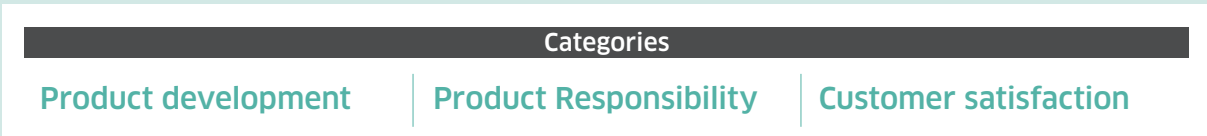


1 Value Creation

We will use our integrated technological expertise to create values that point the way to the future.



The KHI Group Mission—“Kawasaki, working as one for the good of the planet”—indicates that we are committed to achieving sustainability and resolving issues in society through our business operations. At the same time, we are taking action to further improve our activities to ensure product safety and enhance quality and customer satisfaction.



Goals/Approaches and Actions of Medium-term Business Plan 2013 (FY2014 - 2016)

Goals/Approaches	Actions
<ul style="list-style-type: none"> ● Aim to contribute to a sustainable society through business operations and products ● Create products that customers can trust, and seek to further improve quality and product safety ● Monitor customer satisfaction, and boost level higher 	<p>※Key strategies for “value creation through business” are described under Concrete Actions to Achieve MTBP 2013 Targets on page 32.</p>

Overview of Activities in Fiscal 2014

Initiatives to improve various aspects of our operations, including product safety, product quality and customer satisfaction, have been a focus of our efforts since our earliest days as a manufacturer.

Fiscal 2014 was the first year of MTBP 2013, and during this time, all internal companies pursued approaches designed to lead them to medium-term targets. Activities included a push to visualize the steps involved in enhancing product quality and safety,

measures in various areas to boost customer satisfaction based on the results of customer satisfaction surveys, and a push to develop products from the perspective of “creating value for customers.”

Going forward, we are committed to maintaining processes, such as identifying pertinent issues and pursuing opportunities for dialogue with stakeholders, to link business operations with solutions to social concerns over a more extensive range.



Reports on product safety, improved quality and higher customer satisfaction are presented by business division in the same order that has been used in years past.

1 Product Safety Initiatives

In pursuit of safety and that “fun-to-ride, ease-of-riding” feeling



Hiroshi Tanigawa
Senior Staff Officer, Product Planning Department, Research & Development Division, Motorcycle & Engine Company

The most crucial feature of motorcycles is its ability to perform reliably—to run, to turn and to stop. Motorcycles, unlike cars, are not self-supporting unless in motion and the risk of tipping over is always present. It is therefore important to have good control of the machine in

all aspects of operation. That said, cornering—when the rider leans hard into a turn and, at a glance, the body of the motorcycle appears at a precarious angle to the road surface—and speed control through acceleration and deceleration, which differs from the approach used by cars to change speed, are distinctive to motorcycles and what allow riders to truly enjoy the riding experience.

In the area of motorcycles for leisure use, which is Kawasaki’s area of expertise, we pursue product development designed to meet seemingly conflicting requirements, that is, providing motorcycles that create a fun-to-ride, ease-of-riding feeling while giving due care to safety. Let me describe a few noteworthy products below.

The Ninja ZX-14R, the flagship Kawasaki model, boasts our most advanced engine management system—Kawasaki TRaction Control, or KTRC—which combines two systems: one to help maintain optimum traction for acceleration and the other that facilitates smooth riding even on slippery surfaces. Riders can choose from three modes, or they may elect to turn the system off, allowing them to achieve control matched to their own level of riding skill.

The 1400GTR, a tourer model for riders who go on lots of long-distance road trips, is equipped with



Operational modes of Kawasaki TRaction Control

the Tire Pressure Monitoring System (TPMS). A drop in tire air pressure could lead to poor handling and stability or other issues. TPMS continuously measures the pressure—if the sensors detect a significant decrease in tire air pressure, an indicator appears on the instrument panel, immediately alerting the rider to the situation.



Tire Pressure Monitoring System



Multifunction LCD meter

The Ninja 400, a popular model in the Japan market, has an instrument panel that combines an analog tachometer with a digital speedometer integrated into a multi-function LCD. Considering features that would allow riders to concentrate on their riding, we used white LEDs in the backlight for excellent visibility, even at night.

We installed an anti-lock braking system into the Ninja 250—an extremely popular model worldwide, with the Ninja 300—, and it was the first Kawasaki model in the 250cc-class to get the system that prevents the wheels from locking up when the brakes are applied and avoids uncontrolled skidding for obviously more stable handling. We also used the world’s smallest, technologically advanced control unit, which makes finer hydraulic pressure control possible, so kickback to the brake lever during operation is minimal, resulting in a very natural feeling.

As in the car industry, technological advances in the motorcycle industry continue without end. New technologies appear in a steady stream to be incorporated into engine and chassis designs. As elsewhere, here in the Motorcycle & Engine Company, we consider safety factors as we strive to develop products that fully satisfy riders’ appetite for a “fun-to-ride, ease-of-riding” experience.



Compact ABS unit

2 Seeking Higher Quality

Tackling big projects overseas



Hiroaki Fujino
(back row, fourth from the left) at an Indonesian Fabrication Vendor
Manager, Section 1, Quality Assurance Department
Plant & Infrastructure Company

The Plant & Infrastructure Company has a wide range of products such as industrial plants (Cement / Chemical), LNG plants, power plants and incineration plants and others. Most of these products share a noteworthy characteristic in that they are completely built-to-order. A prime example would be LNG tanks. With automatic welding and improved pressing methods at KHI's Harima Works, we are able to realize high quality at reasonable prices and have earned the trust of our customers.

Meanwhile, against the current background of rising international energy demand, we are actively developing a presence in overseas markets with products in categories for which already cultivated competitive strength in the domestic market. But the overseas market environment is fiercely competitive, fueled by a downward trend in prices, of course, as well as the need for high-spec features and high-quality performance. On large projects, the order amount may be significant, but tiny mistakes can have a major influence on how successful a project is overall, and may draw into requiring the true value of integrated engineering expertise.

- Project members strive for barrier-free communication and structure cutting laterally across divisions to ensure that projects proceed smoothly.
 - The Plant & Infrastructure Company applies its own approach to front-end engineering, which exhaustively identifies latent risks right from estimate and design stages.
 - We endeavor to enhance integrated engineering expertise through Company-wide training opportunities as well as our own education and training programs and a proactive use of on-the-job-training as a means for experienced employees to pass on acquired technical knowledge to their younger colleagues.
- In addition, to meet rising quality requirements,

we constantly strive to enhance quality by

- sharing information on nonconformities that occurred in the past and building a database that can be used as live text;
- running a preliminary check to identify risks, visualizing possible actions and then tackling risk management in a timely manner as a team;
- promoting standardization of technologies and products;
- improving the accuracy of production capability assessment at overseas vendors; and
- achieving greater efficiency in the manufacturing-related control methods used by overseas vendors.

Currently, we are working on the production of cryogenic tanks for the Ichthys Project Onshore LNG Facilities in Australia. Major components of the tanks, which are made of 9% nickel steel and cryogenic-use carbon steel, are being constructed at the Harima Works, but in a first for the Plant & Infrastructure Company, we outsourced production of the carbon-steel roof to an overseas vendor. For the roof structure connection, we opted for bolt construction rather than the conventional welded construction to reduce installation costs in Australia where labor costs are high. On the other hand, the need for accurate manufacturing of component parts is much higher than conventional construction, but experienced personnel at the Harima Works in cooperation with experienced personnel of overseas project achieved the quality of parts produced outside Japan as good as that of parts produced in Japan.



Automatic welding of 9% nickel steel tank inner wall at Harima Works

Going forward, international competition is bound to intensify due to the rise of emerging economies. The Plant & Infrastructure Company will strive to improve quality still further and draw on integrated engineering expertise to provide internationally competitive products to customers around the world.



Shipment of LNG tank roof components made by Indonesian vendor is loaded for journey to project site in Australia

Working to Boost Customer Satisfaction

Product support utilizing know-how



Yoshihiro Watanabe

General Manager, Business Department, KHI JPS Co., Ltd.

Currently, there are 22 fully submerged hydrofoils—Jetfoils—operating in Japan. KHI JPS provides support services, such as technical services, parts supply and gas turbine engine maintenance and repair, to companies operating Jetfoils.

Jetfoils are high-speed waterjet-propelled hydrofoils that hover over the surface of the water as if flying. They were developed by Boeing, which applied technology from airplanes to a hydrofoil format. KHI, which acquired licensing from Boeing to manufacture and sell Jetfoils, is now the only maker of Jetfoils in the world. Boeing has withdrawn from the market, and KHI JPS works with relevant internal companies, including the Ship & Offshore Structure Company, as an access point for Jetfoil support services within the KHI Group to address the needs of Jetfoil-operating companies.

Jetfoils typically operate between a mainland area and outlying islands, providing a vital connection that enables communities to exist and supports local activities, such as sightseeing, businesses and other aspects of an island economy. Today, Jetfoils are an indispensable form of transportation. For this reason, every effort must be made to prevent situations that cause a service interruption, whether due to accident or some other kind of trouble.

Jetfoils are based on airplane technology, so every structural part is special. KHI JPS always keeps a sufficient inventory of parts to deal with customer requests and can respond to sudden calls for parts and shipping, thanks to a structure for getting the necessary parts to where they need to be 24 hours a day, 365 days a year. In addition, technicians are dispatched as required to trouble-shoot and offer suggestions on how to deal with the problems.

Ship operators just introducing Jetfoils into their fleets have little familiarity with this style of vessel or obligatory operating know-how, and personnel need classroom training and an opportunity to practice to understand the intricacies of operation and day-to-day maintenance. KHI JPS has prepared a menu of training programs and practice drills, from theory to hands-on

practice and on-site maintenance, to help operating personnel acquire the necessary skills and knowledge. Recently, we ran a series of classes and drills for people involved in the operation and upkeep of High-Speed Rainbow Jet, which commenced service without a hitch on March 1, 2014, on a route linking the port of Sakaiminato and the Oki Islands.

These efforts underpin a commitment at KHI JPS to support smooth Jetfoil operations and build a high level of customer satisfaction.



Jetfoil in service between Niigata and Sado Island, in the Sea of Japan

Jetfoil List in Japan (As of March 2014)

Ship No.	Operator	Ship Name	Manufacture
BJ-11	Iwasaki Corporation	Toppy 7	Jun. 1978
BJ-15	Sado Kisen	Ginga	Nov. 1979
BJ-17	Tokai Kisen	Seven Islands Ai (Love)	Aug. 1980
BJ-19	Tokai Kisen	Seven Islands Niji (Rainbow)	Feb. 1981
BJ-20	Tokai Kisen	Seven Islands Yume (Dream)	Apr. 1981
BJ-23	Cosmo Line (Ichimaru Group)	Rocket 2	Jun. 1984
BJ-26	Kyusyu Yusen	Venus 2	Apr. 1985
KJ-01	Sado Kisen	Tsubasa	Mar. 1989
KJ-02	Tokai Kisen	Seven Islands Tomo (Friend)	Jun. 1989
KJ-03	JR Kyusyu Jet Ferry	Beetle 3	Sep. 1989
KJ-04	Kyushu Shosen	Pegasus	Mar. 1990
KJ-05	JR Kyusyu Jet Ferry	Beetle	Apr. 1990
KJ-06	Cosmo Line (Ichimaru Group)	Rocket 3	Jul. 1990
KJ-07	Kyushu Shosen	Pegasus 2	Oct. 1990
KJ-08	JR Kyusyu Jet Ferry	Beetle 2	Feb. 1991
KJ-09	Kyusyu Yusen	Venus	Mar. 1991
KJ-10	Sado Kisen	Suisei	Apr. 1991
KJ-11	Oki Kouiki Rengo	Rainbow Jet	Jun. 1991
KJ-12	Iwasaki Corporation	Toppy 2	Apr. 1992
KJ-13	Iwasaki Corporation	Toppy 3	Mar. 1995
KJ-14	JR Kyusyu Jet Ferry	Beetle 5	Jun. 1994
KJ-15	Cosmo Line (Ichimaru Group)	Rocket	Jun. 1994

*BJ:Manufactured by Boeing, KJ:Manufactured by KHI