen head office functions that support business foundations (promote ESG-oriented management)




KPIs

Financial KPIs (New Management Targets)

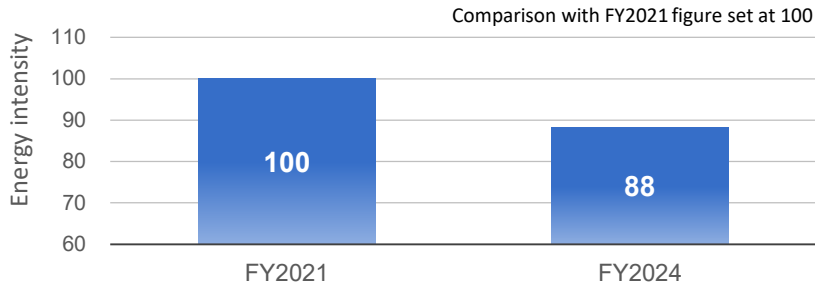
- Ordinary profit
- ROE
- New functional materials ratio of net sales

Non-financial KPIs

- Strengthening of corporate governance
- Working environment / Employee satisfaction
- Social reputation / IR activities & information disclosure
- Environment / Energy intensity & CO₂ reduction

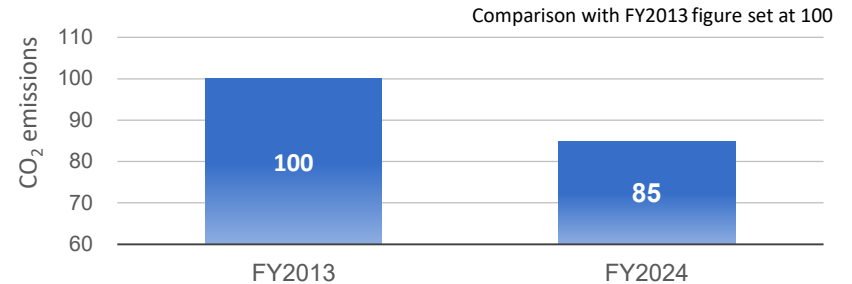
Category	Non-financial KPIs	Initiatives	Targets
 <p>E (Environment)</p>	Energy intensity & CO ₂ reduction	<ul style="list-style-type: none"> ● Implement energy-saving measures ● Formulate plans to meet government targets ● Develop products that can contribute to decarbonization 	<ul style="list-style-type: none"> ● Reduce CO₂ emissions to 15% below FY2013 levels by FY2024 (Government target: 46% reduction compared to FY2013 by FY2030)
 <p>S (Social)</p>	Working environment / Employee satisfaction	<ul style="list-style-type: none"> ● Establish environments in which diverse talent can continue to work ● Strengthen health and safety education ● Encourage employees to take childcare leave ● Update training programs 	<ul style="list-style-type: none"> ● Start use of the new employee recreation facility ● Eliminate workplace accidents ● Promote women’s active participation in the workforce (recruitment and development)
 <p>G (Governance)</p>	Strengthening of corporate governance Social reputation / IR activities & information disclosure	<ul style="list-style-type: none"> ● Strengthen functions of Board of Directors ● Enhance and expand non-financial information ● Continue to conduct compliance education 	<ul style="list-style-type: none"> ● Disclose skills of Board of Directors, evaluate effectiveness, and provide feedback ● Disclose ESG information

Trend in Energy Intensity



- Realize a 12% reduction in energy intensity compared to FY2021 by FY2024
- Maintain “A Class” ranking in the business classification under the Act on Rationalizing Energy Use, aim for “S Class”

Trend in CO₂ Emissions



- Realize a 15% reduction in CO₂ emissions compared to FY2013 by FY2024
- Aim for a 46% reduction compared to FY2013 by FY2030 through the introduction of renewable energies and shift to non-fossil fuels such as hydrogen

- While carriers will not return to pre-COVID levels, sales revenue will rise with the increase in new functional materials and the recovery of oxygen absorbers.
- Although ordinary profit and ROE will fall temporarily in FY2022 due to soaring energy and raw materials prices and increased depreciation burden due to upfront investments in new businesses, profit will subsequently exhibit an upward trend.
- With an increase in sales of new functional materials beyond projections, we will aim for their ratio of net sales to reach 10% or higher by FY2024.

		(billion yen)			
		FY2021 (Results)	FY2022	FY2023	FY2024
Functional Materials	Net sales	7.36	7.96	8.34	8.52
	Segment profit	1.44	1.28	1.42	1.62
Iron Powder	Net sales	1.48	1.56	1.35	1.40
	Segment profit	0.11	0.15	0.13	0.16
Whole Company	Net sales	8.84	9.51	9.68	9.92
	Ordinary profit	1.14	1.00	1.13	1.34

Note 1: [Parameters] Exchange rate, 115JPY/1USD; Crude oil, \$80/bbl

Note 2: Operating profit based on segment information is used for segment profitable

Operating Cash Flow (3yr cumulative)

4.5 billion yen

Investment Plan (3yr cumulative)

3.3 billion yen

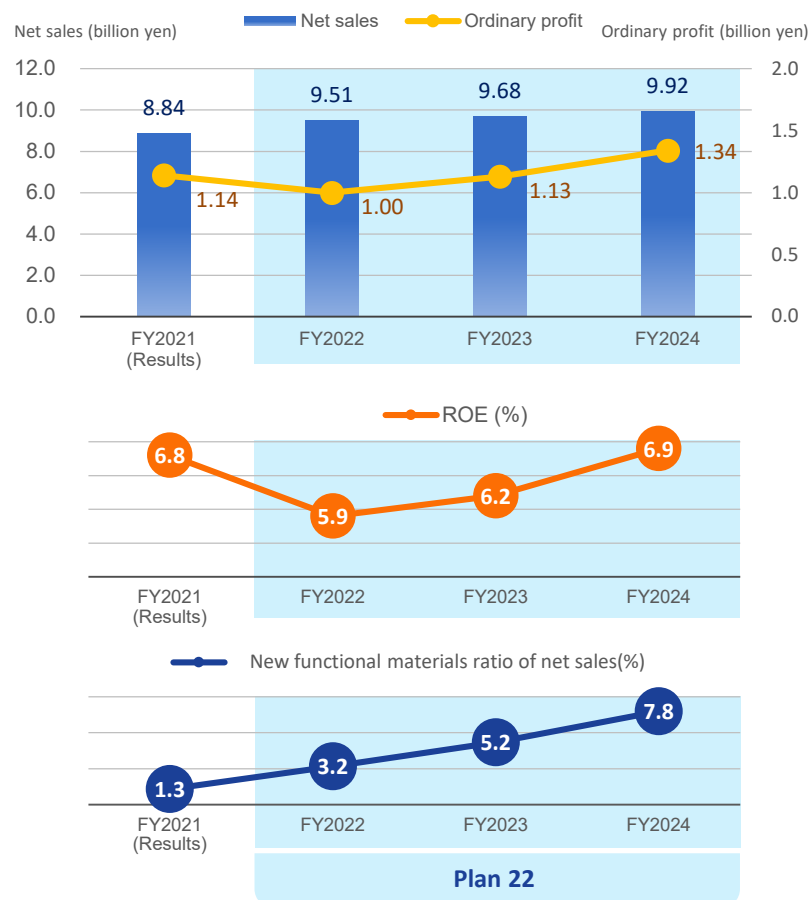
Growth investments 1.9 billion yen
 Maintenance/upgrade investments 0.6 billion yen
 ESG-related investments 0.8 billion yen

Dividend policy

Basic Policy:

Distribute stable, continuous returns of profit to shareholders, taking into account comprehensive evaluation of business performance and other factors
 Payout ratio of 30% or more while securing internal reserves needed for future business development
 Aim for DOE (dividend on equity) of 2.5% or more

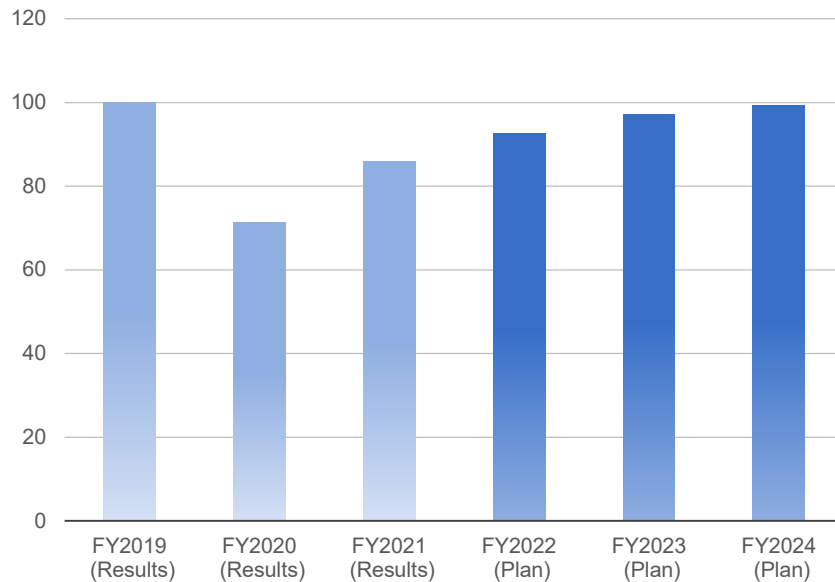
Target:



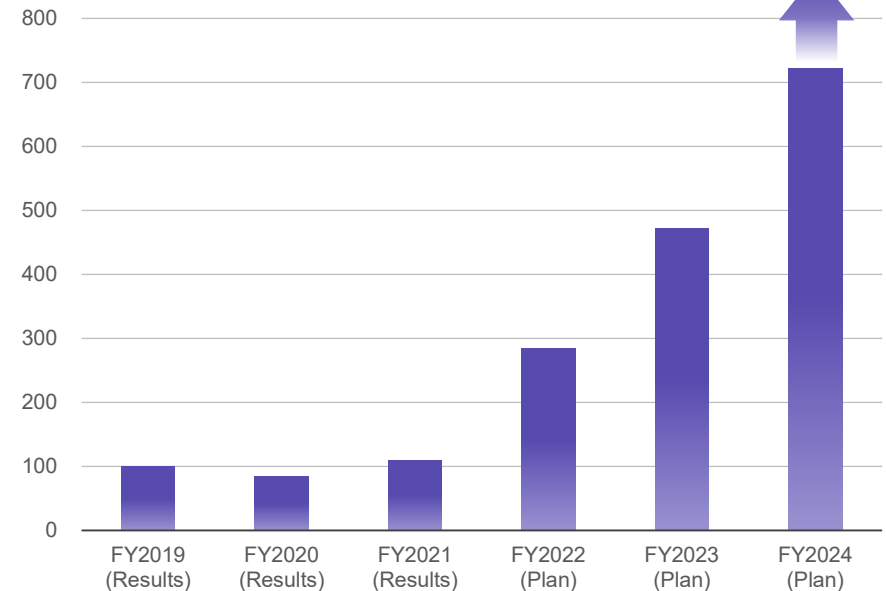
Plan 22 Basic Strategy

- Realize cost reductions through thorough improvements and greater efficiency
- Increase rate of installation of carriers in customers' new models with the development of carrier products
- Establish production capabilities for fine ferrite powder
- Aim for sales above plan by strengthening marketing in new markets and accelerating the launch of new products

Segment Net Sales

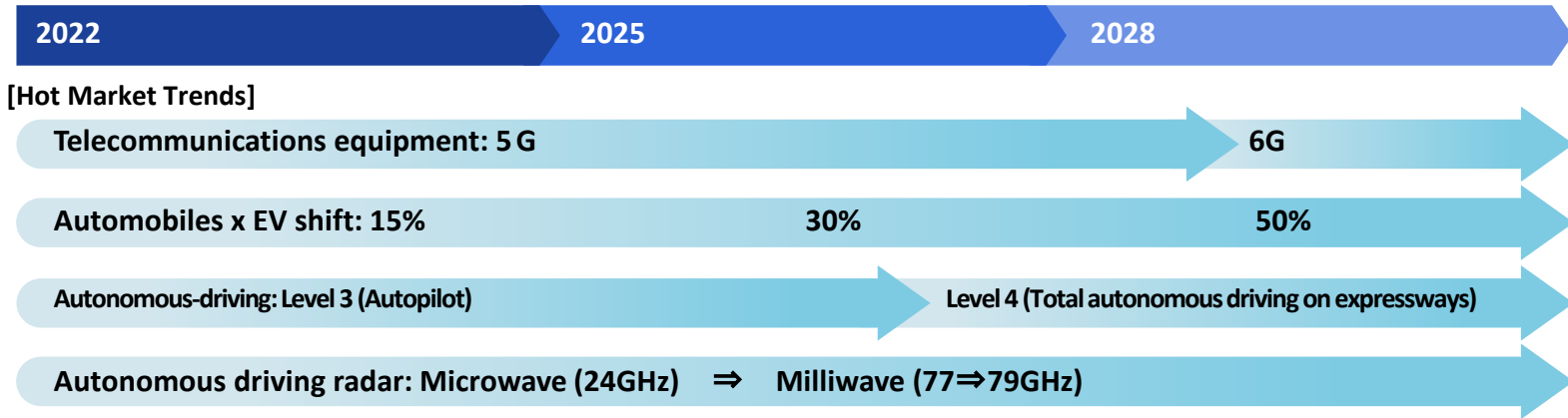


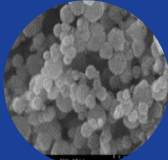
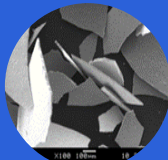

New Functional Materials Business Net Sales



*Year-on-year comparisons with FY2019 set as 100

Continue to propose and launch new products onto hot growth markets with Powdertech's unique technologies



 <p>Spherical fine ferrite powders</p>	<p>Key theme Electronic components and materials</p> <p>R&D New composition design, ultrafine particles, surface treatment</p>
 <p>Electromagnetic wave-shielding ferrite powder</p>	<p>Key theme mmWave shield materials</p> <p>R&D New composition design, flake-shaped powders</p>
 <p>Magnetic composite material (Ferrite film)</p>	<p>Launch of product development themes</p> <p>R&D Substrate/ferrite composition design</p>

Plan 22 Basic Strategy

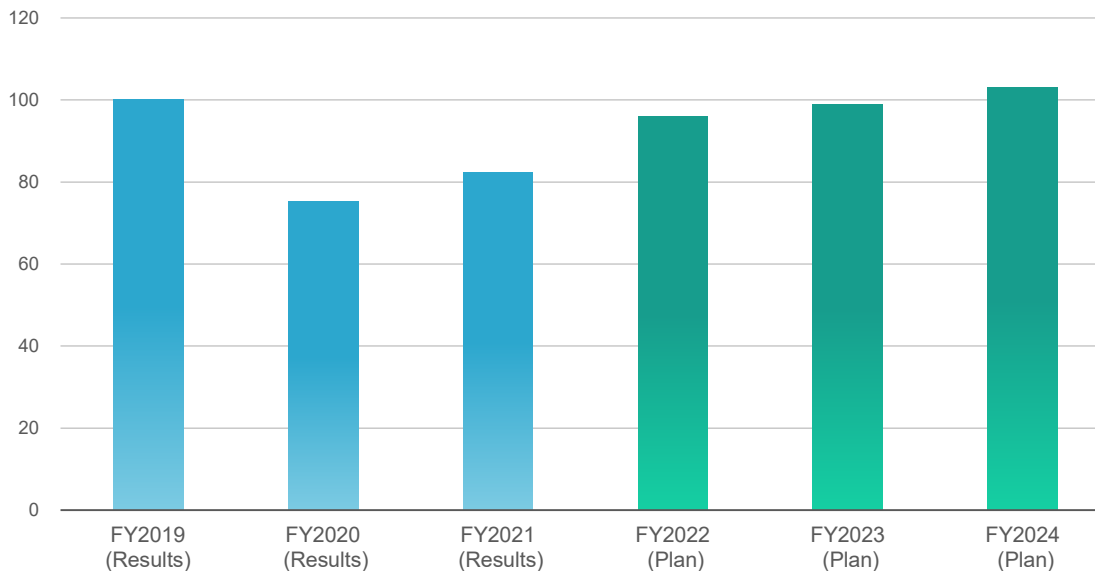
Oxygen absorbers

- Improve sales efficiency (use of DX tools) and expand sales, with a focus on moisture-activated oxygen absorber combined with oxygen sensor in one package
- Strengthen cost-cutting efforts through labor productivity improvements, labor-saving, and yield improvements
- Accelerate new market development with new products that leverage strengths in environmentally-friendly oxygen absorber packaging materials and oxygen sensors

Iron Powder

- Promote structural reform of iron powders business

Net Sales in Oxygen Absorbers Business



*Year-on-year comparisons with FY2019 set as 100

WonderKeep® Digital web page



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