

75th Fiscal Term Annual Report

From April 1, 2021 to March 31, 2022

HRS HIROSE
ELECTRIC
CO.,LTD.

HIROSE ELECTRIC CO.,LTD.

COVID-19 is not yet over, but we need to respond to new business styles due to the entrenchment of remote work and lifestyle changes.

Amid such business environment, orders for connectors have also been growing.

The Hirose Group employees come together as one, continuing to strive to ensure products reach customers.

Thank you to all of you for the enormous support you provide on a daily basis.



Kazunori Ishii, President and Representative Director

■ Starting point for full growth

In the six years from FY2014 to FY2019, the Company's sales and operating profit ratio stagnated, and we constantly fell short of stakeholder expectations.

Since FY2020, we have started to grow in all three primary areas that underpin the Company's Sales (Smartphone and Consumer Equipment, General Industrial Equipment, and Automotive). In FY2021, we recorded Sales of ¥163,670 million and an operating profit ratio of 24.9%, which substantially surpassed initial forecasts.

There has been increased demand for new products in General Industrial Equipment and Automotive, in which we have invested during recent years. In addition, for Consumers, demand for wearable devices and other items associated with the global entrenchment of remote work continues to expand.

Our past activities that were focused on the future are starting to pay off and FY2021 has become the starting point for full growth in the medium to long term.

Building on FY2021, we will achieve growth in FY2022 and beyond.

■ For continuous growth in the medium to long term

It will be important to have high performance and continue to be a high-flyer to achieve continuous growth in the medium to long term.

Every employee demonstrating their fullest capacity, always maintaining a high-level perspective and continuing to take on challenges will lead to the Company's growth.

We believe the key to this is having foresight, sensitivity and responsiveness.

Starting by looking and reading ahead, then sensing the points of change, we will be able to respond quickly, which will lead to the next actions.

Establishment of this cycle will result in us being the first to provide customers with leading, cutting-edge products.

"People" are important for achieving this cycle.

To create an environment where employees experience fulfillment and success in their work, we have rolled out various initiatives for developing human capital, including the introduction of a new HR system, and activities designed to pass down the common values of the Group known as the "HIROSE Philosophy."

We believe the following are issues to be tackled in FY2022 after preparing the foundation for medium-term growth.

Consumer: Growing demand and market stabilization due to new consumer devices becoming entrenched in lifestyles

General Industrial Equipment: Developments for market expansion and growth

Automotive: Major market change due to the need for EVs and autonomous driving, and expectations for substantial growth.

We will respond to these issues by combining the Hirose Group's strengths and treating these issues as growth opportunities. In addition, we will not only grow in the respective markets, but increase our proposal activities to customers through cross-field activities. The Company's mission is to ensure a response to customer requests even amid the changing environment that includes geopolitical risks, natural disasters, and risk of infectious disease. We will progress our activities in FY2022 with our number one priority being to increasingly gain the trust of our customers.

■ To become a company that is indispensable for society

We believe it is important not only to pursue profit but to also contribute to solving social issues in order to achieve sustained development of the Company and society for the future.

We believe addressing climate change to be a matter of urgency.

"Electrification" is a keyword in the decarbonization of society, and the role of connectors, as connecting components, is becoming increasingly important with the electrification of transportation and industry.

The Company is a general department store for connectors used in wide-ranging areas of Smartphone and Consumer Equipment, General Industrial Equipment and Automotive, with an assorted product lineup that contributes to the electrification of automobiles and formation of smart factories.

Demand for these connectors is growing and we are strengthening production capacity while developing new products.

In addition, we not only contribute through business, but also have taken this opportunity to reform the Company's CO₂ emissions reduction targets. These new targets involve activities aimed at carbon neutral in FY2050 with a target of "60% reduction in emissions by FY2027 (relative to FY2021)" applied to Scope 1 and 2 for the Company's own emissions.

Initiatives include the continuation of energy saving activities such as switching to high-efficiency devices, as well as proactively installing renewable energy.

We are reducing emissions. In FY2021, we installed solar power panels on the entire roof of the Suzhou factory, and in FY2022, all electricity purchased at the Ichinoseki factory will come from renewable energy sources.



[Suzhou factory]



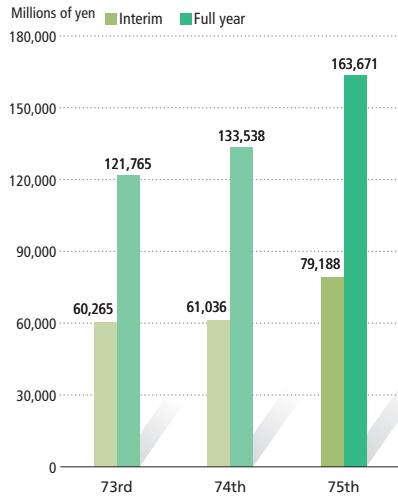
[Ichinoseki factory]

Even in this forthcoming period of selection, the Company will respond to the expectations of our stakeholders and aim for a corporate management that exceeds expectations.

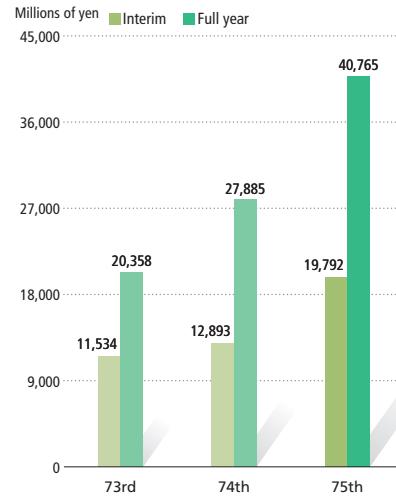
We look forward to your continual support and guidance of our shareholders.

Financial Highlights

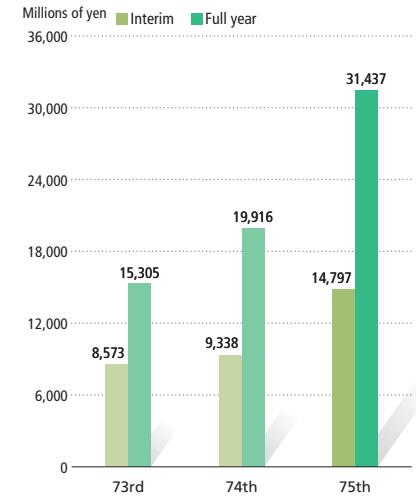
Sales



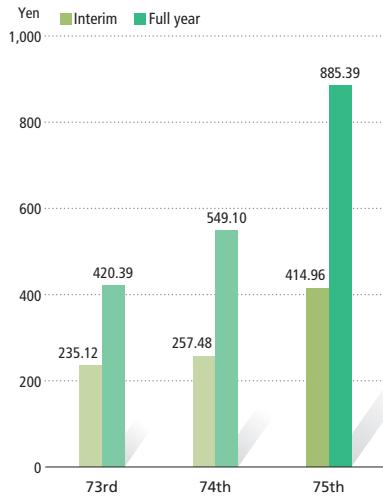
Operating profit



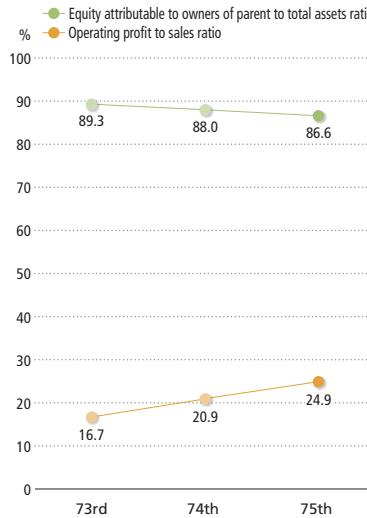
Profit attributable to owners of parent



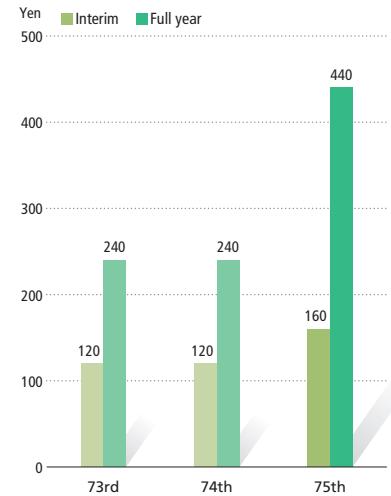
Basic earnings per share



Equity attributable to owners of parent to total assets ratio & Operating profit to sales ratio

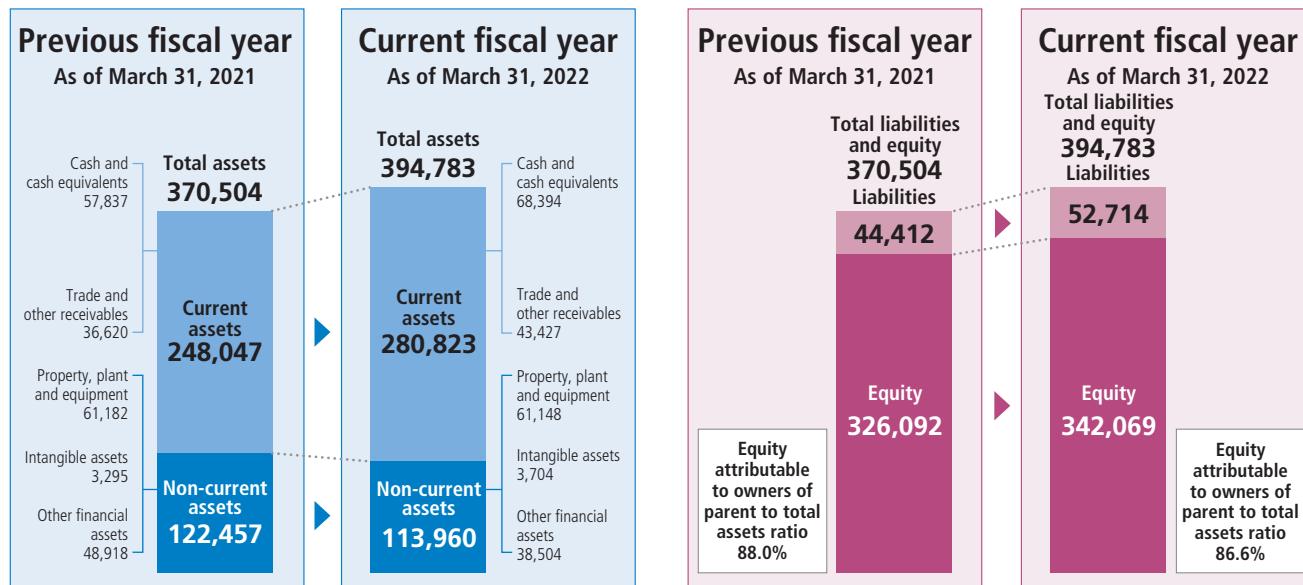


Dividends per share



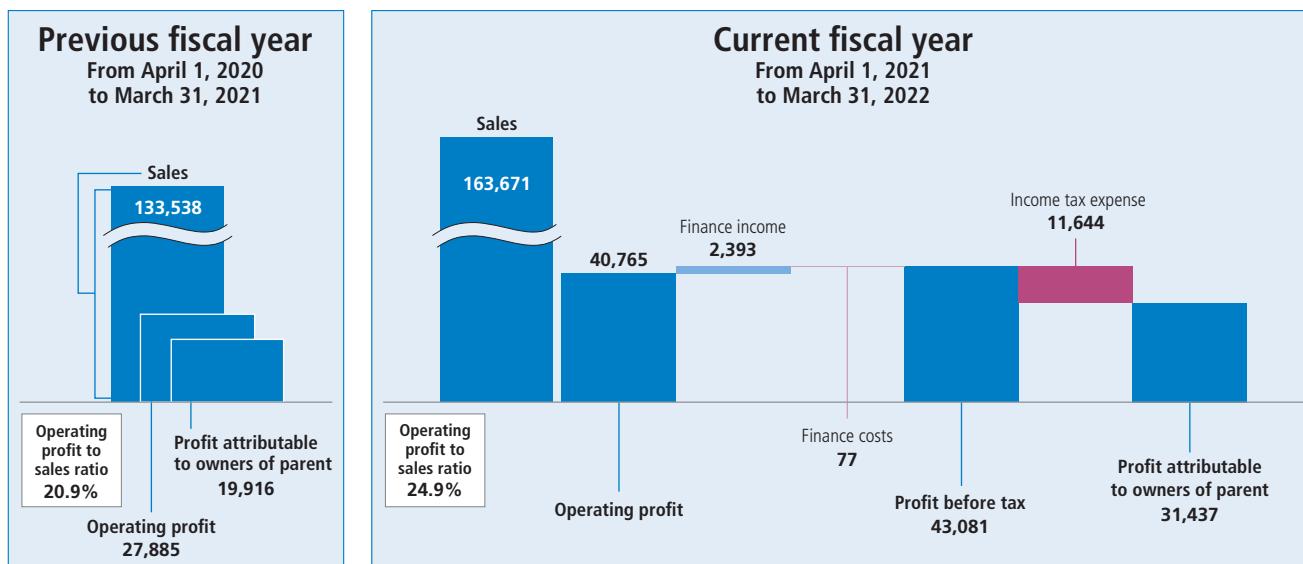
Overview of Consolidated Statements of Financial Position

(Millions of yen)

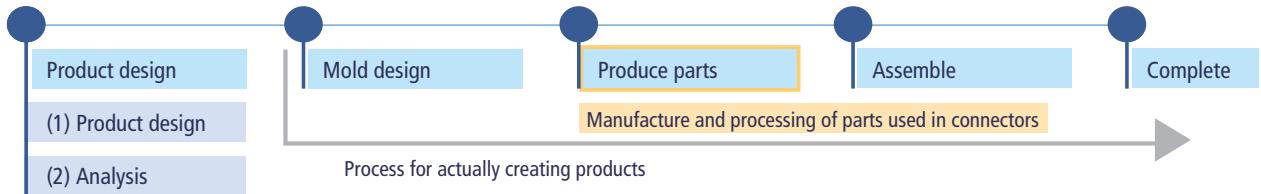


Overview of Consolidated Statements of Income

(Millions of yen)



Steps to creating a connector



Processing methods for component parts that comprise connectors

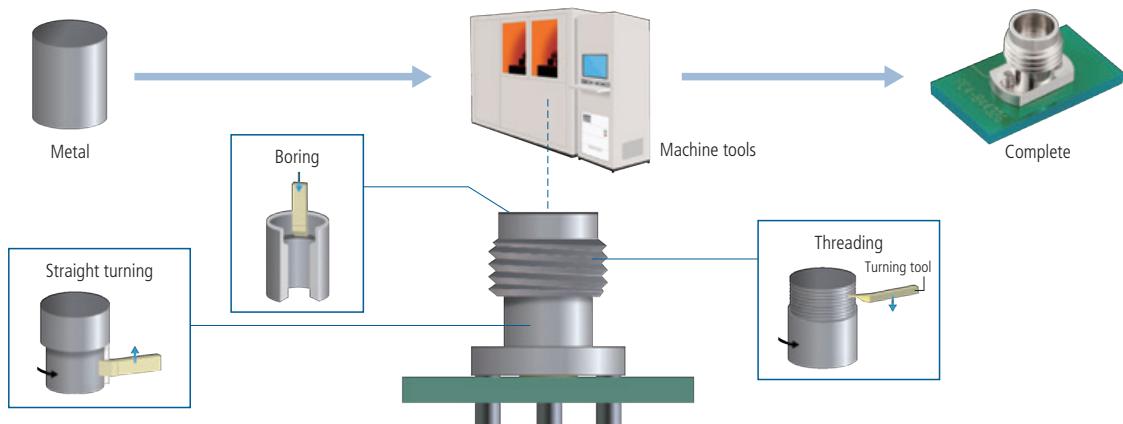
There are two main types of processing methods for component parts that comprise connectors.

Press processing: A processing method to form metal component parts such as terminals and outer shells by pressing molding die into metal plates and bending the metal plate or removing unnecessary parts. Mass processing is possible at one time for items with the same shape by using molding die.

Cutting processing: A processing method to form shapes while scraping away metal, striking the mass of metal materials with a hard blade. This is appropriate for high precision flexible processing and involves shaving with a blade until the target shape is formed.

About cutting processing

The machine operates according to its settings and cuts metal materials once the numerical value is input into the machine tools and combined with a tool for shaving metal. The target shape is processed by shaving and digging into the face of the metal using drills and chisel-like tools called turning tools. There are various types of cutting processing, but the most typical processing method is turning on a lathe. Turning on a lathe is a processing method to form the targeted shape through shaving the material with the movement of a turning tool as the material rotates. Since the process is generally for cylindrical materials, the finished shape is also round. Various processing methods are defined even within turning on a lathe depending on the processing objective.

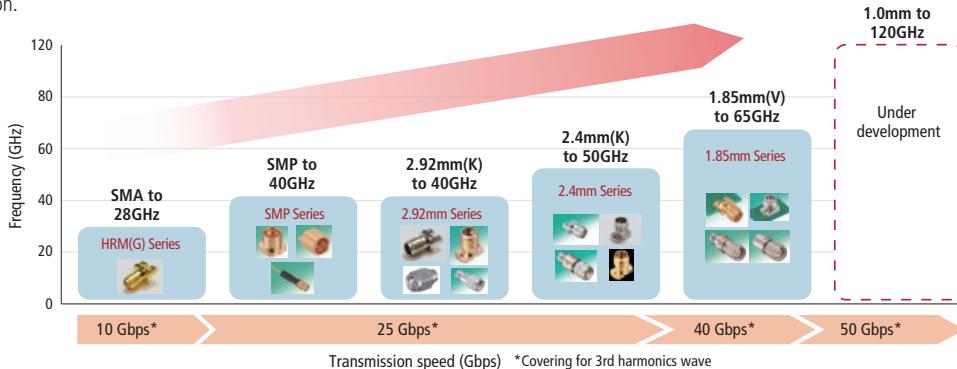


Coaxial connectors to support future telecommunications

HIROSE ELECTRIC produces precision coaxial connectors using cutting processing which is good for high precision processing. Coaxial connectors are precision component parts that require high precision, mainly used in equipment that transmit and receive high-frequency signals such as wireless devices. Strict international standards are set for the shape and size of coaxial connectors. Cutting processing involves shaving metal until the target shape is formed, so it enables more highly precise processing. In future, telecommunications will evolve with greater speed and higher capacity such as 5G and 6G, and we expect this will contribute to a more convenient society. 5G uses "millimeter wave," a high frequency that is incomparable to familiar radio waves, and it will be important to address electromagnetic waves (noise) that interfere with the transmission and reception of millimeter waves. While demand for coaxial connectors that transmit and receive high-frequency signals will increase, it will become even more important to have precision processing that prevents the passage of electromagnetic waves. High precision cutting processing will also be a measure to eliminate gaps in connectors and prevent noise.

The future of HIROSE ELECTRIC's coaxial connectors

We have provided the market with connectors capable of transmitting and receiving high frequencies in compliance with the standards through our high precision processing. HIROSE ELECTRIC's Coaxial Engineering Department is advancing with development activities, mindful of future advancements in telecommunication.



To create connectors for even higher frequency bands, we are pursuing highly precise size to achieve tolerance levels below 1/1,000mm. We are advancing initiatives with three parties: connector engineers, processors and subcontractors.

Engineers: To achieve high precision processing, it is important to determine the size and shape of the connector giving consideration to processing from the design stage. We aim for precision design by deepening connector engineers understanding of the cutting processing through measures such as onsite tours of processing, while strengthening the communication between processing divisions and with subcontractors, building up discussion about processing from the design stage. In addition, we have built up know-how in analysis technology and also undertake activities to reduce the gap between analysis results and actual results.

Processors: Various elements have an impact on processing precision including the processing equipment, shape of the blade, and the rotation speed of the blade and materials. HIROSE ELECTRIC is building up know-how when processing at the Ichinoseki factory, which is in charge of cutting processing, to achieve high precision, stable processing of connectors for high-frequency use.

Subcontractors: We pursue processing precision in collaboration with subcontractors possessing high processing technologies.

In addition, downsizing is also required for coaxial connectors. The signal's wavelength becomes shorter as the frequency becomes higher and this becomes a very short 5mm for a frequency of 60GHz. Electronic circuits need smaller designs to suppress the impact of the wave amplitude of high-frequency signals, which inevitably requires smaller connectors. Advancing the development of small highly-functional coaxial connectors utilizing HIROSE ELECTRIC's strength in downsizing technology.

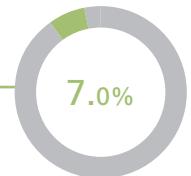
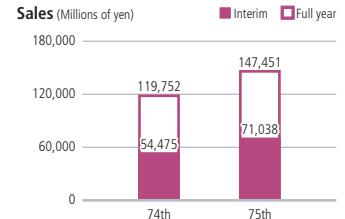
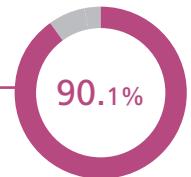
HIROSE ELECTRIC's high precision coaxial connectors are already used in 5G base transmission stations and elsewhere, and we continue our development activities for connectors with greater functionality that are very convenient and precise ahead of future advancements in telecommunications.

Multi-Pin Connectors

Sales **¥147,451 million** (up 23.1% year on year)



Our flagship multi-pin connectors include a variety of connector types such as circular and rectangular connectors, connectors for ribbon cables, connectors used for printed circuit boards including FPCs (flexible printed circuit boards) and nylon connectors. The major applications of these connectors include a wide range of fields such as smartphones, communications equipment and automotive electronics, as well as industrial fields such as measuring and control equipment, FA equipment and medical electronics equipment. Further expansion in demand is expected along with the further development of a sophisticated information and communications networked society and an eco-friendly, energy conservation-oriented society. Segment sales for the year under review increased by 23.1% year on year to ¥147,451 million and operating profit increased by 43.7% year on year to ¥37,778 million.

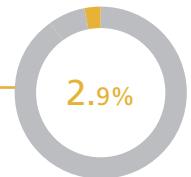
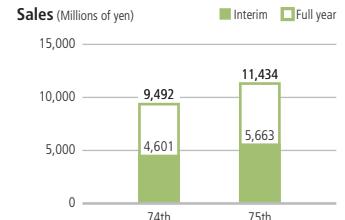


Coaxial Connectors

Sales **¥11,434 million** (up 20.5% year on year)



Coaxial connectors are a special type of high-performance connector used primarily for microwave and other high-frequency signals. Their applications include antenna connections for wireless LAN and Bluetooth communication used in smartphones and PCs, and as GPS antenna connections for automobiles as well as for connecting high-frequency signals in wireless communication devices and electronic measuring equipment. Optical fiber connectors and coaxial switches are also included in this segment. Segment sales for the year under review increased by 20.5% year on year to ¥11,434 million and operating profit increased by 98.7% year on year to ¥2,805 million.

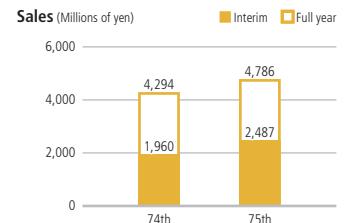


Other Products

Sales **¥4,786 million** (up 11.5% year on year)



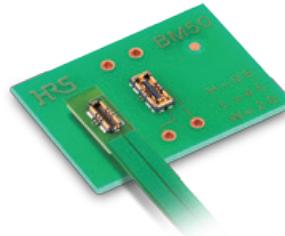
The other products segment includes micro switches and instruments for connectors. Segment sales for the year under review increased by 11.5% year on year to ¥4,786 million and operating profit increased by 2.3% year on year to ¥182 million.



Initiatives in each area

Smartphone and Consumer Equipment

In addition to the downsizing of component parts corresponding to the enhanced performance of smartphones, there is growing needs for increased battery capacity and high-speed power supply, which requires the connectors used in battery connections to be small and have capacity for high-speed power supply. To meet these needs, HIROSE ELECTRIC has developed the BM50 Series. This succeeds in being small while having capacity for high current of 15A, with a reduction in the mounting area of about 30% compared to the Company's traditional products with a mating height that is 0.1mm lower. This contributes to space saving within devices and downsizing the set. This product also received an Honoree award in the CES® 2022 Innovation Awards at CES, the world's largest exhibition of consumer technology products.



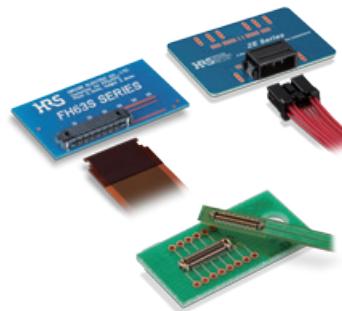
General Industrial Equipment

In recent years, there has been a requirement for high-speed isolated transmission with wire savings and for long distances in areas including industrial cameras, image inspection equipment, and industrial robots. To meet these needs, we have deployed optical connectors represented by our optical active connector BF4M Series and BF4-IR2 Series, and water proof connector SW20 Series. At this time, to expand the range of proposals to customers, we have announced a solution proposal including serial transceivers (THCS251/THCS252) in collaboration with THine Electronics, Inc. HIROSE ELECTRIC will contribute to high added value connection solutions by striving relentlessly to improve customer value.



Automotive

The working age population is declining in advanced countries such as Japan, while labor expenses are rising in China and other Asian countries, so improving production line efficiencies in factories is an important issue for all manufacturers. HIROSE ELECTRIC has prepared the FPC/FFC Connector as the best for assembly by robots as the One Action Series lineup, and we have also achieved automated assembly of previously hard to achieve printed circuit boards for small printed circuit boards and cable connectors for printed circuit boards through collaboration with others including robot manufacturers to propose further added value. As a result, we exhibited a demonstration model at the International Robot Exhibition, held from March 9 to 12, 2022 and received an overwhelming response. HIROSE ELECTRIC will continue to make proposals for improved efficiency of manufacturing.



◎ Domestic bases

TOHOKU HIROSE ELECTRIC CO., LTD.



ICHINOSEKI HIROSE ELECTRIC CO., LTD.



KORIYAMA HIROSE ELECTRIC CO., LTD.



West Japan Sales Office

Kansai Branch

Chubu Sales Office

Kitakanto Sales Office

Gotanda Office

Head Office



Kikuna Office



◎ Overseas bases

HIROSE ELECTRIC EUROPE B.V.



HIROSE ELECTRIC (SUZHOU) CO., LTD.



HIROSE ELECTRIC (DONGGUAN) CO., LTD.



HIROSE ELECTRIC INDIA. PVT. LTD.



HIROSE ELECTRIC MALAYSIA SDN. BHD.



HIROSE ELECTRIC SINGAPORE PTE. LTD.



P.T. HIROSE ELECTRIC INDONESIA



Hirose Electric (China) Co., Ltd.



HIROSE KOREA CO., LTD.



HIROSE ELECTRIC (U.S.A.), INC.



HIROSE ELECTRIC TAIWAN CO., LTD.



HIROSE ELECTRIC HONG KONG CO., LTD.
HIROSE ELECTRIC HONG KONG TRADING CO., LTD.



Company Profile (As of March 31, 2022)

Trade name	HIROSE ELECTRIC CO., LTD.
Date of incorporation	June 15, 1948
Number of employees	Consolidated: 5,070 (excluding part-timers)
Capital stock	¥9,404,379,401

Directors (As of June 23, 2022)

President and Representative Director	Kazunori Ishii
Senior Managing Director	Mitsuo Nakamura
Director	Yukio Kiriya
Director	Hiroshi Satoh
Director	Shin Kamagata
Director	Jun Inasaka
Director	Sang-Yeob Lee
Outside Director	Kensuke Hotta
Outside Director	Tetsuji Motonaga
Outside Director	Masanori Nishimatsu
Director (Standing Audit & Supervisory Committee Member)	Yoshikazu Chiba
Outside Director (Audit & Supervisory Committee Member)	Terukazu Sugishima
Outside Director (Audit & Supervisory Committee Member)	Kentaro Miura

Note:

Outside Directors Kensuke Hotta, Tetsuji Motonaga, Masanori Nishimatsu, Terukazu Sugishima and Kentaro Miura are Independent Officers who are unlikely to have any conflicts of interest with general shareholders, and are required to be designated by the Tokyo Stock Exchange.

Accounting Auditor

KPMG AZSA LLC

Stock Information (As of March 31, 2022)

Total number of shares issued	35,365,735 shares
(Excluding 2,810,207 shares of treasury shares)	
Number of shareholders	3,510

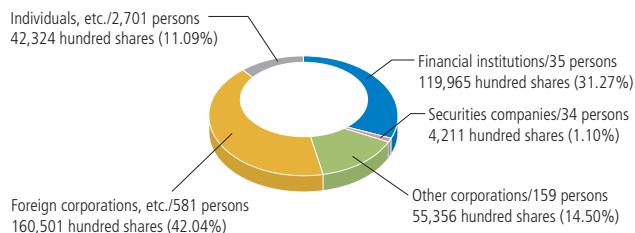
Major Shareholders (Top 10)

Name of shareholder	Number of shares held
The Master Trust Bank of Japan, Ltd. (Trust Account)	51,367
Hirose Foundation	31,476
State Street Bank and Trust Company 505223	29,141
JPMorgan Chase Bank 380055	25,002
Custody Bank of Japan, Ltd. (Trust Account)	15,306
HS Kikaku Co., Ltd.	12,215
Custody Bank of Japan, Ltd. (Trust Account No. 4)	10,524
Mizuho Trust & Banking Co., Ltd. (Trust Account) 0700093	8,707
Mizuho Trust & Banking Co., Ltd. (Trust Account) 0700094	8,652
State Street Bank West Client - Treaty 505234	8,287

Note: In addition to the 10 major shareholders above, the Company owns 28,102 hundred shares of treasury shares.

Distribution of Shares

Distribution of Shares by Shareholder Type



Shareholder information

Fiscal term	From April 1 of a calendar year to March 31 of the next calendar year
Ordinary General Meeting of Shareholders	June every year
Record date	Ordinary General Meeting of Shareholders: March 31 every year Year-end dividend: March 31 every year Interim dividend: September 30 every year (As required, another record date may be decided with prior public notice.)

[Share-related notifications and inquiries regarding change of address, etc.]

Shareholders who have accounts at securities companies are requested to direct their notifications and inquiries regarding change of address, etc., to their respective securities companies where shareholders have their accounts. Shareholders who do not have accounts at securities companies are requested to call the telephone number as stated below.

Number of shares in one voting unit 100

Method of public notices The Company's Web site below shall be used for its public notices.
(<https://www.hirose.com/corporate/ja/ir>)
If an electronic public notice should fail due to accident or any other unavoidable circumstances, the Company shall post a public notice in the Nihon Keizai Shimbun.

Shareholders' register manager and account management institution for special accounts Sumitomo Mitsui Trust Bank, Limited
4-1, Marunouchi 1-chome, Chiyoda-ku, Tokyo

Handling office of shareholders' registry administrator Securities Agency Department,
Sumitomo Mitsui Trust Bank, Limited
4-1, Marunouchi 1-chome, Chiyoda-ku, Tokyo

(Mailing address) Securities Agency Department,
Sumitomo Mitsui Trust Bank, Limited
8-4, Izumi 2-chome, Suginami-ku, Tokyo 168-0063
0120-782-031 (Toll free, available only in Japan)

Phone:

URL: <https://www.smtb.jp/personal/procedure/agency/>

[Special accounts]

For shareholders who was yet to have used JASDEC (Japan Securities Depository Center, Inc.) by the share certificate dematerialization date, the Company opened a transfer account (hereinafter "special account") at Sumitomo Mitsui Trust Bank, Limited, as mentioned above, which serves as the shareholders' registry administrator. You are requested to use the above telephone number when making inquiries about the special account and notifications of matters such as change of address.

Recommended Contents of the HIROSE Website

1. Integrated Report 2021



2. Basic explanation of what you should know about connectors



3. CONNECTOR SELECTOR 2022



By scanning the QR code, you can access the website!

* "QR Code" is a registered trademark of DENSO WAVE INCORPORATED.