

# IHI REPORT

Interim Report for 197th Fiscal Year

April 1, 2013 to September 30, 2013

**IHI**  
Realize your dreams





**The IHI Group was able to make a smooth start with the initiatives toward “realization of growth” set out in the “Group Management Policies 2013.” The Group will aim to expand ongoing businesses and improve profitability.**

## Tamotsu Saito

President and Chief Executive Officer

**Q This fiscal year marks the first year of the medium-term management plan, “Group Management Policies 2013.” Please provide your shareholders with an overview of the situation now that six months have elapsed.**

**A** Looking back over the past six months, there was an upswing in the economic situation. In Japan, the upswing was underpinned by a sense of expectation about the effects of Abenomics and corrections made to the strong yen; overseas by such factors as convergence of turmoil associated with the European sovereign debt crisis and the robust U.S. economy.

Under this business environment, orders received by the IHI Group during the six months under review increased by ¥25.7 billion compared with the same period of the previous fiscal year to ¥614.8 billion, net sales decreased by ¥18.6 billion to ¥546.3 billion, operating income increased by ¥5.2 billion to ¥19.7 billion, ordinary income rose by ¥11.7 billion to ¥23.3 billion, and net income increased by ¥0.9 billion to ¥12.7 billion.

Net sales decreased, but as the Ships & Offshore Facilities segment had been included in the figures in the same period of the previous year, if that effect is excluded, orders received, net

### ●Earnings Highlights (Consolidated)

(Billions of yen)

Items	Six months ended September 30, 2013	Fiscal 2013 (forecast)
Orders received	614.8	1,440.0
Net sales	546.3	1,310.0
Operating income	19.7	50.0
Ordinary income	23.3	39.0
Net income	12.7	24.0

sales and income all increased. I feel that we have been able to make a smooth start.

**Q** You have made a smooth start, but what kind of challenges are you facing in achieving the management targets? Please tell your shareholders your thoughts on how to deal with those challenges.

**A** One of the biggest challenge facing the Group is “securing orders in the global market.”

Although there is an upswing in the Japanese economic situation, a major trend is significant growth in emerging countries, including those in Asia. It is my belief that unless we take advantage of that growth, the IHI Group’s growth will not be realized. Orders received demonstrate this clearly. I mentioned previously the orders received for the first six months of fiscal 2013, but for the full year we are aiming to receive orders of more than ¥1,400 billion, which will improve on last year’s result by ¥200 billion.

Especially with regard to gaining orders in the global market, we will steadily implement measures and work to ensure the securing of orders. Those measures will include: cultivating new markets in the vehicular turbocharger business; expanding orders for natural gas-related business, such as floating liquefied natural gas (F-LNG) storage facilities, tanks for use on LNG bulk carriers and chemical plants; expansion of the heat and surface treatment business; and taking active steps to promote the offshore resource development business in Brazil.

**Q** IHI established three Group Organizations with common functions from April this year. On what is each of these headquarters working?

**A** To realize “growth,” the keyword in Group Management Policies 2013, we reorganized the technologies accumulated thus far by the individual businesses and those business models to bring about reforms that linked, combined and transcended the frameworks known as “businesses.” In other words, it required the setting up of horizontal links to what had been completed as a vertical model. To promote this transformation we newly established three organizations: the Solution & Engineering Headquarters, the Intelligent Information Management Headquarters, and Global Marketing Headquarters.

Firstly, taking steps forward from the style up to now of offering products and services individually through several organizations, the Solution & Engineering Headquarters is commencing activities that propose to customers a combination of products, services and technologies, from multiple business areas, capable of fulfilling customer needs. And not only IHI Group products and services to suit the needs of customers, as we will promote activities linked to customers’ new value creation by proposing packaging with other companies’ products and participation as “all-IHI” in large-scale government-to-government projects.

Next, the Intelligent Information Management Headquarters is gathering, analyzing and explicating a range of data from IHI Group products and services and working to link that data into proposals to customers. Specifically, the Headquarters is promoting the performing of

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constant monitoring of Group products utilized by customers; the utilization of a remote maintenance common platform of the customer's actual machine that will provide customer cost reductions through rapid troubleshooting and planned maintenance; and provides the control system common platform consists of the Group's unique control equipment and software building tool to achieve sophistication in control systems.

In addition, the Global Marketing Headquarters is working to expand region-based business and adopt effective business management within the local areas and global human resource development and recruitment. Specifically, while leveraging the three regional headquarters that have been making inroads thus far in the Americas, China and Asia-Pacific, we are proceeding to advance the head office functions of each regional headquarters—centered on the key regions of the Americas, China and Southeast Asia as well as the key countries of Indonesia, Thailand, Vietnam and Malaysia—to enhance marketing and develop global human resources in the local areas.

Centered on these three organizations, we are contributing to our customers' value creation and aiming for the realization of IHI Group growth.

**Q** In conclusion, please provide a message to convey to all your shareholders.

**A** IHI celebrated the 160th anniversary of its founding this year. Born when the modern age in Japan was dawning, we have constantly undertaken manufacturing that looks to the future and contributed products to society, including which were firsts in Japan or the world, or world's



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largest. Our current corporate message—"Realize your dreams"—expresses that by bringing together the IHI Group's "Monozukuri Technology" (the technology used to improve the competitiveness of products and services offered, by strengthening the capabilities required in development, design, supply, manufacture and construction), we hope to realize the dreams and goals of the people of this world. Through these actions, we intend to fulfill our corporate social responsibility.

In the years to come, based on IHI Group's Management Principles of "contributing to the development of society through technology," we will pursue technologies aiming to be the best in the world, which are the IHI Group quality, and manufacturing that addresses improvements in daily productivity.

I would like to express my gratitude to all IHI Group shareholders, in heartfelt appreciation and eager anticipation of your invaluable, ongoing support.

### ● Interim Dividend

We would like to request your understanding for having decided to suspend the interim dividend at the end of the second quarter.

# Topics



## Resources, Energy and Environment

### Order Received for Cove Point LNG facility in the United States

In April 2013, a joint venture comprising IHI Corporation subsidiary IHI E&C International Corporation (IHI E&C) and major U.S. construction organization Kiewit Energy Company received an engineering, procurement and construction (EPC) project order for the Cove Point liquefied natural gas (LNG) facility from the U.S. power generation and gas company, Dominion.

Aiming to liquefy and export U.S. shale gas, this facility will be constructed on Chesapeake Bay in Lusby, Maryland at the east coast of the U.S. Its liquefaction capacity will be 5.25 million tons per annum, and planned completion is in 2017. Possessing world-leading plant engineering capabilities, the IHI Group will work on the stable supply of energy.



Image of completion (3D CAD)



## Social Infrastructure and Offshore Facilities

### Equity Investment in Brazil's Largest Shipbuilding Company

In cooperation with JGC Corporation and Japan Marine United Corporation, IHI Corporation made an equity investment in the Brazilian shipbuilding company, Estaleiro Atlântico Sul S.A. (EAS).

Having as its aim the advancement of Brazil's offshore industry, EAS is a shipbuilding company established with funding from the Brazilian Development Bank. The company receives many orders for drilling ships and tankers used in the development of oil resources from the state-managed energy major company, Petróleo Brasileiro S.A. (Petrobras).

Over many years in the past, IHI Corporation has built up network in Brazil through Ishikawajima do Brasil Estaleiro S.A. (Ishikawajima Brazil Shipyard). With this equity investment in EAS, however, IHI will strengthen its relationship with major Brazilian construction companies, which are EAS's shareholders, and Petrobras, which is EAS's main customer, and work proactively on business in the offshore resource development facility and manufacturing fields in Brazil.



General view of shipyard



## Industrial Systems and General-Purpose Machinery

### Joint Venture Company with Hyundai-Kia Motor Group Established

In October 2013, IHI Corporation and Hyundai WIA Corporation, a major automobile parts manufacturer and subsidiary of South Korea's top automobile manufacturer Hyundai-Kia Motor Group, established a joint venture, Hyundai WIA IHI Turbo Co., Ltd. (HWIT), to undertake the design, manufacture and sale of vehicular turbochargers.

In the years to come, global demand for vehicular turbochargers is expected to expand against a backdrop of the spread of downsized engines and more stringent fuel efficiency requirements and exhaust emission regulations.

The IHI Group's vehicular turbocharger business unit has seven plants all over the world and is targeting annual production of 7 million units in FY2015. Within a few years thereafter, the business unit is aiming and conducting business development to sell more than 10 million units worldwide per year.

IHI started this joint venture business with the aim of expanding business in the South Korean market, which recently has been forecast to grow.

The IHI Group is already the top share brand of turbocharger in the Asian market, which includes China, Japan and Thailand. The Group will strengthen its position as the No. 1 brand in Asia through this joint-business in South Korea.



★ Hyundai WIA IHI Turbo Co., Ltd.

Global development of vehicular  
turbocharger business



## Aero Engine, Space and Defense

### The First Epsilon Launch Vehicle Successfully Launched

On September 14, 2013, the Epsilon launch test vehicle was launched from the Japan Aerospace Exploration Agency (JAXA) Uchinoura Space Center at Kimotsuki in Kagoshima Prefecture. Having been responsible for developing and manufacturing the Epsilon launch vehicle's systems, IHI Aerospace Co., Ltd. also assisted at the launch.

Developed under JAXA leadership to be compatible with the launches of a variety of small satellites, the aim with the Epsilon was to realize a launch system that would combine high reliability, low cost and high operability.

Having verified the results of the launch system-related technical developments that the IHI Group has worked on up to now, this successful launch is being taken as marking a first step on the way to participate in the market for launches of small satellites, the demand for which is expected to grow globally.

In the years to come, the IHI Group will promote R&D related to launch system development and remain committed to the growth of Japan's space development business.



General view of Epsilon launch

160

Thanks 160th Anniversary

## 160 Years of IHI That Has Continuously Supported Social Development with Unsurpassed Technologies

Dating back to 1853, when the modern age in Japan was dawning, IHI was established and has developed businesses in a wide range of fields—from ships, onshore machinery, and plants to aero engines and space—and underpinned industrial development and people’s affluent lifestyles not only in Japan but in the world through its advanced engineering capabilities. IHI has thus marked its 160th anniversary in 2013. In order to make dreams come true for people all over the world, the IHI Group will continue to draw on its technologies to contribute to the development of society in the years to come.

# 1800s

## 1853

Established “Ishikawajima Shipyard,” the predecessor to the current IHI

Forced to counter Western powers by arrival of fleet under U.S. Commodore Matthew Perry, Japan’s feudal government instructed Mito clan to establish a shipyard.



## 1876

Established “Ishikawajima Hirano Shipyard”

Tomiji Hirano established the first civil shipyard in Japan.



## 1866

The first steam engine warship, “Chiyodamaru,” completed

Installed the first warship steam engine manufactured in Japan.



## 1887

The largest iron bridge in Japan “Azuma Bridge,” which spanned the Sumida River

Built by Japanese engineers from design to manufacture, it was the largest truss structure iron bridge in Japan.



1800

# 1900s

## 1907

Established “Harima Dock Co., Ltd.” another predecessor to the current IHI

Kiyotaro Karahata, the head of Aioi village (now the Aioi City) in Hyogo Prefecture established Harima Dock Co., Ltd.



## 1959

Established “Ishikawajima do Brasil Estaleiros” in Brazil

The first Japanese shipyard overseas, and the forerunner of Japanese company's overseas expansion.



## 1962

Japan's first vertical, circulation-type parking system (Tower parking system)

The first system delivered to the Takashimaya department store in Nihombashi, Tokyo. Demand grew as automobiles became more popular, and the system remains a best seller to this day.



## 1911

Completed construction of steel structures for Tokyo Central Station (now Tokyo Station)

Breaking with conventional wisdom in steel building of erecting a scaffold, the method of using two movable cranes gained admiration of architecture world.



## 1960

Established “Ishikawajima-Harima Heavy Industries Co., Ltd.”

With strengths in onshore machinery, Ishikawajima Heavy Industries Co., Ltd. merged with Harima Shipbuilding & Engineering Co., Ltd., a force in large ships.



## 1969

Completion of Japan's first four LNG tanks

The groundbreaking technology that stores LNG at temperatures of minus 162°C transformed Japan's energy circumstances.

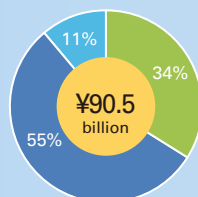


Tokyo Gas—Negishi LNG Plant

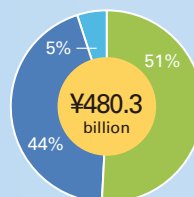
## 1900

### Trend of Consolidated Net Sales and Breakdown Thereof by Business Segment

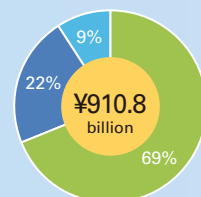
- Machinery and Plants
- Ships and Offshore
- Aero Engine and Space



1963



1973



1983



# 2000s

## 1989

### V2500

Internationally joint-developed turbofan engine for small civil airliners. Has become a best seller engine with cumulative orders received exceeding 7,000 units.



## 1998

### Akashi Kaikyo Bridge

Completed the world's longest suspension bridge (3.9 km long), which cuts the journey time between Shikoku and Kansai to two hours.



## 2001

### Surpassed the cumulative 10 million vehicular turbochargers

Surpassed the cumulative total of 10 million vehicular turbocharger units, production of which started in 1959.



Photo source: J-POWER  
(Electric Power Development Co., Ltd.)

## 2002

### Started operation of the first of Japan's tower-type boiler with 600MW

Delivered Japan's first tower-type boiler to Isogo thermal power station. The subsequent delivery of the No. 2 boiler in 2009 recorded the world's highest steam condition.

## 2007

### The company name changed from "Ishikawajima-Harima Heavy Industries Co., Ltd." to "IHI Corporation"

The company name changed to create a global brand and transform IHI into a comprehensive engineering company.

# IHI

## 2010

### Astroid Explorer "HAYABUSA"

Protecting the recovery capsule from temperatures that reach around 20,000°C, IHI-developed heat-resistant material led successful return to Earth.



©JAXA

## 2013

### Epsilon Launch Vehicle

The Epsilon Launch Vehicle is a solid propellant launch vehicle suitable for a new age, delivering both high performance and low cost.



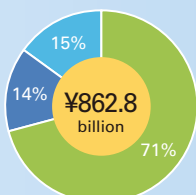
©JAXA

## 2000

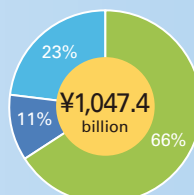
### Trend of Net Sales and Breakdown Thereof by Business Segment

- Machinery and Plants
- Ships and Offshore
- Aero Engine and Space

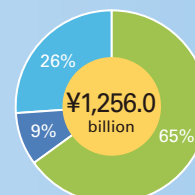
Note: From 2003 onward, consolidated net sales are shown.



1993



2003



2012



Cell culture equipment (upper section)

## Influenza Vaccine Manufacturing Business

In a tie-up with the UMN Pharma Inc. drug discovery venture company, IHI Corporation established UNIGEN Inc. in May 2010 to manufacture influenza vaccine pharmaceutical ingredients using cell culture methods. In comparison with conventional methods, cell culture enables the safe mass production of vaccine in a short period of time.

Adding to its Akita plant, which is a production technique research facility, UNIGEN completed its Gifu plant, the world's largest biopharmaceutical manufacturing plant, in May 2013. Currently aiming for sales to commence in 2015, UNIGEN is conducting the trial production of a vaccine against seasonal influenza at the Gifu plant.

## Biofuel from Algae Business

IHI Corporation, Gene and Gene Technology Y.K. and the Neo-Morgan Laboratory Inc. established the joint venture company IHI NeoG Algae LLC in August 2011. Research and development related to algae biofuel business is being jointly undertaken.

There are high expectations that biofuel from algae will be used as a jet fuel and a heavy fuel oil, reduce CO<sub>2</sub> emissions, and provide a solution to soaring fuel and food prices.

IHI NeoG Algae is expanding its cultivation test plant inside IHI's Yokohama works and is starting mass cultivation tests in earnest. In 2014, the company aims to start the sample supply of algae biofuel.



Cultivation test plant (Yokohama works)



# Realize your dreams

We want to realize the dreams of the world.

This is why we want to contribute on a global level by fully understanding the needs of customers and people.

Therefore our work focuses on capturing the essence of technology and manufacturing skills to deliver products that are of true value.

We feel it is our duty to support our global community by being the first to connect it to the most advanced solutions in technology.

Our dream is to be entrusted with turning the world's aspirations into a reality.

## Inquiries regarding administrative procedures for stocks

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