HIROSE ELECTRIC CO.,LTD.

Integrated Report 2024

HIROSE ELECTRIC CO.,LTD.

Hirose Electric Co., Ltd.

Cover Story
01

Connecting the World, Connecting the Future

Supporting the evolution of electronic devices with connectors

The evolution of electronics, which has been deemed the greatest technological revolution of the 20th century, has created a variety of devices that are indispensable to our daily lives, including personal computers, automobiles, and home appliances. These devices are assemblies of semiconductors and countless other electronic components, with the evolution of these devices having been supported by the downsizing and increased performance of electronic components. One such component is the connector, which “connects” electronic components and circuits. Although connectors cannot fulfill functions on their own, they serve to unleash the power of electronic components by connecting them.

Manufacturing, which used to be carried out entirely in a single country, has now shifted to an international division of labor where modules are assembled from various suppliers. This change reflects the increasing precision and complexity of components, which has led to the manufacturing of specific modules being consigned to specialized manufacturers. This process is made possible by the connector’s function of connecting/disconnecting parts, enabling assembly to be easily carried out by connecting different parts together as long as each part has connectors attached. By delegating the connecting function to connectors, manufacturers are able to focus on their own areas of specialization and create a single device through integration with modules from other companies. Connectors allow products to be flexibly customized in line with the development of modules and support development collaboration among manufacturers in different countries.

Looking further into the future, with regard to electrification measures that are essential for achieving carbon neutrality, electric power still accounts for only around 20% of all energy consumption. As expectations for a shift from a society centered on fuel consumption to electrification as exemplified by electric vehicles (EVs) continue to grow, the demand for connectors that serve as the pathway for electric signals has also increased. In addition, it is said that as much as 62 million tons of electronic waste is generated in the world each year, with only a quarter of that volume recycled. As the demand for repair and reuse grows, the role of connectors that allow necessary parts to be disconnected and replaced will become increasingly important. Further evolution of connectors is thus required to meet these expectations.

Cover Story

02

A Small Company Connecting Wisdom

Founded in 1937 by Keizo Hirose, the Company started out as a processor and distributor of resin materials before expanding into the contract manufacturing of connectors by leveraging processing technologies for insulating materials. At that time, Japanese connectors were dead copies of those made by overseas manufacturers. There was occasionally a pile-up of defective products as the Company did not understand the design concepts of those products.

Against this backdrop, Hideki Sakai, who would later become the Company's second President, joined the Company in 1952 as the first new graduate. Having graduated from an industrial high school, Sakai was the only person in the engineering department because of his background in electrical engineering. However, no one in the Company had any knowledge of connectors, and Sakai continued to learn through practice every day as he humbly asked to be taught by customers and production partners.

The turning point came in 1957, when the Defense Agency began the domestic production of a new type of wireless equipment. The Company participated in this project, which could be considered a reckless challenge for an SME, and fulfilled the strict requirements with its ideas and innovations despite the lack of testing equipment and adequate facilities. It ended up with the extraordinary achievement of developing the first connector using domestic technology. Having established its foundation as a connector manufacturer, the Company subsequently decided to focus on new product development. Three years later, it ceased the production of its old products and converted its entire product series to original products.

In the 1960s, Sakai had the opportunity to visit a connector manufacturer overseas. Upon seeing this rival with its overwhelmingly large presence both in scale and sales, Sakai came up with the fabless strategy of "conduct development in-house, and outsource manufacturing." Japan is home to a group of excellent specialist companies that support this strategy, which led to the Company choosing to work in cooperation with such partners rather than aiming for self-sufficiency.

Sakai continued to set business targets such as achieving a new product ratio of 30% and an operating margin of 20% or more. He has left behind teachings such as "High profit margins are a form of admiration from customers, and we must pursue value-added products that are completely new," "In-house technology will become obsolete, and we must always incorporate external knowledge." Those have been passed down to this day in the form of the Inseparable Principles of "A Small Company Connecting Wisdom."

The first domestically manufactured connectors

Employees at Yugawara Plant around 1950

吾以外皆師
素直な心で学びましょう
酒井秀樹

New product ratio

30%

Operating margin

20%

or more

Inseparable Principles to Be Connected to the Next Generation

Ideal Vision

Co-creating Our Future Society with the "Power to Connect"

HIROSE Philosophy

The Ultimate Standard of Thought and Behavior

Inseparable Principles

A Small Company Connecting Wisdom

Acknowledging ourselves as "small," we are always earnestly and modestly studying to achieve further growth for tomorrow. By leveraging the collective wisdom within the Group and from the world at large, we will evolve through our connecting business.
This is the unchanging philosophy at the core of the Hirose Group.

The Ultimate Standard of Thought and Behavior

HIROSE Philosophy

The HIROSE Philosophy, which drives the continuous growth of the Hirose Group, consists of six values that embody the Inseparable Principles.
Every activity of ours is based on the Ultimate Standard of Thought and Behavior.

Ideal Vision

Co-creating Our Future Society with the "Power to Connect"

We aspire to achieve this vision through the practice of the Inseparable Principles and the HIROSE Philosophy.
By expanding the circle of co-creation partners globally and providing new technologies, we will contribute to the creation of a future society in which everybody can live comfortably.

Cover Story

03

Strengths We Have Honed Through Connections

Create the "New": Delivering products which never seen in the world

Mindset of achieving differentiation

Since connectors are highly customizable in line with the applications of customers, it is possible to achieve some success by responding to existing needs. However, we have always followed the path of creating new products under the HIROSE Philosophy of "Always Taking the Lead, Pursuing the Cutting Edge, Achieving Differentiation." We determine the feasibility of product development based on whether it is possible to achieve differentiation as well as the profit margin, which indicates the value provided, while also leveraging production by production partners in order to focus our resources on R&D.

Our deeply embedded system and culture of pursuing originality has earned us the trust of customers based on the belief that they can receive new proposals if they approach Hirose, allowing us to introduce many unprecedented and cutting-edge products to the world.

New product ratio
30%

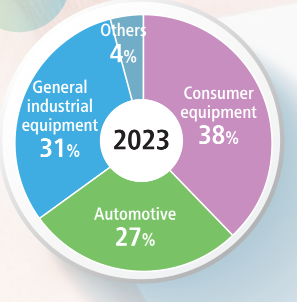
Number of products
40,000

80 years of history and achievements

Starting with the development of the first domestically manufactured connectors, we have accumulated an extensive product series and knowledge along with the development of electronic devices. This accumulation directly contributes to the extensiveness of our solution proposals, and at the same time, we have established a global network with local roots to support these solutions.

As the integration of software and hardware continues in the field of electronic devices, there has been a blurring of lines between markets, with a growing demand for proposals that transcend different markets and regions. We provide high-value-added products with superior economic efficiency by leveraging our market base that encompasses consumer equipment, automotive, and general industrial equipment to develop and expand the sales of products that meet the unrealized needs of countless customers.

Broad business foundation



Domestic and overseas plants and offices
15 countries/regions
57 locations

Commitment to high profitability and a strong financial foundation

We are a company that pursues high added value, not only focusing on expanding the scale of business.

We have set a high target of achieving a stable operating margin of 25%, with 20% at the minimum. To this end, it is extremely important for us to understand how the added value of our products is perceived and to decide on their pricing, which is the manifestation of this value. We analyze each product and project in detail, and even our management is involved in examining and improving the value provided to customers. We have conveyed to our employees that, based on the cash flow generated as a result, they would not have to worry about their livelihood even if the Company has three years of zero sales, and that they should focus on research and development for the future, thereby allowing us to concentrate on future-oriented activities.

Average operating margin (over 30 years)
26.0%

Cover Story

04

Co-creating Our Future Society with the Power to Connect

Although technology is constantly evolving, it is not always directed at improving convenience but is also aimed at the pursuit of vibrant lives, including the resolution of social issues. Exemplary of this trend is the electrification of energy and increased energy efficiency as part of efforts to mitigate climate change, as well as the development of sensing technology as the foundation of a safe and secure society, with electronic devices being utilized in infrastructure and various other places as lifelines.

As connecting parts, connectors are also required to evolve not only in pursuit of high functionality but also in various ways to fulfill specific applications. With "A Small Company Connecting Wisdom" as our Inseparable Principles, we recognize the limitations of our capabilities as a standalone company and seek to achieve co-creation by leveraging external knowledge.

- **Extensive problem recognition based on the three pillars (consumer equipment, automotive, and general industrial equipment)**
- **Collaboration with co-operators on connector peripheral parts through 3C+1C (Co-operator) activities**
- **Accumulation of diverse elemental technologies through our production partners network**

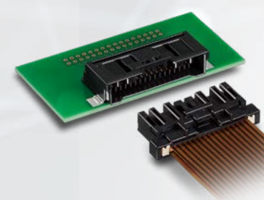
Establishment of Tohoku Advanced Technology Center and creation of opportunities for cooperation, including with production partners

Capital and business alliance with AIO Core Co., Ltd.
(Development of connectors that utilize silicon photonics chips)

By connecting knowledge from inside and outside the Company, we have expanded our product series to address issues facing the world, including products that are appropriate for construction sites that have not used connectors in the past as well as heat- and vibration-resistant FPC connectors that help reduce the weight of automobiles. Going forward, we will strengthen our efforts in this regard more than ever before and promote active engagement through business and capital alliances, etc. By expanding our network of co-creation partners globally and providing new technologies and products to society, we will contribute to the creation of a future society in which everybody can live comfortably.

Work hours at construction sites
Reduced by 1/3

[EF2 Series]



Replacing cables with FPC to reduce weight

[ZK1 Series]

Connecting the World, Connecting the Future

Connectors are small and inconspicuous electronic components.
They might not stand out, but they are still an essential component of the device.
By performing their connecting function, they make it possible to greatly enhance the functionality and convenience of electronic devices.
We believe that we can realize a more prosperous future and connected world through connectors.
The Hirose Group continues to propose solutions to various issues by creating "New." connectors that have been realized through the collective wisdom of the Group and the world at large.

Contents

Editorial Policy

This report has been compiled to allow all stakeholders to gain a well-balanced understanding of the various aspects of the Hirose Group including not only financial information such as business performance and strategies, but also non-financial information concerning the Group's policies toward the environment, society and corporate governance. When editing this report, the Company referenced the International Integrated Reporting Framework published by the International Integrated Reporting Council (IIRC).

In addition to this report, the Company prepares an Annual Securities Report (in Japanese only), and a Newsletter to Shareholders along with various other communication tools.

Please visit the Hirose Group's website to peruse the detailed information we post there.

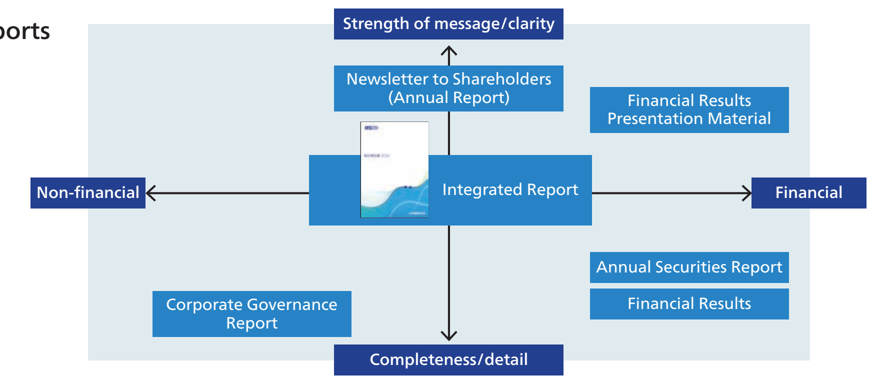
* Note that in this report, the term the Hirose Group refers to the entire HIROSE ELECTRIC Group, while Hirose Electric is used to refer to Hirose Electric Co., Ltd. on a non-consolidated basis.

This report has been translated from the Japanese original for reference purposes only. In the event of any discrepancy between this translated version and the Japanese original, the original shall prevail.

Applicable Period

From April 1, 2023 to March 31, 2024 (Portions of this report contain information about activities and initiatives from April 1, 2024 onward.)

Purpose of Various Reports



How to Access the Reports

Integrated Report
https://www.hirose.com/corporate/en/ir/integrated_report/

Annual Securities Report / Quarterly Financial Report
https://www.hirose.com/corporate/en/ir/fr/

Financial Results Presentation Material
https://www.hirose.com/corporate/en/ir/frp/

Financial Results
https://www.hirose.com/corporate/en/ir/fs/

Newsletter to Shareholders (Annual Report)
https://www.hirose.com/corporate/en/ir/annual_report/

Corporate Governance Report
https://www.hirose.com/corporate/en/csr/management/

Website Guidance

For Retail Investors
https://www.hirose.com/product/jp/pr/individual/ (in Japanese)

Governance
https://www.hirose.com/corporate/en/csr/management/

Social Responsibilities
https://www.hirose.com/corporate/en/csr/sr/

Environmental Responsibilities
https://www.hirose.com/corporate/en/csr/er/

President's Message

A Message from the President

Kazunori Ishii

President and
Representative Director

We will establish a three-pillar portfolio (comprising consumer equipment, automotive, and general industrial equipment) for our medium-term plan and strive to seek the "New" for the next phase.

Connectors and our business

For many years, the Company has engaged in the "connecting business" with connectors at the core of its business. Connectors are said to be the last part that is chosen in the design of electronic devices. Our end customers, who are responsible for the design, start with the design of semiconductor-related parts that determine the performance of devices before finally selecting the connectors by taking into consideration printed circuit boards layout and the connections between the parts and modules. Therefore, design changes occur frequently, making it necessary to carry a wide variety of products, including small-lot items, in order to satisfy customer's expectations. Connecting also involves manual connection processes by workers that require a deep understanding of the customer's work site, which can be said to be a professional job that relies on experience and knowledge. This is why our end customers opt not to manufacture connectors in-house but instead entrust them to external manufacturers of electronic components and connectors.

Responding to such demanding requirements fosters trust with our customers. Our sales representatives, who are the point of contact with our customers, are equipped with diverse product and quality knowledge beyond the area of sales to ensure that they can respond promptly on the ground. Likewise, the scope of work of our engineers goes beyond design and includes thinking about what kind of products to develop in order to expand the market. Our business, which always entails the pursuit of the new, requires a spirit of taking on challenges and teamwork in carrying out a wide range of work with customers as the starting point. Therefore, the positive and cheerful attitude of those who interact with our customers as they engage in their work has an impact on the Company's performance. Enhancing corporate value is thus inextricable from the trust of customers based on the belief that Hirose will be able to achieve something unique and new when asked to.

On the other hand, it is the responsibility of management to provide direction and establish structures to ensure that these efforts give rise to actual results. The question is to identify an approach through which we can consolidate the market in response to the countless demands and expectations for connectors, and embark on efficient development and production. To this end, we have been strengthening our ability to respond to fluctuations by (1) aggregating needs through new product proposals and (2) leveraging compact equipment and our production partners network.

In addition, since I was appointed President in 2012, we have been focusing on the development of product applications based on the three-pillar portfolio (consumer equipment, automotive, and general industrial equipment). As exemplified by the saying that "automobiles are becoming more like smartphones," there has been a blurring of lines between markets in recent times, and devices across all fields are now capable of communication and are equipped with displays and batteries, with demand for environmental endurance growing simultaneously. By capturing such points of commonality of connection areas across different fields, we will engage in the horizontal expansion of products and technologies and seek to contribute to addressing issues facing a wide range of customers. Our market portfolio, which was centered on consumer equipment around 2010, now encompasses a growing composition ratio of automotive and general industrial equipment. The establishment of this portfolio will reach its conclusion in the Medium-Term Business Plan through FY2027, allowing us to move on to the next phase.

Our medium- and long-term plans

In our new Medium-Term Business Plan, we have set targets for sales of ¥230.0 billion, operating margin of 25% or more, and ROE of 10% or more. As a company that is committed to high profitability, we have previously announced targets for operating margin and ROE only, and this is the first time we have set a target for sales. This is because our recent financial results for the period from FY2020 to FY2023 were affected by supply chain disruptions sparked by the COVID-19 pandemic and fluctuated wildly, and we felt it was imperative that we reiterate the medium-term growth trajectory that we were pursuing.

Sales for our automotive business have continued to grow by 20% annually for the past three years despite being a late entrant into the market, and we are now in the process of reaping the rewards of past investments we have made since FY2016. As our target is to increase the sales composition ratio of the growing automotive business to 30% by FY2027, we will complete the establishment of the three pillars as our management theme during the period of this Medium-Term Business Plan and begin our search for the "New"—pillars that will drive further growth.

At the same time, we will build a business platform in line with our sales growth and changes in our business composition. The Tohoku Advanced Technology Center (TAT Center) was established to create platforms for production lines and expedite the launch of lines, creating opportunities for not only our employees but also members of production partners to come together for practical learning. We also plan to renew our SCM system over the next several years to optimize our global supply chain and expedite decision-making. These initiatives are indispensable for becoming a leaner company and for establishing a foundation for further growth.

The possibilities of our connecting business

In the world of automated driving and medical robotics that is now upon us, connectors are becoming increasingly important as connection-related issues such as instantaneous interruptions must not occur. In the world of high-speed and high-frequency technology, signal quality varies significantly depending on the shape of metal terminals and the precision of connector

dimensions. It is not sufficient for connectors to merely be mated mechanically, as competitiveness in areas that are not immediately apparent such as the accumulation of analytical technology is also important. In order to achieve a very high level of compatibility, including in the area of high-speed and high-frequency technology amid the trend toward downsizing, there is a limit to what can be achieved by considering connectors on their own as it is important to cooperate and cater to changes in the printed circuit boards, cables, and semiconductors to which the connectors are connected. In view of this, in addition to our one-on-one relationships with customers, we will further promote cooperation with companies surrounding our customers with the aim of creating value beyond the mere provision of products.

Furthermore, we must demonstrate our philosophy and identity when working together with other companies. Driven by the Inseparable Principles of "A Small Company Connecting Wisdom," we are a company that specializes in the development of new products that are "Always Taking the Lead, Pursuing the Cutting Edge, Achieving Differentiation." In order to demonstrate this, we hope to actively expand our R&D activities that have hitherto been conducted in-house to involve external parties, and as part of these efforts, we are investing in and developing active optical devices. In the area of digital transformation (DX), which will continue to grow going forward, low energy is a desired feature of communications in addition to high speed and high capacity. One solution to this is optical communications, whose applications are expected to broaden from current mainstream applications in network infrastructure to compact connections inside devices in the future. Besides our expertise in electrical connections that we have cultivated thus far, we will also incorporate such optical technologies and focus on active optical devices that take advantage of the strengths of both fields.

The growth potential of our connecting business will continue to increase further as we move forward into the future. As a company that creates the "New" and generates new value, we will continue to contribute to our customers and society going forward.

Value Co-creation Model

Social issues

- Demographic changes
- Climate change
- Resource circularity
- Discontinuous technological advancement
- Division in the world
- Diversification of values and increased awareness of human rights

Foundation of our values

Global customer base
Number of customers:
more than 3,000

Global network
Plants and offices:
57 locations in 15 countries/regions
Production partners:
more than 800

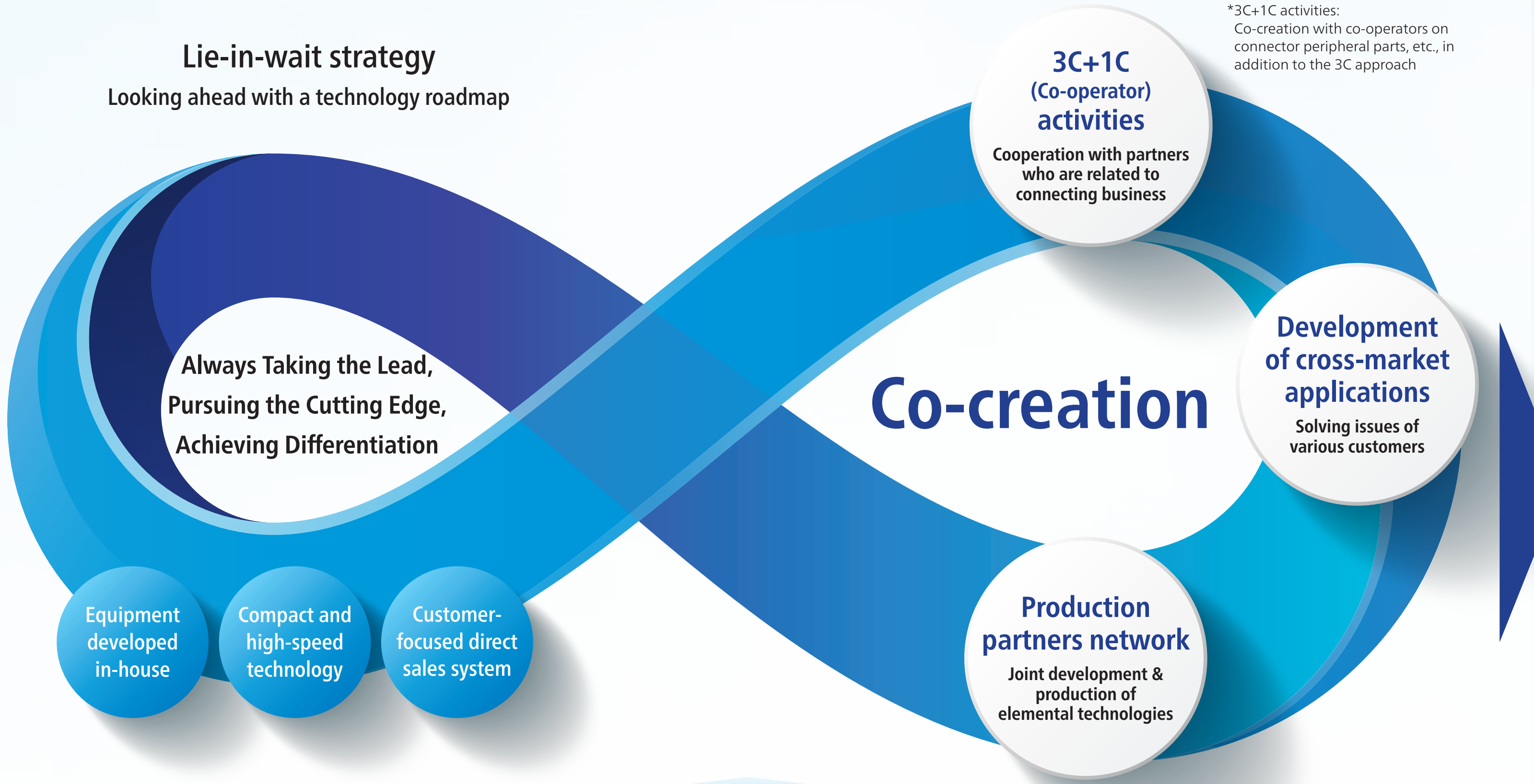
Technological development-oriented
R&D expenses:
approx. ¥12.0 billion/year

Human capital who share HIROSE Philosophy
Number of employees:
approx. 5,000

Stable financial condition
Operating margin (for 30 years):
26.0% (Avg.)

Natural capital
CO_2 emission:
approx. 38 thousand t-CO_2

Foundation of our values



*3C+1C activities:
Co-creation with co-operators on connector peripheral parts, etc., in addition to the 3C approach

A corporate culture of challenge | Mindset of aiming for high profitability | Culture of teamwork

Customer value and social value

Key word: "Power to Connect"

"Create the New."

Extensive expansion of solution proposals
(number of products: 40,000)

Delivering the power of electronics to all places

- Contributing to increasing design freedom and to the evolution of devices by downsizing through connectors
- Achieving device autonomy and advancing communications through high-speed, high-frequency solutions

Creating a safe, secure, and employee-friendly working environment

- Improving on-site work efficiency and reducing workload of workers through simple connections
- Preventing on-site accidents (electrocutions, fires, etc.) through reliable connections with lock mechanisms

Contributing to a sustainable society through connector products

- Promoting electrification and decarbonization by simplifying electrical connections
- Improving maintainability and reducing waste through connector-based connections

Ideal Vision

Co-creating Our Future Society with the "Power to Connect"

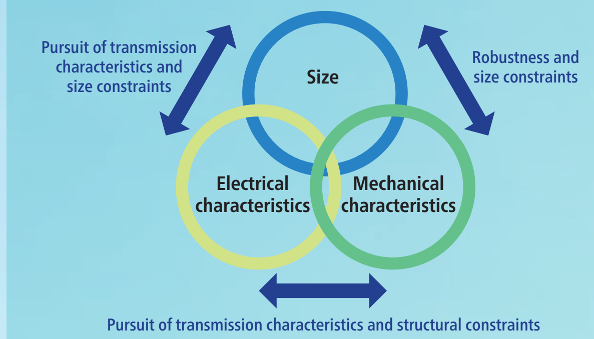
Inseparable Principles
A Small Company Connecting Wisdom

HIROSE Philosophy
The Six Values

- Connecting Wisdom
- High Added Value
- The Principle of "Being Small"
- Always Taking the Lead, Pursuing the Cutting Edge, Achieving Differentiation
- A Small Company of Smart People
- Continuing to Be a "High Flier"

Mechanisms for Value Co-creation

Connector markets



A wide variety of market and customer requirements depending on the equipment on which the connectors are mounted

1. Product characteristics
   Huge variety of products exist to meet a wide variety of requirements
2. Competitive environment
   Competitors focus on target markets to increase their expertise

Our strengths

Management

Pursue high added value rather than expansion of scale

- Focus on markets where technological change is occurring; do not just pursue scale of sales pointlessly
- Management is involved in pricing and reviews evaluations for each product by customers and the market

Marketing and R&D

Prioritize original and differentiated products

- Rationalize and align with HIROSE Philosophy
- Engineering departments are to be organized according to product, pursuing technical specialization
- Build a mechanism through which numerous customer needs are aggregated around our three-pillar business and hypotheses are verified (e.g., Hirose Technology Exhibition)
- Sufficient R&D expenditure and a stable financial foundation

Manufacturing

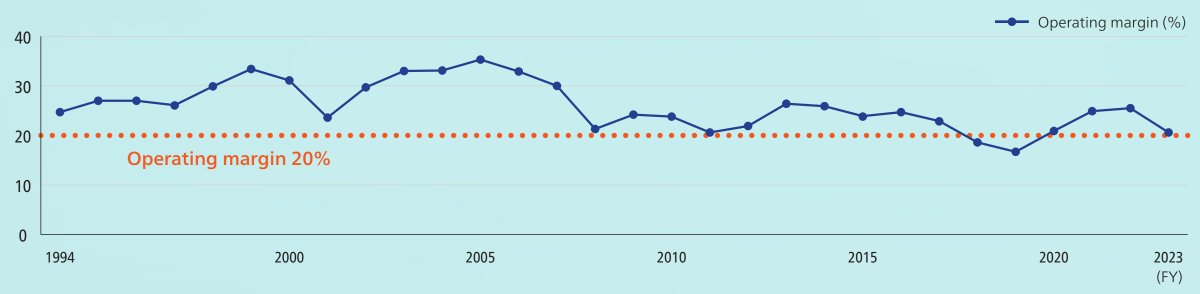
A structure that is resilient to demand fluctuations

- Production partners network
- Flexible production framework using compact standard equipment

Integration of Hirose's technology and knowledge of production partners

- Creation of our unique manufacturing philosophy and its development through verification at the production lines
- Joint R&D with the introduction of knowledge of production partners

Operating margins in past 30 years



Development of products and expansion of solutions

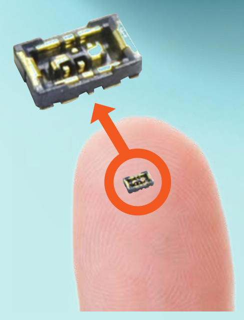
Expansion of product lineup

Expertise shared with cutting-edge customers and track record of adoptions

Proposing new value
Propose our differentiated connectors to customers with cutting-edge technologies

Connecting the knowledge of customers
Entry into other markets through development of new applications and feedback on product features

Provision of abundant solutions
Supply capability with a product range that meets a wide range of customer needs



Example: Propose the world's smallest advanced connector for increasingly downsized consumer devices

Product development	Original and differentiated products	Development of product variations	Sales expansion of existing products
Sales channels	Emphasis on direct sales		Emphasis on sales through distributors
Manufacturing	In-house manufacturing		Outsourced manufacturing