

FY2016 - FY2018

## Making the leap to becoming a global player

In March 2016, Hitachi Industrial Equipment Systems (HIES) devised its 2018 Mid-term Management Plan, aiming to strengthen domestic operations and implement growth strategies to establish itself as a global player in the global market. The plan set targets of 230 billion yen in net sales, with 27% being global business.

Subsequently, in April 2016, the Industrial Products Business Unit was established within Hitachi, Ltd. to oversee the industrial equipment business. This reorganization included HIES taking on Hitachi, Ltd.'s substation and control equipment business and large air compressor business and Hitachi Power Solutions Co., Ltd.'s substation and control equipment business.

Then, in April 2017, Mr. Aoki, then President of HIES, transitioned to the role of chairman. Yutaka Araya, the senior managing director, became the fourth President. In July of the same year, Hitachi, Ltd. acquired Sullair, LLC., a prominent U.S. air compressor manufacturer. This acquisition positioned Hitachi, with HIES, as the world's third largest air compressor manufacturer.

### Fiscal 2016

#### Launch of the 2018 Mid-term Management Plan

#### Expansion of global priority businesses and strengthening of domestic businesses

In March 2016, Hitachi Industrial Equipment Systems formulated its 2018 Mid-term Management Plan. The basic policy of the plan was to implement growth strategies aimed at becoming a global player and strengthening domestic business. The company put forth management targets of 230 billion yen in sales and a global business ratio of 27%.

Globally, the company aimed to further expand its business by quickly responding to market changes. It accelerated its global expansion by strengthening its sales and service structure and product competitiveness and by reinforcing its business control functions in each region. In addition, the company actively utilized and trained a diverse range of human resources, including local staff, and made the best use of them in its business. In particular, as a key global business expansion strategy, there was a focus on the air compressor and marking businesses, with the goal of increasing the ratio of global business from 32% in fiscal 2015 to 48%.

In the domestic business, the company focused on steadily capturing market changes such as energy conservation, higher efficiency, increased investment in facilities and infrastructure, and energy structure transformation, leading to continuous performance improvement. Regarding sales, the company expanded market share and sales by strengthening regional strategies and enhancing sales capabilities in collaboration with distributors. In particular, the launch of Internet of Things (IoT) maintenance services became a priority.

As part of the business transfer from Hitachi, Ltd. and other Hitachi Group Companies to HIES, the Katsuta Works was established on April 1, 2016, through a company split. Katsuta Works took over the design, manufacturing, and quality assurance divisions of Hitachi, Ltd.'s substation and control equipment business for the industrial field and Hitachi Power Solutions' business related to substation and control equipment. The design, manufacturing, quality assurance, sales, and after-sales service divisions of the large air compressor business were also taken over by the company, and Tsuchiura Works was established.



Katsuta Works



Outside view of the Tsuchiura Works main building

## Policies for Major Business Initiatives in the 2018 Mid-term Management Plan

In the compressor business, HIES focused on expanding sales of oil-free scroll compressors and other products, cultivating new customers, and expanding cooperation with partner companies. It expanded through integrated services, sales, and manufacturing to increase global sales in China and other Asian countries and to expand sales in the European and North American markets.

To expand its top market share in Japan, the company strengthened its sales network and energy-saving and renewal proposals and promoted the development of maintenance menus and the expansion of its service business utilizing IoT. In the large air compressor business, which was transferred from Hitachi, Ltd., HIES enhanced its competitiveness by consolidating its resources and know-how, and further expanded its business in Japan and accelerated its global expansion, especially in Asia.

In the marking business, HIES expanded its business domain by developing new sales routes, strengthening its sales structure, and collaborating with partner companies to expand sales of strategic products such as the Gravis UX series to increase its global market share. Furthermore, to build a total marking business, the company expanded its product lineup, including laser markers, and expanded its services business by strengthening its maintenance menu to create a system that could respond to varying customer needs.

In the transformer business, HIES steadily captured the needs for energy conservation and higher efficiency in the domestic market and the increasing demand for new energy sources such as wind and solar power generation, and further consolidated its position as the market leader in Japan. Globally, the company sought to expand its business by increasing orders for power grid projects in China, strengthening its product lineup to meet private-sector demand, and working closely with Hitachi Soe Electric & Machinery Co., Ltd., a transformer joint venture established in Myanmar.

In the drive business, the company strengthened its business by capturing IoT demand through the expansion of its servo product lineup and the launch of the next core model of inverters. By concentrating development resources on PM motors, the company focused on and shifted to high-value-added fields and markets to expand sales.

As a new growth area, HIES focused on IoT-related businesses that used information and communication technologies connected to the Internet and cloud computing. It responded to needs for labor and energy savings with products that include IoT controllers, drive products, and communication terminals. In addition, the company set out to build a system that could respond to varying customer needs by not only delivering equipment but also by incorporating maintenance and services.

The company expanded its service business globally in coordination with the development of new sales routes and the strengthening of the sales structure globally. In Japan, the company created and expanded new services based on customer needs. This included developing new customers by offering maintenance packages and proposing cloud monitoring services. This quickly and steadily promoted the uptake of large compressor services that had been transferred to the business.

As for R&D investments for growth, the company focused on the development of next-generation machines for current products, along with R&D for new businesses such as air compressor sensing and predictive diagnostic technology, new laser markers, PM motors, and new drive control for IoT utilization.

In addition, HIES continued to strengthen quality control, accelerate the Smart Transformation Project, ensure the basics and the right path, and accelerate “co-creation” with customers under a market-specific business structure with enhanced front-line functions to create valuable innovation through both services and products.

In the substation and distribution business, which was transferred to HIES, the company strengthened its business foundation by expanding its product lineup and increasing management efficiency under a unified strategy that covered everything from equipment to control panels.



Gravis UX Series twin-nozzle model

## Major business initiatives

For compressors, HIES introduced the HISCREW NEXT II series of 22/37/55/75kW screw compressors in July 2016. The following month saw the DSP NEXT II series debut, comprising 15 to 55kW single-stage oil-free screw compressors. Further expanding this line, January 2017 brought the DSP NEXT II series of 132-240kW two-stage oil-free compressors. In addition, HIES released an innovative oil-free scroll compressor equipped with an integrated amorphous motor in March.

Turning to inverters, the company released the high-performance Inverter SJ series P1 in September 2016.

Related to marking, the Gravis UX series was enhanced with the introduction of a twin nozzle model in December 2016.

For IoT-related products, the company led the way with several major launches in 2016. In April, the PAC system HX series of industrial controllers for IoT applications was unveiled, followed by the CPMonitor, a multi-input/output terminal device for IoT/M2M solutions, in July. November saw the release of the WT series of wireless units, designed for Hitachi motor blocks.

In the field of service solutions, the company expanded its offering in October by adding a cloud-based monitoring service for air compressors, the FitLive service for on-site modifications. This service complemented its existing LCM service, a comprehensive, high-value maintenance solution that catered to all customer needs, from equipment installation to after-sales service.

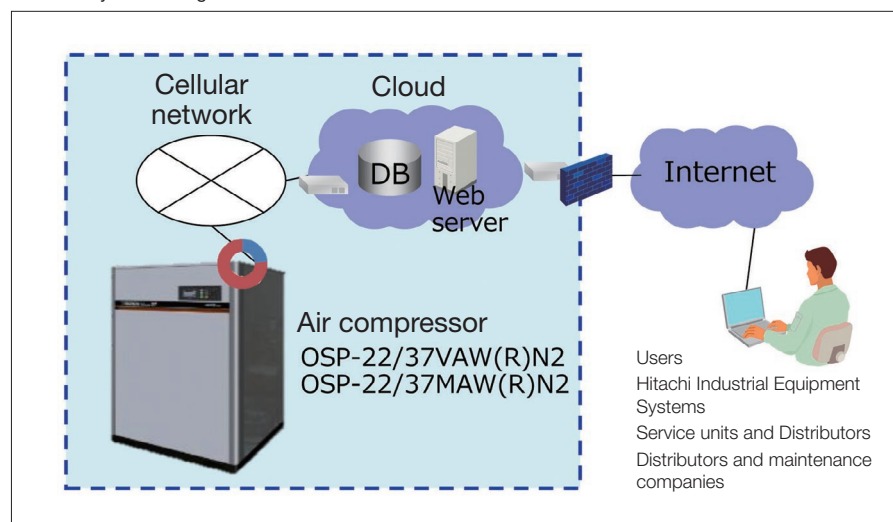
Regarding other products, April 2016 marked the launch of the Super F2 series of electric chain hoists, capable of lifting motor blocks weighing from 2 to 10 tons. This was followed by the release of durable, environment-resistant vehicle-mounted equipment designed for export in May.

In September, the company unveiled a 20kW/30kW power storage system tailored for small- and medium-scale industries. October saw the introduction of the Vortex Blower E series, which included a PM motor-mounted version. November's offering was a double-sided bio-clean bench, and in December, the company rolled out the ICHIDAS2-AX laser positioning system.



7.5kW oil-free scroll compressor with integrated amorphous motor

### FitLive system configuration



## Sales of 200 billion yen in sight

Regarding management and other developments, April 2016 saw a significant reorganization of the Kansai Branch service base. By August, a new, consolidated service and sales office opened at the Shikoku Subbranch. This milestone was celebrated with a formal unveiling ceremony and party on November 7.

Related to awards and recognition, the Katsuta Works was honored with the Award for Creativity from the Ministry of Education, Culture, Sports, Science and Technology in April 2016. Further testament to the company's excellence came in November, when the Ebina Works' Air Compressor Technology School was recognized with an award from the Minister of Health, Labor, and Welfare.

Individual achievement in 2016 was also celebrated, with Kazu Shishido of Katsuta Works bringing honor to the company by winning the bronze medal in the structural steel working category of the 54th National Skills Competition held in October.

In fiscal 2016, the company reported sales of 195.0 billion yen, with a global business ratio of 22.0%.



Attendees at the November 2016 unveiling ceremony for the new Shikoku subbranch built in August.

## Fiscal 2017

### Further advancement under new President Yutaka Araya

#### Acquisition of Sullair gives HIES the third largest share of the global air compressor market

In April 2017, Masakazu Aoki assumed the position of chairman, and Senior Managing Director Yutaka Araya became the fourth President.

President Araya established the Corporate Planning Division under the leadership of his predecessor, Chairman Yutaka Aoki. This division was responsible for formulating management and business strategies for HIES, including the 2015 and 2018 Mid-term Management Plans. Upon assuming the position of President, Mr. Araya said that in addition to achieving the goals of the 2018 Mid-term Management Plan, the company would set high goals for 2021. He went on to say that to achieve those goals, he would focus on the three "strengths" of product power, sales power, and organizational power that could be applied globally.

In business development, the acquisition of the U.S. air compressor manufacturer Sullair by Hitachi, Ltd. in July 2017 attracted a lot of attention. This big project was something that Chairman Aoki had been working on since 2016 as part of his global strategy for compressors. Sullair was a subsidiary of Luxembourg-based industrial machinery manufacturer Accudyne Industries Acquisition Sarl, which had the world's fifth-largest market share for air compressors after Hitachi. However, Sullair's business performance had been sluggish, and the purchase price of approximately 135 billion yen was a huge sum. Consequently, there was strong opposition to the transaction, even within Hitachi. In the face of this opposition, Mr. Aoki insisted that the Sullair acquisition was essential if Hitachi was to become a global leader in compressors. As it was, the acquisition of Sullair gave Hitachi the world's third largest share of the air compressor market.

Since then, HIES and Sullair have worked together to promote post-merger integration, with the aim of becoming the global leader by creating synergies in both products and sales.



4th President  
Yutaka Araya

## Major Business Initiatives

In the compressor business, in May 2017, Hitachi Industrial Equipment (Suzhou) Compressor Co., Ltd. (HISC) was established as a joint venture with an investment company established by the Chinese shareholders of United OSD. The company would develop and manufacture compressors and peripheral equipment for the Chinese market.

In September, a ceremony was held at the Shimizu Works to commemorate the shipment of the 200,000th Hitachi screw compressor.

In products, the AIR ZEUS SDS NEXT II series of oil-free screw compressors was launched in April 2017. In September, the NEXT III series of screw-type air compressors followed, which offered compatibility with cloud monitoring services as a standard feature. This was recognized as the first Hitachi Lumada Use Case for creating new added value for customers.



Signing ceremony for joint venture of Hitachi Industrial Equipment (Suzhou) Compressor



In the transformer business, Hitachi Soe Electric & Machinery (HISEM) received a large order for approximately 5,400 power distribution transformers from the Ministry of Electricity and Energy of Myanmar in September 2017.

In June, the company began selling multi-winding transformers for mega-solar power plants.

In the marking system business, the product lineup of inks for non-OPOSP industrial inkjet printers was expanded in September 2017.

In the IoT related products business, the HX series of hybrid industrial controllers for IoT applications was released in October, and the CPTrans-ME multi-carrier-compatible wireless communication terminal was launched in November.

In other businesses, HIES launched a regenerative medicine cabinet in August 2017, and the SuperV (Type 4) hoist inverter drive series in September. In November, the company released the L series of compact high-function motor blocks.

### Global business ratio reaches 34%

From June to November 2017, HIES held exhibitions at eight locations and venues across Japan. Customers in each region saw the company's comprehensive capabilities, including industrial IoT solutions, drive solutions/automation and labor-saving solutions, and energy-saving solutions, further building relationships of trust.

In awards and recognitions, the hybrid type vacuum circuit breaker received the Japan Electrical Contractors Association Encouragement Award at the JECA Fair 2017 Product Competition.

In May 2017, Masao Imaizumi of Taga Works and in November Seizo Shirai of Nakajo Works were each awarded a Medal with Yellow Ribbon (a government medal of honor). In November, Takayoshi Shimizugashira of Katsuta Works received the Contemporary Master Craftsman award. Yusei Taguchi of Katsuta Works also won a silver medal in the structural steel working category of the 55th National Skill Olympics.

In fiscal 2017, because of the addition of the Sullair business, HIES achieved sales of 240.2 billion yen with a global business ratio of 34.9%, well exceeding the 30% mark.

### Fiscal 2018

## Building a foundation for becoming a top global player

### Providing products and services that respond to market changes

As the final year of the 2018 Mid-term Management Plan approached, President Araya positioned it as an important year for achieving a leap forward to become a global player and build a foundation for 2021. With integrated service, sales, and manufacturing, he emphasized the importance of working in unison to respond quickly to market changes, including the shift to IoT, automation, and labor saving, and to provide timely customer value through products, services, and solutions that accurately met customers' needs.

As part of a new challenge of creating a robotics solutions business structure, in March 2019, the company signed an agreement to acquire robotics system integrator KEC Co., Ltd. The acquisition strengthened HIES' support for edge computing by incorporating the company's technologies and products, such as IoT controllers and location communication devices.

As of April 1, 2018, Hitachi, Ltd. restructured its substation business by transferring the sales and engineering division operations for industrial sector applications exceeding 33 kV to HIES. This shift allowed HIES to strengthen its comprehensive engineering and sales competencies to accommodate the increasing diversity of substation requirements.



Inks for non-OPOSP industrial inkjet printers



Main unit of CPTrans-ME multi-carrier wireless communication terminal



HIES exhibition 2017 poster

## Major Business Initiatives

In the compressor business, the expansion of the new China air compressor plant (at HISC) was completed and started operation in March 2019. Regarding products, the SDS NEXT III series of oil-free screw compressors was launched in October 2018, followed by the NEXT III series of nitrogen gas generators (N2 packs) in January 2019.

In the substation business, in February 2019, an agreement was signed with Hitachi, Ltd. under which HIES would strengthen the substation business for the industrial sector through a company split. In products, the lineup of fuse-free breakers and earth leakage breakers was renewed in January 2019.

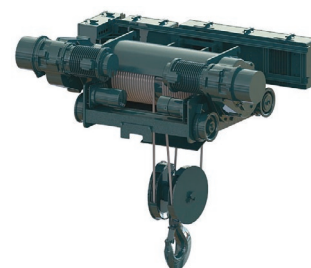
In the marking system business, the U.S. marking sales company Hitachi Industrial Equipment Marking Solutions Inc. and Label House (L.A. Supply Corporation) were integrated to strengthen sales in July 2018.

In the IoT-related products business, the ICHIDAS-VGC with operational support functions for AGVs was released in January 2019.

Regarding other products, the company launched a vortex blower unit with an inverter and a new Hitachi Air Shower Flutter Jet series in July 2018. In August, the K series regenerative inverter hoist was released.



ICHIDAS-VGC with operational support functions for AGVs



K series regenerative inverter hoist

## Aiming for net sales of 271.7 billion yen and a global business ratio of 40%

In May 2018, the cumulative production of inverter modules by the Narashino Works reached 2 million units, and in September, Lumada Center Southeast Asia was opened in the Amata City Chonburi Industrial Estate in Thailand.

In awards and recognition, in April 2018, the HIES oil-free scroll compressor with integrated amorphous motor received the Prime Minister's Award at the 47th Japan Industrial Technology Awards. In November, Takayoshi Shimizugashira of Katsuta Works was awarded a Medal with Yellow Ribbon.

In fiscal 2018, the company reported net sales of 271.7 billion yen, and the total ratio of global business rose to 40.4%.



Chairman Aoki (left) with Executive Managing Director Fujii expressing their commitment at the Lumada Center Southeast Asia

## Know yourself, Set the Right Goals, and Take on Challenges



**Yutaka Araya**  
Senior Officer for Sales  
Corporate Sales & Marketing Group  
Hitachi, Ltd.  
(4th President of Hitachi Industrial  
Equipment Systems Co., Ltd.)

In 2013, as General Manager of the Corporate Sales & Marketing Group, I helped form the Mid-Term Management Plan 2015. As a growth strategy aimed at becoming a global player, the company focused management resources on its four core businesses (compressors, marking systems, transformers, and inverters) and expanded its cyclical business. The aim was to become more competitive in the global market and increase corporate value through total service, including after-sales service.

In 2017, when I was appointed president, the acquisition of Sullair made us the world's third-largest manufacturer of air compressors. We also took on the challenge of becoming the top global company in marking by engaging in mergers and acquisitions to expand in Europe, the United States, and Asia.

Another path to growth was through green and digital solutions that utilize the

Internet of Things (IoT). New businesses can be created by providing total solutions based on Hitachi Industrial Equipment Systems' strong products to meet needs such as energy conservation, automation, and data traceability and security. The key to generating growth and high profitability will be through the solutions business in power distribution equipment, drives, and hoisting equipment.

The COVID-19 pandemic impacted the Mid-term Management Plan 2021, but performance is recovering under Yasuhiro Takeuchi, President and CEO. As we celebrate the 20th anniversary of our founding, I look forward to Hitachi Industrial Equipment Systems reevaluating its strengths in a return to its roots, with all employees uniting to achieve the sales, operating income, and globalization targets set out in the Mid-Term Management Plan 2024, and taking on challenges to develop even further.